

UTILIZATION OF SELF MEDICATION AMONG STUDENTS OF TECHNICAL COLLEGE, OSOGBO, OSUN STATE, NIGERIA.

Bello, M. A.,
&
Akeusola, A O

ABSTRACT

This study tends to determine the level of utilization of self-medication among students of Technical College, Osogbo. A descriptive survey research design was adopted while the target populations are students in technical college. Stratified sampling technique was used to select 292 respondents but only 202 respondents were finally used for the study. The instrument used was questionnaire to extract information from the respondents. Results were presented in tables, and charts. Research findings showed that, the level of utilization of self-medication is high and the frequently self-medicate once or twice a week. The study indicated that the drugs mostly used for self-medication are anti-malaria, eye/ear drops, antibiotics, anti-allergies and analgesics/antipyretic and the most common ailment for which the respondents reported to have practiced self-medication were headache, chills and Catarrh. The research findings showed that factors influencing decisions on self-medication include family and friends advise, previous medical prescription, and advice from private practitioners. Three hypotheses were tested and finding showed that there was no significant relationship between gender and the practice of self-medication, there was no significant relationship between the presence of long-standing illness and the practice of self-medication and there was no significant relationship between the perception of the students about the health system in Nigeria and the practice of self-medication. It is therefore recommended among others that, people should be educated about the harmful effects of irresponsible self-medication and adequate information should be provided on self-medication.

Keywords: Utilization. Self-medication. Students

INTRODUCTION

Self-care is a broad concept encompassing all what people do for their own selves to establish and maintain health, prevent and deal with illness including hygiene, nutrition, lifestyle, environmental factors and medication (Al Khatja, Handu, James, Oloom and Sequeria, 2006). The World Self-Medication Industry (WSMI) defined self-medication as the treatment of common health problems with medicines especially designed, labeled and approved for use without medical supervision. (Ali, Kai, Keat and Dhanaraj, 2012). Self-medication can also be defined as the selection and use of non-prescription medicines to treat self-recognized illness or symptom without a professional advice or prescription.

Medicine which refer to all substances for use in the diagnosis, prevention of treatment of a disease fall into two categories which are; Prescription Only Medications (POM) and non-prescription medications, also called Over the Counter Drugs (OTC).

Prescription Only Medications refers to those drugs which are only available on prescription as they are not safe except under supervision of a physician because of toxicity and potential harmful effects (Ali *et al*, 2012). They are prescribed in – line with a medical diagnosis and decision by a licensed health care professional and can only be dispensed from a pharmacy by a licensed pharmacist. OTC medications on the other refer to those drugs that do not require prescription purchase at pharmacy (Gatema, Gadisa, Berhe, 2011) or

other places including supermarkets and small convenience stores and are usually chosen by a self-diagnosis and self-care decision.

Craving for medicine has part mankind from the beginning of time. The taking of drugs, herb or home remedies on one's own initiative or on the advice of another person has traditionally been seen as self-medication. Around the 1960's in the west, self-care and self-medication were regarded as potentially unhealthy practices. This paternalistic approach to medicine, supported by health systems designed to treat sickness (rather than to prevent them), remains a familiar aspect of health care in many countries. Some governments are increasingly encouraging self-care of minor illness, including self-medication. (Bennadi, 2013). Studies carried out on self-medication states that it is a very common practice. Especially in economically deprived communities. Nowadays, health care services are getting costlier and becomes an obvious choice of health care service. Furthermore, it has been noted that purchase of drugs that can only be bought with prescription in developed countries are OTC in developing ones. In addition, lax regulation has resulted in the proliferation of counter free drugs that are in high demand for the treatment of highly prevalent diseases. (Bennadi, 2013).

Modern consumers (patients) wish to take a greater role in the maintenance of their own health and are often competent to manage uncomplicated chronic, and recurrent illness after proper medical diagnosis and with occasional provisional advice e.g use of histamine (H₂) blocker, topical corticosteroid, antifungal and oral contraceptives. They are understandably unwilling to submit to the inconvenience of visiting a doctor for what they rightly feel they can manage by themselves, given adequate information. Self-medication is very common and a number of reasons could be enumerated or it. Urge of self-

care, feeling of sympathy towards family members in sickness lack of time. Lack of health services, financial constraint, ignorance, misbelieves, extensive advertisement and availability of drugs in other than drug shops are responsible for growing trend of self-medication. (Phalke, Halbe, Durgawale, 2006).

While self-medication could produce good results by reducing the cost of health especially in developing countries and allow physicians to focus more on serious health problems. Irresponsible self-medication with POM and abuse/misuse of OTC drugs could cause risks such as dependence/addiction, bacteria resistance, hypersensitivity reactions, digestive bleeding as well as risk of neoplasia. In addition to these risks, it should be emphasized that the momentary relief of symptoms may actually mask underlying disease. Health professionals have the ability of preventing the risk of self-medication, as they work on three main aspects of professionalism, information, therapeutic advice, education

Information is giving proper instructions and explaining the reason why the drug is prescribed by professionals while prescribing drugs, so that it will be helpful for the patient to understand and help him make his decisions. Given information should be at patient's comprehension level so that it will be helpful for them to understand. Therapeutic advice is giving information about the usage of drugs. If patient is not well informed, they are likely to use medications incorrectly. Lack of therapeutic compliance is a serious problem in both acute and chronic treatment arms. However, if the direction for and the limitations of a given drugs are explained e. g. dose, Frequency of dose, treatment of course, how to take it etc then patients will have a set of guidelines which help them to use drug correctly both now and in future. Inappropriate and erratic self-medication, along with lack of

compliance will only be reduced if patients are informed and understand clearly why certain advice is given.

Inappropriate self-medication is the result of medical model from which people have learnt. By regular educational attitude, we can have an effect on large sectors of the population, and people who in turn, moving directly influence their friends and families. This aspect is particularly important with respect to the self-medication of children by their parents. (Bennadi, 2013). This study tends to determine the level of utilization of self-medication among students of Technical College, Osogbo

Due to innate urge to take active role in the management of self-health, amidst other factors such as low socio-economic status and inadequate health professionals. People especially adolescents tend to self-medicate without adequate knowledge or guidance from qualified personnel. Which can lead to medical (drug resistance and hypersensitivity) social (Juvenile delinquency) and physiological (addiction and drug dependence) problems. Hence this study on the level of utilization of self-medication among students of Technical College, Osogbo

Objectives of the study

The following objectives will be accomplished in this study.

1. To assess the level of utilization of self-medication among students.
2. To examine the frequency of utilization of self-medication among students.
3. To identify types of ailment that students use self-medication for.
4. To identify types of drugs that are mostly used for self-medicated among students
5. To assess the factors influencing decisions of utilization of self-medication among students.

Research questions

1. What is the level of utilization of self-medication among students.
2. What is the frequency of utilization of self-medication among students
3. What is the types of ailment that students use self-medication for
4. What is the types of drugs that are mostly used for self-medicated among students
5. What are the factors influencing decisions of utilization of self-medication

Hypotheses

1. There is no significant relationship between the cost of visiting health professional and the practice of self-medication.
2. There is no significant relationship between the presence of long-standing illness and the practice of self-medication.
3. There is no significant relationship between the perception of the students about the health system in Nigeria and the practice of self-medication.
4. There is no significant relationship between the practice of self-medication and knowledge about its health consequences.

METHODOLOGY

The research design employed is a descriptive survey research design. It aimed at exploring the practice of self-medication and knowledge of its health consequences among students of technical college Osogbo, Osun state. Student at technical college Osogbo, were the target population. There were 700 students as at the time the study was carried out. Sample size was determined using Taro Yamane's while stratified sampling technique **was adopted to select 292** students.

Instrumentation

A self-developed questionnaire with structured questions section into A, B, C and D was used for data collection. Dichotomous scale was used to answer questions in Section B to D. The developed questionnaire was given to the panel of experts for critiquing to ensure face, content and construct validity, and

modification made where necessary. To ensure reliability of the instrument, the questions were pretested. A pilot study will be done by administering 10 questionnaires to 10 subjects from Laro secondary school, Asubiaro Osogbo with the same characteristics as the respondents for the study, the score was 0.82 which was determined by Cronbach Alpha.

RESULTS

Table 1: Demographic characteristics of respondents

Variables		Frequency	Percent
Age	Less than 16 years	42	20.8
	17-20 years	102	50.5
	21-24 years	52	25.7
	24 years and above	6	3.0
	Total	202	100.0
Gender	Male	170	84.2
	Female	32	15.8
	Total	202	100.0
Class	Year 1	12	5.9
	Year 2	68	33.7
	Year 3	122	60.4
	Total	202	100
Religion	Islam	84	46.5
	Christian	104	51.5
	Traditional	4	2.0
	Total	202	100.0
Ethnicity	Yoruba	192	95.0
	Igbo	6	3.0
	Others	4	2.0
	Total	202	100.0

Table 1 showed that 42 (20.8%) respondents are less than 16 years old, 102 (50.5%) fall between 17 – 20 years of age, 52 (25.7%) fall between 21 – 24 years and the remaining 6 respondents are 24 years of age and above. Findings further showed that 170 (84.2%) of the respondents are male while the remaining 32 (15.8%) are female. Also, table 1 showed that 12 (5.9%) of the respondents are in year 1, 68 (33.7%)

(33.7%) are in year 2 and 122 (60.4%) are in year 3. 1 of the respondents did not respond to the question. The table further revealed that 84 (46.5%) of the respondents practice Islam, 104 (51.5%) practice Christianity and remaining 4 (2.0%) of the respondents practice Traditional religion. Lastly, 192 (95%) of the respondents are Yoruba, 6 (3.0%) are Igbo and 4 (2.0%) did not indicate their ethnicity.

Table 2: The Level of Utilization of Self-Medication Among Students

	Frequency	Percent
Regular	108	53.5
Not regular	94	46.5
Total	202	100.0

As presented in Table 2, 108 (53.5%) respondents take medicines to treat any condition without the prescription from a doctor regularly while 94 (46.5%) do not take

medicines without doctor's prescription. This result concludes that the level of utilization of self-medication among Students is regular.

Table 3: the frequency of utilization of self-medication

Responses on How often?	Frequency	Percent
Daily	10	5.0
Twice a week	44	21.8
Weekly	28	13.9
Occasionally	10	5.0
When needed	4	2.0
Once in a blue moon	2	1.0
Due to how long it is	2	1.0
Unspecified	102	50.5
Total	202	100

Table 3 showed that out of the 100 respondents who take medicines without the doctor's prescription, 10 (5.0%) take medicines on a daily basis, 44 (21.8%) take medicines twice in week, 18 (13.9%) take medicines weekly, 10 (5.0%) take medicines occasionally, 4 (2.0%) take medicines when needed, 2 (1.0%) take

medicines once in a blue moon, 2 (1.0%) take medicines due to how long it is and the remaining 102 (50.5%) did not specify how often they take medicines without doctor's prescription. In conclusion, the frequency of utilization of self-medication among students are twice a week and weekly.

Table 4: Types of Ailment that students used self medication for

		Frequency	Percent
Headache	Yes	180	89.1
	No	22	10.9
	Total	202	100
Diabetes	Yes	50	24.8
	No	152	75.2
	Total	202	100
Chills (cold)	Yes	128	63.4
	No	74	36.6
	Total	202	100
Catarrh	Yes	124	61.4
	No	78	38.6
	Total	202	100
Sore throat	Yes	84	41.6
	No	118	58.4
	Total	202	100
Stomach pain	Yes	100	49.5
	No	102	50.5
	Total	202	100
Diarrhoea	Yes	46	22.8
	No	156	77.2
	Total	202	100
Pain	Yes	48	24.8
	No	152	75.3
	Total	202	100.0
Constipation	Yes	48	24.8
	No	144	71.3
	Total	202	100

As presented in Table 4, 180 (89.1) of the respondents usually treat headache without doctor's guidance while the remaining 22 (10.9%) do not treat headache without the doctor's guidance. Also, 128 (63.4%) of the respondents usually treat chills (cold) without a doctor's guidance while the remaining 74 (36.6%) do not. This study observed that 124 (61.4%) of the respondents usually treat catarrh without a doctor's prescription while the remaining 78 (38.6%) do not. Findings in this study also showed that 84 (41.6%) of the respondents usually treat sore throat without a doctor's guidance while remaining 118 (58.4%) do not treat it without a doctor's guidance. This result observed that 100

(49.5%) of the respondents usually treat stomach pain without a doctor's guidance while the remaining 102 (50.5%) do not. The result of this study showed that 46 (22.8%) of the respondents usually treat diarrhoea without a doctor's prescription while the remaining 156 (77.2%) do not. Out of the 202 respondents 48 (24.8%) treat pain without a doctor's guidance while the remaining 152 (75.3%) do not treat pain without a doctor's guidance. Lastly, 48 (24.8%) of the respondents treat constipation without a doctor's guidance while 144 (71.3%) do not treat it without a doctor's guidance. In conclusion, headache, Chills and Catarrh are the types of Ailment that students used self medication for.

Table 5: Drugs that is mostly used for self-medication among students

		Frequency	Percent
Anti-malaria	Yes	168	83.2
	No	34	16.8
	Total	202	100.0
African traditional medicine	Yes	112	55.5
	No	90	46.6
	Total	202	100.0
Antacids	Yes	36	17.8
	No	162	80.2
	Total	202	100.0
Analgesics/antipyretics	Yes	60	29.7
	No	134	66.3
	Total	202	100.0
Antibiotics	Yes	104	51.5
	No	98	48.5
	Total	202	100.0
Eye / ear drops	Yes	116	57.4
	No	86	42.6
	Total	202	100.0
Alcohol	Yes	28	13.9
	No	174	86.2
	Total	202	100.0
Anti-allergies (e.g., Piriton)	Yes	66	32.7
	No	136	67.3
	Total	202	100
Concaine	Yes	24	11.9
	No	178	88.1
	Total	202	100
Concoction	Yes	114	56.5
	No	90	44.6
	Total	202	100
Ibu-400, paracetamol	Yes	4	2.0
	No	198	98.0
	Total	202	100

Result showed that the following drugs were taken without doctor's prescription in no particular other. Out of the 202 respondents, 168 (83.2%) of the respondent take anti malaria while 17 (16.8%) do not take anti malaria. Also, 112 (55.5%) of the respondents take African traditional medicine while the remaining 90 (44.6%) take orthodox medicine. Further findings revealed that 36 (17.8%) respondents take Antacids while 162 (80.2%) do not take antacids. Report of this study showed that 60 (29.7%) of the respondents take analgesics / antipyretics while 134 (66.3%) of them do not take it. Also, finding showed that 104 (51.5%) of the respondents take antibiotics while 98 (48.5%) do not take antibiotics. This study revealed that 116 (57.4%) of the respondents use eye/ear drops while 86

(42.6%) do not use it. The report showed that 28 (13.9%) respondents takes alcohol while 174 (86.2%) do not take alcohol. The findings of this study showed that 66 (32.7%) of the respondents take anti-allergies (e.g., Piriton) while 136 (67.3%) to not take anti-allegies. Also, 24 (11.9%) respondents take cocaine while the remaining 178 (88.1%) do not take cocaine. Result showed that 114 (56.5%) of the respondents take concoction while 90 (44.6%) do not take concoction. Lastly, 4 (2%) of the respondents take other drugs such as Ibu-400 and paracetamol while the remaining 198 (98%) do not take such drugs. we can summarize that, Anti-malaria, African traditional medicine and Eye / ear drops are drugs that is mostly used for self-medication among students

Table 5: factors influencing your decisions

		Frequency	percent
Self decision	Yes	76	37.6
	No	126	62.4
	Total	202	100
Family and friends' advice	Yes	116	57.4
	No	86	42.6
	Total	202	100
Previous medical prescription	Yes	130	64.4
	No	72	35.6
	Total	202	100
Mass media	Yes	74	36.6
	No	128	63.4
	Total	202	100.0
Advice from private practitioners	Yes	114	56.4
	No	88	43.6
	Total	202	100.0

Findings on Table 5 showed that 76 (37.6%) of the respondents utilize self-decision in determining the drugs to take while the remaining 126 (62.4%) do not do so. Result further revealed that 116 (57.4%) of the respondents utilize family and friends' advice

in determining the drug to take while 86 (42.6%) do not utilize family and friends' advice. Results showed that 130 (64.4%) of the respondents depend on previous medicine prescription in determining the drug to take while 72 (35.6%) do not depend on such

previous prescriptions. Report showed that 74 (36.6%) of the respondents utilize the mass media determining which drug to take while the remaining 128 (63.4%) do not utilize the mass media. Lastly, 114 (56.4%) of the respondents utilize advice from private practitioners in determining the drug to take while the remaining 88 (43.6%) do not utilize such. From the result, we can conclude that,

family and friends' advice, previous medical prescription and advice from private practitioners were factors that influence respondent's decision on self-medication.

Hypothesis one

There is no significant relationship between gender and the practice of self-medication.

Table 6: Pearson product moment between gender and self-medication

Variable	N	Mean	SD	r-cal	Sig.
Gender	90	18.23	2.14	0.081	0.075
self-medication	94	19.00	2.01		

Not significant at 0.05; df = 200; critical r-value = 0.098

As presented in Table 6, the calculated r-value of 0.081 was less than the critical r-value of 0.098 at 0.05 level of significance with 200 degrees of freedom. With this result, we can concluded that, there was no significant relationship between gender and the practice of self- medication.

Hypothesis two

There is no significant relationship between the presence of long standing illness and the practice of self-medication.

Do you take medicines to treat any condition (e.g. headache, diarrhoea, fever, etc. without the prescription from a doctor? Do you have any long-standing illness that required treatment?
Crosstabulation

Table 7: chi-square table for relationship between the presence of long standing illness

Yes	No	Total	Chi-square	Sig.
13	41	54	.029	.866
12	35	47		
25	76	101		

From table 7, degree of freedom (df) = 1, χ^2 tab = 3.841, χ^2 cal = 0.029. Therefore, we accept the null hypothesis. This implies that, there is no significant relationship the presence of long-standing illness and the practice of self-medication.

Hypothesis three

There is no significant relationship between the perception of the students about the health

system in Nigeria and the practice of self-medication.

Do you take medicines to treat any condition (e.g., headache, diarrhea, fever etc. without the prescription from a doctor? * what do you think about the health system in Nigeria? Does it meet the major health needs of the populace? Cross tabulation

Table 8: chi-square of relationship between students' perception of health system

Yes	No	Total	Chi-square	Sig.
28	24	52	.077	0.782
28	23	47		
52	47	99		

From the results in Table 8, at degree of freedom (df) 1, χ^2 tab = 3.841 was greater than χ^2 cal = 0.077. Therefore, accept the null hypothesis which states that, there is no significant relationship between the perception of the students about the health system in Nigeria was retained.

DISCUSSION OF FINDINGS

This study tends to determine the level of utilization of self-medication among students of Technical College, Osogbo. The demographic characteristics of this study showed that majority of the respondents are 17 – 20 years of age. Findings further showed that majority of the respondents are male and they are in year 3. Findings further revealed that respondents are majorly Islam and Christianity. Lastly, majority of the respondents are Yoruba.

The research finding showed that the level of utilization 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. Findings of this study showed that the frequency of respondents' self-medication is once or twice in a week.

The study showed that the most common ailment for which the respondents reported to have practiced self-medication were headache, chills and Catarrh. Ali, Kai, Heat and Dhariaraj (2012) also indicated in a similar study conducted at a private university at Malaysia

that the most prevalent symptom responsible for self-medication was headache, followed by cough and cold, fever and chills and then stomach pain.

The study indicated that the drugs mostly used for self-medication are anti- malaria, eye/ear drops, and antibiotics. Lamikanra (2012) who also conducted a similar study in south eastern Nigeria found that antibiotics were the most commonly self-medication followed by anti-malarias. The research findings showed that factors influencing decisions on self-medication include family and friends advise, previous medical prescription, and advice from private practioners. A similar study conducted by Alghanim (2011) on "self-medication practice among patients in a public health care system" indicated a similar result showing that factors influencing decisions on self-medication are mostly private pharmacies, followed by left over prescription including and family and friends.

Implications for nursing

1. The World Health Organisation and WSMI identifies the importance of self medication and therefore advocates for its responsible especially nurses.
2. Nurses must educate the patients about irresponsible self medication and its associated.
3. The patients must be properly attended to and their conditions properly managed to ensure their confidence in professional orthodox practitioners.

4. They must be given adequate information about the use of drug outside the health facility
5. There should be proper follow-up of clients to ensure adherence with medical advice.

Conclusion and Recommendations

Self is an important aspect of self-care that is characterized by the selection and use of medicines to treat symptoms or minor health problems without the guidance or prescription of qualified professional personnel and is based on the innate nature of human beings to play an active role in the management of their own health.

It is a common knowledge that are not enough doctors and pharmacies in developing countries, which has made the WHO and WSMI to support responsible treatment of self-identified problems in order to reduce cost of health, reduces pressure on medical services and allow the limited health practitioners to focus on more serious health problems. But irresponsible self-medication involving the abuse of prescription drugs and misuse of OTC drugs is overwhelmingly common among the populace with their attendant health risks. At the end of this study, it was discovered that majority of the respondents were aware of the health risks associated with self-medication but practice it due to certain reasons that were also identified in study.

Information obtained showed that the respondents were aware of health risks of responsible self-medication, but practice it due to certain reasons including high cost of visiting health professionals, lack of time etc. Therefore, in view of this, the following recommendations are to be encouraged to reduce risks of self-medication.

Government

The government should promote the proper training of health professionals in order to increase the number of competent health care provider capable of meeting the health needs of populace. Also, government should promote the establishment of less costly health facilities including primary health centre well stocked with necessary equipment's required for their proper functioning.

Health Practitioner

They should have adequate knowledge of proper management of cases. Also, provide adequate information whenever self-medication must utilized to ensure its proper utilization.

Members of the community

They should visit heat facilities for proper management of cases. Also, follow all prescribed orders regarding the use of drugs

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