

A REVIEW OF THE SELF-MEDICATION PRACTICES BY STUDENTS OF TWO HEALTH TRAINING INSTITUTIONS IN LAGOS.

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ABSTRACT

Two of the main reasons given for practising self-medication include inaccessibility of medicare facilities, and knowledge of the drug therapy required to cure a disease. The interaction between these factors are not fully known, hence we decided to investigate the extent of self-medication practices by 580, undergraduate students of the College of Medicine, University of Lagos and the Lagos University Teaching Hospital, a population resident within the premises of the latter institution in Lagos, Nigeria. All the students sampled had carried out self-medication in the proceeding 6 months.

The commonest reason for practising self-medication given by 238 and 114 students respectively was that of unnecessary protocols coupled with time wasting during consultations in the hospital and knowledge of the drug therapy required. The greatest number of self-medication practices was found in departments where the main emphasis of the courses of study is either on diseases/therapeutics or drugs, while students in departments where other aspects of the medical sciences constitute the bulk of course content recorded the least figures. It is necessary to implement measures, which will encourage these students to make use of the hospital when necessary, and depend less on self-medication.

Key words: Self-medication, medical school students in Lagos.

INTRODUCTION

Self-medication is not only common all over the world¹, it has also been on the increase². The rising level of education of the population has been identified as one of the factors responsible for the rise since acquisition of knowledge has increased the public's confidence in its ability to treat itself². Inaccessibility of health institutions, particularly in the developing world³ and the desire to by-pass the process of obtaining prescription⁴ are other reasons why people practise self-medication.

It is expected that those in the medical and allied professions may practise self-medication more than the general population since they have more knowledge of diseases and drug therapy. They may also have easier access to drugs. These professionals should be able to carry out self-medication more accurately with fewer tendencies of complications. Such persons fall within the category of those by whom self-medication may be desirable if done intelligently, applying the knowledge of the disease condition and drug properly⁵. In comparison, it is not certain that students of the medical and related professions may be able to self-medicate properly since they are just receiving the basic training in their fields. The misuse of drugs may be compounded in cases where these students assume more knowledge than they actually possess.

The purpose of this study is to ascertain the extent of self-medication practice among

some students, randomly selected in the College of Medicine, University of Lagos and the Lagos University Teaching Hospital. The study is also to find out factors associated with the practise considering the location of standard health care facility within the school premises.

MATERIALS AND METHODS

A retrospective survey of the self-medication practices of undergraduate students of the College of Medicine, University of Lagos and The Lagos University Teaching Hospital was carried out from August 1998 to April 1999 through the use of self-administered questionnaires. Five hundred and eighty students selected by simple random sampling were reached in the following departments: Medicine and surgery, dental surgery, physiotherapy, physiology, pharmacy, pharmacology, school of nursing, medical laboratory science, and school of medical biostatistics. The questionnaire was divided into two sections, A and B. Section A contained information on course of study, level/year of the student, previous qualification acquired, age, religion, sex and nationality, while section B contained details of the frequency of self-medication practices in the last 6 months, the names and dosages of drugs taken, place of purchase of the drugs, knowledge of the presence of a hospital made accessible to all students, reasons for self-medication and reasons why the students treated themselves instead of visiting the appropriate hospital.

Generally, simple percentages were used in the analysis and interpretation of the results. The number of self-medication practices by the students in the last 6 months proceeding the study are presented as mean values \pm standard error.

RESULT

The total number of respondents were 580. All of them had practised self-medication during the previous six months. The average number of times each student of the various departments undertook self-medication during the 6 month period varied from 1.81 to 10.90 (Table 1) with a mean of 7.04 ± 3.45 .

The greatest tendency of self-medication practice was found in the departments of medicine/surgery, pharmacy, dental surgery, pharmacology and physiotherapy. The mean values of the number of times self-medication was practised by students in these departments over the previous 6 months were 10.90 ± 0.04 , 9.13 ± 0.04 , 8.75 ± 0.04 , 8.13 ± 0.04 and 7.9 ± 0.04 respectively. In contrast, students in the departments of physiology, medical laboratory science, school of nursing and medical biostatistics school had average values of 5.79 ± 0.04 , 2.62 ± 0.02 , 2.29 ± 0.02 and 1.81 ± 0.02 respectively. Headache, Fever, dysmenorrhoea, skin infections and diarrhoea accounted for many of the cases of self-medication, these were 382 (33.5%), 270 (23.73%), 195 (17.14%), 90 (7.91%) and 85 (7.47%) in number respectively, while the other symptoms accounted for 116 (10.19%) of the entire complaints recorded (Table 2).

Out of the respondents, 326 (56.40%), 172 (29.76%), 35 (6.06%) and 45 (7.79%) purchased their medications

from the pharmacy, chemist, supermarket and market stalls/hawkers respectively. Hence, 86% of the students purchased their medication from pharmacy stores and chemists. Two respondents could not remember where they purchased their drugs from when they were ill. Unnecessary protocols coupled with time wasting was the reason 238 of the students gave for practising self-medication, while knowledge of the drug therapy required was cited as reason for self-medication by 114 of the respondents. Seventy-two cases could not give any reason for self-medication practices. Also, 63 students said they were compelled to treat themselves because of the non-chalant attitude of doctors and nurses over "minor" symptoms such as headache. In 8 and 35 cases respectively the clinic was avoided because of phobia and busy academic schedules. Twenty of the students claimed they treated themselves since they were at home on break during the periods of their illnesses.

Seventeen students refused to visit the clinic since they ended up paying for their drugs particularly during emergencies. In 13 cases medication prescribed during previous consultation was repeated (Table 3). The commonest drugs taken by these students were paracetamol and chloroquine tablets, with frequencies of 1,646 and 937 (Table 4). Ampicillin taken on 245 episodes was the most frequently administered antibiotic. Worthy of note is the antibiotic found to be least utilized in this study, chloramphenicol, which was consumed on 51 occasions. The subjects used analgesics to alleviate dysmenorrhoea and headache while antibiotics were

administered to treat diarrhoea, cough, sore throat, acne and skin infection. The use of anti-malaria by the students was normally sequel to subjective diagnosis of malaria fever, especially when they experience fever. There was no laboratory investigation carried out. We could not ascertain the compliance of these students to standard dosage regimen because they did not fill the relevant column in the questionnaire.

DISCUSSION

Knowledge of diseases and drugs is an important factor responsible for the practice of self medication, this may account for the observation that the students with the greatest tendency to treat self were from departments where the main emphasis of the courses of study was either on diseases/therapeutics or drugs, while the students in departments where other aspects of the medical sciences constitute the bulk of course content record the least frequency of self-medication practices.

The bulk of these students, 86%, purchased their medication from pharmacy shops and chemists, some of which are registered. Thus, they are less likely to procure fake drugs unlike those who buy from the markets and hawkers. However, there are concerns that all the drugs including antibiotics were obtained without prescriptions from qualified persons. Those involved in the drug distribution/sales network should place more attention on practising within the expected framework of their professions, they should sell over-the-counter drug alone for self-medications.

Long periods spent in orthodox health institutions while seeking medical attention

may discourage patients from utilizing such facilities. This is moreso, in developing countries where there is a dirt of personnel and equipment. It is therefore not surprising that 41% of the students surveyed complained that they avoided the clinic because of time wasted there during consultations. Lengthy protocols of registration and drug procurement from the clinic added to the inadequacy of facilities and low number of staff at the clinic will actually prolong the period spent at the hospital by patients. Hence, it is necessary to reduce these protocols to the barest minimum. This will be of great benefit to those students since they run very busy academic schedules, moreso, with their practical and clinical rotations.

Students may be stressed in an attempt to cope with the work load in the College of Medicine. This may result in various features like headaches and tiredness particularly if they do not eat or sleep at the appropriate time. The therapy needed, in such cases will be, counselling these students to desist from over-exerting themselves. Such counselling should be provided at the clinic but 63 students complained that the attitude of the medical personnel was non-challant over such symptoms. The use of antibiotics by these students, in

cases such as diarrhoea, cough and sore throat may constitute drug misuse since there were no objective diagnostic criteria to implicate bacterial infection. It is unfortunate that there were 51 encounters with chloramphenicol capsules among these subjects. This is a drug that has been placed under restriction by health authorities world wide because of its tendency of inducing aplastic anemia. Such unadvised use of chloramphenicol will no doubt increase the number of people potentially prone to developing this dreadful adverse drug reaction.

It would have been revealing to ascertain the compliance of these students to standard dosage regimen, unfortunately we could not obtain data for this from the subjects as virtually all of them omitted the relevant column in the questionnaire, perhaps because they could not remember. This omission may also be a pointer to the fact that they did not know and thus did not utilize the standard doses, because if they knew it, filling the information should not have been extra burden before attending to questions in other sections of the questionnaire.

It appears the practice of self-medication is common among the students surveyed in the College of Medicine and the

Lagos University Teaching Hospital. In spite of the accessibility of standard Medicare facility to these students, two main factors, lengthy periods spent at the hospital during consultations and knowledge of drug therapy prompted self-medication. These students are therefore liable to the dangerous consequences of self-medication which include adverse drug reactions⁷ and emergence of resistant strains of bacteria when antibiotics are misused in the course of self-medication. Another complication which may occur in those who eventually have to seek medical consultation is masking of the clinic features of diseases. The tendency to these dangerous situations is more when the patient is acting based on assumed knowledge of the drug. In view of these, it is necessary to educate the students on the dangers of self-medication and the necessity to make use of the appropriate health facility. Also, they need to be educated on the routine procedures of the official clinic so that the necessary protocols will not be seen as needless burden. The clinic staff will need to minimize the time spent by the students during consultations and pay more attention to counselling in order to encourage the use of the clinic facility when necessary.

TABLE I: Average number of self-medication practices by each student in 6 months

DEPARTMENTS	MEAN OF SELF-MEDICATION PRACTICES	
Physiotherapy	7.97	+0.04
Pharmacology	8.13	+0.04
Physiology	5.79	+0.04
Medical Laboratory science	2.62	+0.02
Medical Biostatistics	1.81	+0.02
Dental Surgery	8.75	+0.04
Nursing	2.29	+0.02
Pharmacy	9.13	+0.04
Medicine/surgery	10.90	+0.04

TABLE II Symptoms which prompted the practice of self-medication

SYMPTOMS	NO. OF SELF-MEDICATION PRACTICES	%
Headache	382	33.57
Dysmenorrhea	195	17.14
Fever	270	23.73
Fisthous	85	7.47
Sore throat	35	3.08
Skin infection	90	7.91
Cough	41	3.60
Acne	40	3.50
TOTAL	1138	100

TABLE III: Reasons Given For Practicing Self-medication

REASONS FOR SELF-MEDICATION	NO. OF STUDENTS	%
Unnecessary protocol/time wasting	238	41.03
Knowledge of the drug therapy	114	19.66
No reason	72	12.41
Non challant attitude of hospital staff	63	10.86
Phobia for hospitals	8	01.38
Busy academic schedule	35	06.38
Away from school during illness	20	03.45
Financial reason	17	02.45
Decision to repeat previous medication prescribed at clinic	13	02.94
TOTAL	580	100

TABLE IV: Frequency Of Use Of Various Drugs

DRUGS		FREQUENCY	PERCENTAGE (%)
CLASS	NAME		
ANALGESICS	Paracetamol	1,646	44.64
	Aspirin	221	5.99
	Novalgin	42	1.14
	Diclofenic Potassium	40	1.08
ANTIBIOTICS	Ampicillin	245	6.64
	Cotrimoxazole	191	5.18
	Tetracycline	132	3.58
	Chloramphenicol	51	1.38
ANTI-MALARIA	Chloroquine	937	25.41
	Sulphadoxine/Pyrimethamine	149	4.06
	Halofantrine	33	0.90

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