

Awareness, attitude and practice of self-medication among some selected second year medical students of KIU western campus

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ABSTRACT

Self-medication particularly with analgesics and antibiotics have been reported by WHO as one of the major causes of antibiotic resistance. In country, like Uganda there is a wide range of drugs, coupled with inadequate health services have resulted to an increased number of drugs used as a self-medication compared to prescribed drugs. Assessment of knowledge and practice of self-medication is needed especially in rural settings. This was an anonymous, questionnaire-based, descriptive study. Questionnaires containing closed ended questions were administered to 288 second year undergraduate medical students. Data analysis was performed using STATA 14. Descriptive statistics were performed in terms of frequencies and percentages. Statistical significance was assessed at alpha of 0.05. The research results indicated that the mean age was (24) and the majority of the students who participated in the study were male (63%). The prevalence of self-medication in the study was found to be markedly high (83.4%). The most important reason for self-medication was that it is cheaper (91%) and the majority (92%) of the students reported that they self-medicated because of diarrhea/vomiting with antacids found to be the highly used class of drug (93%). Majority of the students got the information concerning the drugs through advertisements (98%) and (92%) of the students bought medicine from drug shops. In conclusion, most of the students feared having the side effects of the medications since they were self-prescribed without any experience.

Keywords: Knowledge, attitude, practice, self-medication, undergraduate medical students, Uganda

INTRODUCTION

Self-medication is defined as the use of medication by a patient on his/her own initiative or on the advice of pharmacist instead of consulting medical practitioner [1-4]. Some governments are increasingly encouraging self-medication of minor illnesses [5-7]. Studies done on self-medication reveal that it is fairly common practice in today's era, but it is confined to a relatively smaller group of medical student. With the emergencies and discoveries of new medicines for the managements of various diseases, the practice of self-medication has been on the rise [3-7].

Self-medication is a common practice and internationally has been reported as being on rise and can produce a good result and be a convenient practice for patient [8-10]. Self-medication particularly with analgesics and antibiotics has been widely reported leading the WHO to call attention to the dangers of self-medication as a cause of antibiotic resistance [10-12]. In country like Uganda there is a wide range of drugs coupled with inadequate health service result in increased proportion of drug used as a self-medication compared to prescribed drugs.

METHODOLOGY

Study Design

The study design was descriptive cross sectional study using random sampling method until 50 respondents are got. Questionnaires were used for data collection. Second year under graduate medical students at Kampala international university western campus in Ishaka-Bushenyi were selected by convenient sampling. Data was collected through face to face interviews using interview guides and pre-tested semi-structured questionnaires.

Study Area

The research was conducted in Kampala international university western campus in Ishaka municipality, Bushenyi district, located in western part of Uganda and is approximately 326km from Kampala, the capital city of Uganda.

Study Population

The targeted population for the study was undergraduate second year medical students of Kampala international university western campus in Ishaka.

Selection Criteria

This included both inclusion and exclusion criteria.

Inclusion Criteria

The study participant were both females and males and who were second year undergraduate medical students of kampala international university western campus in Ishaka who consent to the study.

Exclusion Criteria

Those with chronic illness and those who were absent were excluded. The second year medical students below the age of 18years old were also excluded. Second Year Medical Student Who Were Mentally Unwell.

The median age from the respondents was 24 as in the table below. The majority of the respondents were male 63% and then the females were 37%. Of the respondents, as shown in the table below, the highest percentage of 35% were Catholics, followed

Sampling Procedure

Convenience simple sampling was used in selecting students of Kampala International University Western campus, Bushenyi district, to take part in the study where both male and female students will be selected by use of convenient simple sampling.

Data Collection

Data was collected solemnly by the researcher with the help trained research assistants, checklist was used to interview the respondents.

Data Analysis

Data was sorted manually and scientific calculator use to compute figures and results will be displayed in percentages, proportions, tables, graphs and charts to display findings.

Ethical Considerations

An introductory letter was obtained from KIU-TH Faculty of Allied health after approval of the proposal by Research and Ethics Committee of the Department of Health Studies, KIU-TH. Informed consent was obtained from the respondents after explaining the nature and purpose of the study. It was emphasized that participation is voluntary and that they can withdraw from the study at any time without penalty.

The interviews were conducted privately and the respondents were assured that their information was treated as being strictly confidential.

The principle of autonomy was practiced where by all participants received enough information about the study and this enabled them to exercise their rights during decision making whether to participate or not. Students (respondents) were thanked for their contribution.

RESULTS

by 22% which were protestants, then 13% were Muslim, 18% were born again and 1% were other religion. As in the table below, the greatest percentage of 64% were single, followed by 35% who were married and 1% was divorced.

Table 1: showing the result of socio-demographic data of knowledge, attitude and practice of self-medication among second year undergraduate medical students of Kampala international university western campus

Variable	Summary measure
Median age(IQR)	24(23-26)
Religion n (%)	
Catholic	102(35)
Protestant	64(22)
Muslim	38(13)
Adventist	32(11)]
Born again	51(18)
Others	2(1)
Marital status n (%)	
Single	184(64)
Married	102(35)
Divorced	3(1)
Gender n (%)	
Male	181(63)
Female	108(37)

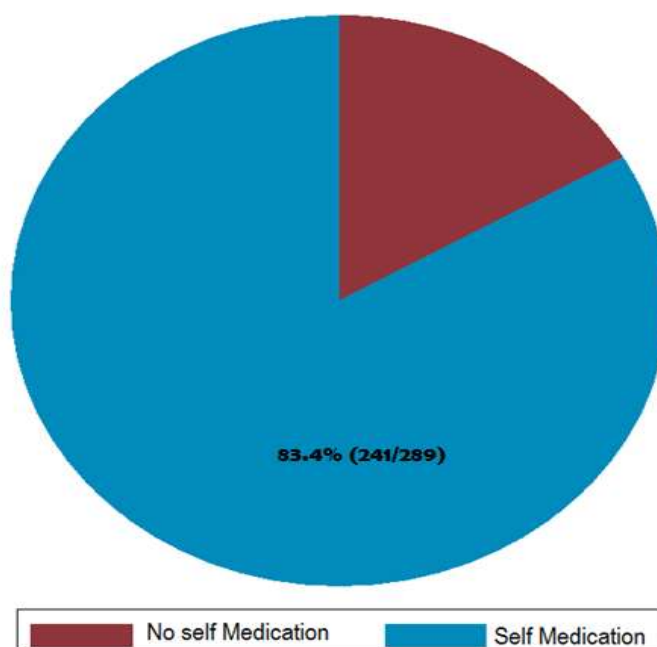


Figure 1: A pie chart showing the Proportion of self-medication among second year undergraduate medical student at Kampala international university western campus

From the above pie-chart it can be noted that the highest percentage 83.4% of the students were involved in the practice self-medication and only 16.6% of the student did not practice self-medication. From the table below, 92% of the students self-medicated because of diarrhea/vomiting, 91% was because of flue/cough/sore throat, 91% was because of

fever/headache, 91% was because of abdominal pain, and 89% was because of other symptoms. It was found that 93% used antacids, 92% used antihistamine, 91% used antibiotics, and also 91% used analgesics. As indicated in the table below, 92% of the students bought from drug shops, 91% from pharmacies, 86% got from friends, and 86% got from their relative.

Table 2: showing practices of self-medication among second year under graduate medical student at Kampala international university western campus

Variable	Self-medication		Chi-square(X ²)	P-value
	NO (n=48)	Yes(n=241)		
Symptom indicated for self-medication.				
Flue/cough/sore throat n (%)	16(9)	160(91)	18.37	<0.001
Fever/headache n (%)	14(9)	145(91)	15.54	<0.001
Diarrhea/vomiting n (%)	6(8)	74(92)	6.63	0.01
Abdominal pain n (%)	9(9)	86(91)	5.20	0.023
Others n (%)	15(11)	122(89)	6.03	0.014
Drug used for medication				
Antibiotic n (%)	18(9)	185(91)	29.52	<0.001
Analgesic n (%)	17(9)	168(91)	20.43	<0.001
Antihistamine n (%)	9(8)	99(92)	8.53	0.003
Antacids n (%)	6(7)	83(93)	9.04	0.003
Source of drug				
Drug shops n (%)	15(8)	184(92)	37.97	<0.001
Pharmacies n (%)	15(9)	154(91)	17.58	<0.001
Friends' n (%)	8(11)	64(89)	2.09	0.15
Relatives' n (%)	4(11)	32(89)	0.90	0.34

The major source of information was through advertisements with 98%, then own knowledge with 92% followed by friends with 91% and Google with 88%, as in the table below. According to the collected data as indicated in the table below, 91% of the students went for self-medication because it

is cheaper, 89% went because it is time saving, 89% went because it is easy and convenience, 89% went because they wanted to avoid hospital crowding, 87% went because it gives quick relief and 84% went because of adventure.

Table 3: showing knowledge of self-medication among second year undergraduate medical student of Kampala international university western campus

Variable	Disagree	Agree	P-value
Source of information			
Own knowledge n (%)	12(8)	130(92)	<0.001
Friend's n (%)	15(9)	151(91)	<0.001
Advert n (%)	1(2)	45(98)	0.004
Google n(%)	7(12)	49(88)	0.34
Reason for self-medication			
Time saving n (%)	25(11)	205(89)	<0.001
Cheaper n (%)	16(9)	168(91)	<0.001
Adventure n (%)	11(13)	73(87)	0.304
Quick relief n (%)	22(16)	114(84)	<0.001
Easy & convenience n (%)	25(11)	204(89)	<0.001
Avoid hospital crowding n (%)	23(11)	193(89)	<0.001

As indicated in the table below, 77% of the students blamed those who practice self-medication, 6% agreed that Students should be dismissed from school if found self-medicating, 93% agreed that students must visit qualified medical practitioner when ill, 81% were sympathetic for

students who get side effects of drugs after self-medicating, 31% believed that Students should be allowed to practice self-medication after 2year, 72% were worried about students who practice self-medication.

Table 4: showing attitude of self-medication among second year undergraduate medical student of Kampala international university western campus

	Response n (%)	
Blame those who practice self-medication	Yes	223(77.16)
	No	66(22.84)
Student must visit qualified medical practitioner when ill	Yes	269(93.1)
	No	20(6.92)
Student should be dismissed from school if found self-medicating	Yes	17(5.88)
	No	272(94.12)
Feel sympathetic for students who get side effects	Yes	234(80.97)
	No	55(19.03)
Students should be allowed to practice self-medication after 2year	Yes	91(31.49)
	No	198(68.51)
Am worried about students who practice self-medication	Yes	209(72.32)
	No	80(27.68)

DISCUSSION

A total of 288 second year undergraduate medical students of Kampala international university western campus were involved in the study. The highest percentage of the participants was Catholics with (23%) and majority of the respondents were single with a percentage of (64%). The present study was conducted to assess the

knowledge, attitude and practice of self-medication among second year undergraduate medical students of Kampala International University Western campus. The prevalence of self-medication in my study was found to be markedly high (83.4%). The majority (92%) of the students reported that they self-medicated because

of diarrhea/vomiting with antacids found to be the highly used class of drug (93%). The students perceived several factors, and believes that contributed to their knowledge of self-medication of which in the finding, was the source of information factors where the major got the information through advertisements with (98%), My study finding agreed to the finding In research study on Self-Medication practices in Rural Districts of Eastern Uganda, Alele et al. [8] reported that Radio/TV advertisements (19.7%) were the major source of information for self-medication. According to this study, the majority, 91% of the students went for self-medication because it is cheaper. This was

The results of our study which was conducted among second year undergraduate medical students at Kampala international University provide evidence that majority of the respondents practice self-medication. The findings in this study revealed that indications and

CONCLUSION

Paska in disagreement to similar observations which were reported in a few studies from India by Tamil Nadu, where most students practiced self-medication as it was time saving, whereas in Punjab, the most common reason for self-medication was for quick relief. Students are prone to make unsupervised health-related decisions especially students of health sciences who feel confident of their knowledge about the drugs [9-10]. In this study, the highest percentage of students (93%) agreed that students must visit qualified medical practitioner when ill and (81%) were sympathetic for students who get side effects of drugs after self-medicating.

drugs used for self-medication, attitudes towards self-medication, factors and advantages that led the respondents to self-medicate, sources for obtaining information and potential risks for self-medication as reported by the respondents all showed some highly significant results.

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