

ORIGINAL ARTICLE

Evaluation of the practice of self-medication among undergraduates of Imo State University (IMSU) Owerri, South-East Nigeria

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INTRODUCTION

Self-medication is widely practised in both developing and developed countries.¹ Druggists, pharmacists, licensed medicine sellers, street drug vendors, often encourage the practice of self-medication by indulging in indiscriminate sale of drugs particularly over-the-counter (OTC) drugs to members of the public.²

Some of the common illnesses for which people self-medicate include fever, pain,

ABSTRACT

Background: The concept of self-medication entails the use of drugs, herbs or home remedies on an individual's own initiative or on the advice of another person within his or her environment without consulting a qualified medical health services provider. It is widely practised in both developing and developed countries, and empirical evidence shows that great populations of persons in our communities indulge in the practice.

Objective: To evaluate the practice of self-medication among undergraduates of Imo State University Owerri.

Methodology: It was a descriptive cross sectional study. Data was obtained using semi-structured, self-administered questionnaires. Results were analyzed and presented using tables, bar charts and pie charts.

Results: Only 38.9% of the respondents consulted qualified doctor when ill, the rest (61.1%) practised self-medication or by using drugs recommended by friends, family members or a paramedical worker. Reasons given for self-medication include cheaper costs (52%), avoidance of delay at the hospital (51.6%), past experience of the efficacy of the drugs (51.9%).

Conclusion: Factors that influence self-medication should be addressed by appropriate stakeholders for it to be curbed.

Keywords: Analgesics, Antacids, Anti-malarials, Headaches, Medical Science

allergies, cold, cough, indigestion, etc.³ The drugs commonly misused are prescription medicines with proven clinical efficacy. Self-medication can result in several adverse side effects such as drug interactions, Steven-Johnson's syndrome, risk of over-dosage, dependence and development of resistance especially to a wide range of bacteria.^{4,5,6,7}

Since the second half of the last century, the problem of self-medication has been persisting, as empirical evidence shows that a

great population of persons within the communities still indulges in it; hence, the need to curb the unhealthy practice.

METHODOLOGY

Study Area: The study was carried out in Imo State University Owerri. It is a tertiary educational centre and has various faculties in the Arts and Sciences.

Study Population: It comprised all the male and female undergraduates of Imo State University.

Study Design: It was a cross-sectional descriptive study that lasted for three months (January to March 2011).

Sample Size

The population being studied was larger than 10,000, hence the sample size was calculated using the Cochran formula:

$$n = \frac{(z^2 \times p \times q)}{d^2}$$

n = sample size for population > 10,000

z = standard normal deviate set at 1.96 for 95% confidence interval.

p = Prevalence i.e. the proportion in the target population estimated to have a particular characteristic of interest to the study, were set at 50% = (0.5).

$q = 1-p = 1-0.5 = 0.5$

d = degree of accuracy desired or the precision value set at 0.05

Therefore, the sample size

$$n = \frac{(1.96^2 \times 0.5 \times 0.5)}{0.05^2}$$

$$n = 384.16$$

(It was approximated to 401)

Sampling Method: A multi-stage sampling technique was used in two stages (random cluster and purposive cluster sampling) to get the number of respondents from each faculty to make up the total sample size of 401 students.

Data Collection: It was collected using pre-tested semi-structured self-administered questionnaires.

Data Analysis: Data was analysed using EPI-version 15 and Microsoft Excel. A test of significance (Pearson's Chi-square) was used to determine association between certain different variables and the respondent's attitude.

Ethical Considerations

Permission was obtained from the Ethical Committee of the University before the study was conducted; also, verbal consent was obtained from the students as well.

Limitations of the Study

This was the index study of this and other related topics at Imo State University Owerri, so, there was a dearth of literature in the topic.

RESULTS

Majority of the respondents were aged 23–28 years, and males constituted the majority 240 (59.9%), 44.1% of respondents practised self-prescription, while the rest got theirs from licensed medicine sellers, family members or friends.

Table 1. Age and gender of respondents

Age (years)	Frequency	%
17 - 22	169	42.14
23 - 28	191	47.63
29 - 34	14	3.41
> 35	4	0.99
No Response	23	5.74
Total	401	100
Sex		
Female	157	39.3
Male	240	59.9
No response	4	1.0
Total	401	100

Table 2. Source of drug prescription when ill

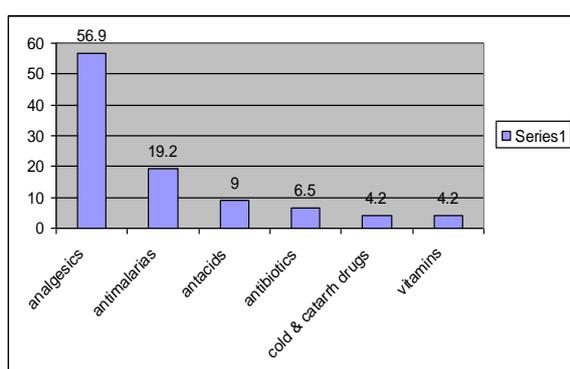
Prescriber	Frequency	%
Self	177	44.1
Friends	18	4.5
Family members	53	13.2
Street medicine shop	119	29.7
No Response	34	8.5
Total	401	100

Table 3. Respondents personal view on self-medication

View	Frequency	%
Good	177	29.2
Bad	274	68.3
No response	10	2.5
Total	401	100

Majority of the respondents believed that self-medication is bad (68.3%), while only 29.2% thought that it was good.

Figure 1. Bar Chart on the most frequently self-medicated drugs



Analgesics were the most frequently self-medicated drugs followed by antimalarial drugs and antacids.

The most frequent reasons given for practicing self-medication were past experience that a particular drug worked for a particular complaint and avoidance of delay at health facility care centres.

Figure 2. Reasons for self-medication

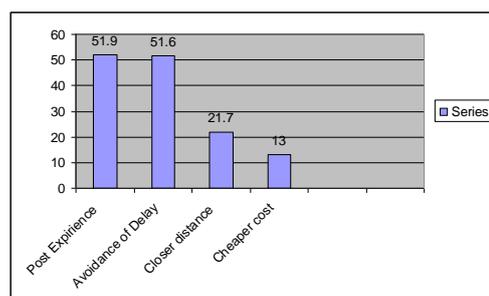


Table 4. Relationship between the respondents' course of study and practice of self-medication

Course	Self Medication		Total	%		
	No	%			Yes	%
Medical Sciences	14	31.1	31	68.9	45	100
Education	60	62.5	36	37.5	96	100
Law	34	44.7	42	55.3	76	100
Arts /Social Sciences	23	57.5	20	42.5	40	100
Engineering	17	30.9	35	69.1	55	100
Total	148	47.4	164	52.6	312	100

Majority of the respondents in the medical sciences (68.9%) practised self-medication more than those in other courses.

DISCUSSION

The study showed that most of the respondents (70%) had a good understanding of the concept of self-medication. This was expected as they were undergraduates and invariably matured, enlightened and expectedly learned enough to understand the concept.

This finding was similar to that obtained by Meisenger C, *et al*, in their study on matters of self-care among undergraduates in Taiwan who in spite of their positive attitudes towards consulting with a doctor, continued self-medication.⁹

Headache and body pains were the major ailments for which self-medication was practised, followed closely by malaria, thus

making analgesics and antimalarial the drugs that were most self-administered. This was similar to the findings of Tom Fergusson in a similar study where chronic joint pains and malaria were the major ailments for indulging in self-medication.¹

Self-medication as a health issue was aptly demonstrated in the study as majority of the respondents did not visit the hospital as the first port-of-call whenever they took ill. There was also a significant relationship between the programmes of respondents and self-medication as those in the medically related programmes practised self-medication more than the others in other faculties. This was also observed in a survey of medication knowledge and behaviour among college students in Taiwan which showed that health science students indulge more in self-care than non-health science students.¹⁰

This finding was in line with logical expectations as most students in medically-related programmes have some medication knowledge and would apply it when they fell ill. However, irrespective of their course of study, majority of the respondents (68.3%) felt that self-medication was bad. This was corroborated by a similar study also in Taiwan which revealed that most college students irrespective of the course of study have a positive opinion towards consulting a doctor when ill.⁹

One of the reasons given by the respondents for indulging in self-medication was their past experience that a particular drug was effective when used for a particular ailment by the respondent, his friends or members of his family. Similar studies done in Poland and the United States of America showed that the sources of antibiotics used for self-medication were left-overs given by friends or family.^{10,7}

Other reasons given were avoidance of delay at the hospital, closer distance to a nearby medicine store and cheaper cost. In Jammu City, India, a similar study revealed that the most common reason for indulging in self-

medication was the high cost of private doctor's consultations.¹¹

CONCLUSION / RECOMMENDATION

Self-medication was apparently understood by majority of the students of Imo State University, however, many of them still indulged in the act. Health facilities in higher institutions of learning should be adequately equipped to cope with demands of health care of the students. Also, time wasting at the University Health Centre should be minimized to enhance patronage by the students. They can also receive treatment either completely free or on subsidized basis.

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