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Original Article

KNOWLEDGE, ATTITUDE, AND PRACTICES TOWARD SELF-MEDICATION AMONG MEDICAL STUDENTS IN KAMPALA SCHOOL OF HEALTH SCIENCES, WAKISO DISTRICT; A CROSS-SECTIONAL STUDY.

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ABSTRACT.

Background:
Specific objectives: To determine the knowledge, attitude, and practice towards self-medication among medical students in Kampala School of Health Sciences, Wakiso district.

Study design/method:
A cross-sectional study was conducted among medical students in Kampala School of Health Sciences, Wakiso district. The questionnaire was used as a tool to collect data from 100 respondents.

Results:
Self-medication was found to be practiced by 93% of the students. The most common condition of taking self-medication was headache 54.66% of the total participants. Analgesics were the most common drug group to be used as self-medication by a majority of 65.67% of the students.

Conclusion:
There was an alarming rise in self-medication practices among medical students in the Kampala School of Health Sciences, Wakiso district. They should be given sufficient knowledge about the medicines they were taking, regarding their indications, contraindications, cross-reactions, allergies, and side effects.

Recommendations:
Strengthening of rules and regulations by which pharmacies, and drug shops are guided and supposed to operate in regards to selling medicines.
Furthermore, there is a need for continuous health education by health workers on self-medication and its complications.
There is a need for further study to be conducted in other medical institutions with a larger sample size to substantiate the findings of this study for possible generalization.

Keywords: Knowledge, Attitude, Practice, Self-Medication, Medical Students, Wakiso District.
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BACKGROUND.

A report from the National Drug Authority in 2014 revealed that an estimated eight out of every ten people self-medicate or buy drugs over the counter. More Ugandans are self-medicating a practice that comes with devastating consequences including death, however, today any person who feels unwell walks into a pharmacy or drug shop to buy some of which require a doctor's prescription. The most common drugs used are ampicillin, co-trimoxazole tetracycline, chloramphenicol, erythromycin, ciprofloxacin, methicillin, and gentamycin. Most of the respondents would recommend self-medication to another sick person which is associated with risks such as drug resistance.
The prevalence of self-medication among university students in Uganda is high which indicates that 8 out of every 10 Ugandan students practice self-medication of antibiotics. Factors such as religion, marital status, residence, and faculty of the student were found to be associated with self-medication (ALSHASHRANI SM, 2019).
The Ministry of Health of Uganda is strengthening health education to create awareness in the population about the rational use of drugs and also improving drug regulation, however, there is still an increase in antimicrobial resistance and increased adverse drug events which could be due to self-medication NDA pharmaco vigilance Bulletin 2022. Therefore, this study aims to assess the knowledge attitudes, and practices of students toward self-medication.

METHODOLOGY.

Study design

The study design used was cross-sectional and descriptive. This is because it did not require follow-up of participants and the study was carried out for a short period.

Study setting.

The study was carried out at Kampala School of Health Sciences, Wakiso district. The time scope of the study ran from September to November 2023. The geographical scope was Kampala School of Health Science.

Study population.

The study population was 100 students at Kampala School of Health Sciences.

Sample size determination.

The sample size of 100 respondents was determined from the study population. Using Morgan's table.

Table 1 shows the sample size determination.

Sample size	Study population
30	60
40	80
50	100
100	1000

According to table 1, the sample size was 100

Sampling technique.

The study employed a convenience sampling technique. This is because it saved time and was easy to use since the study population had similar characteristics of being students.

Sampling procedure.

The convenience sampling method was used to select the respondents for the study where the first 100 students to be approached, were enrolled in the study.

Data collection method.

The researcher used a quantitative method of data collection.

Data collection tool.

The research employed a questionnaire that consisted of closed-ended questions. This is because it was easy to administer to the participants and saved time.

Data collection procedure.

An introductory letter from the Kampala School of Health Sciences was issued to the researcher introducing him to the Kampala School of Health Sciences administration and seeking permission to carry out the study from the school.
The school administration granted written permission which was presented to the student's body which then introduced the researcher to the students.
After seeking their consent, the respondents were given the questionnaire and answered it in their free time and then the respondents submitted them.

Independent variables.

The independent variables were knowledge, attitude, and practices.

Dependent variable.

The dependent variable was self-medication

Quality control.

Pre-testing of the questionnaire.

Thequestionnairewasfirsttestedonclassmembers.Tofindo utitsstrengthandweaknesses

Inclusion criteria.

All students at Kampala School of Health Sciences, who consented to take part in the study, were eligible for the study

Exclusion criteria.

All those who did not consent were excluded from the study. Even those students who were sick were excluded from the study.

Data analysis and presentation.

The data was manually tallied onto a piece of paper. The totals were entered into the Microsoft Office Excel Computer program where they were converted into tables, and pie charts.

Ethical consideration.

An introductory letter from the Kampala School of Health Sciences was issued to the researcher introducing him to the Kampala School of Health Sciences' administration and seeking permission to carry out the study from the school.
Participants were informed about the purpose of the study. Informed consent was obtained and consent forms were signed. Confidentiality and the right to autonomy were

taken into consideration.

To ensure privacy and confidentiality, the names of the respondents were not written anywhere on the forms. Those who declined to participate in the study were not forced and were assured that no privileges would be withdrawn from them for refusing to take part in the study.

RESULTS.

Demographic characteristics of the respondents.

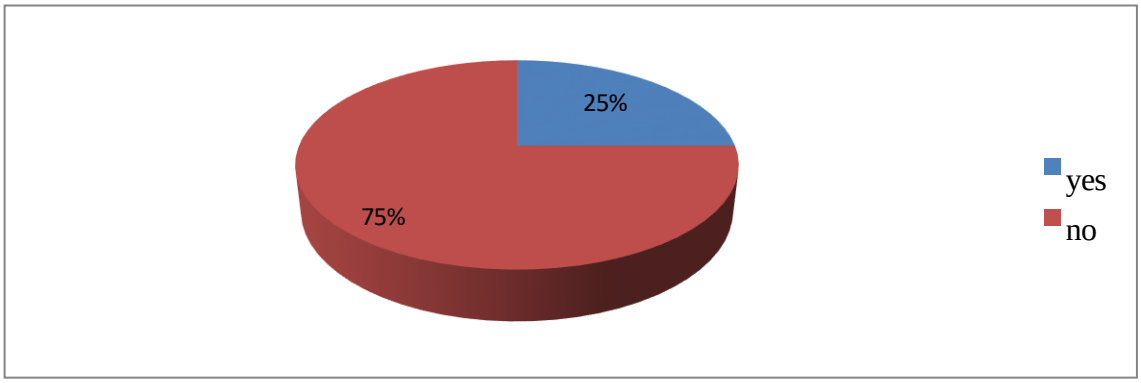
Table 1: Distribution of respondents according to bio-data. (N=100)

Variables	Frequency	Percentage
18-24	10	10
25-34	51	51
35-39	30	30
40-45	9	9
Total	100	100
Sex		
Male	38	38
Female	62	62
Total	100	100
Marital status		
Single	85	85
Married	13	13
Divorced	2	2
Total		
Year &Semester		
1.1	20	20
1.2	20	20
2.1	20	20
2.2	20	20
3.2	20	20
Total	100	100

Most of the respondents 51(51%) were aged 25-34 years of age while at least 9 (9%) were aged 40- 45 years. The majority 62 (62%) were females while the minority 38(38%) were males. The majority of the respondents 85(85%) were single while the minority 2(2%) were divorced 20(20%) of the respondents were chosen from each year and semester.

Knowledge on Self-medication among medical students in Kampala School of Health Sciences, Wakiso district.

Figure 1: Response as to whether anyone fell sick in the past two months. (N=100)



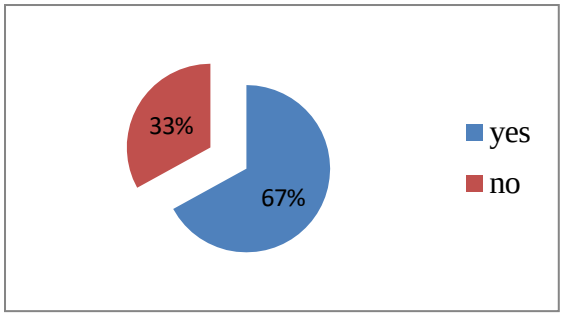
The majority of the respondents 75 (75%) had fallen sick in the past month while the minority25 (25%) didn't before the data collection date.

Table 2: Distribution of respondents according to conditions suffered and the source of medical care. (N=75)

Conditions	Frequency(f)	Percentage (%)
Headache	41	54.66
Menstrual pain	19	25.33
Back pain	4	5.33
Cough	11	14.66
Total	75	100
Source of medical care		
Drug shop	8	10.66
Clinic	22	29.33
Pharmacy	45	60
Total	75	100

Most of the respondents 41 (54.66%) treated headache as the commonest illness while the least 4 (5.33%) treated back pain, majority of the respondents 45 (60%) said they got medical attention from the pharmacy while the minority 8(10.66%) got from drug shops.

Figure 2: Distribution of respondents according to whether they kept medicine in the hostel for use when they fell sick. (N=100)



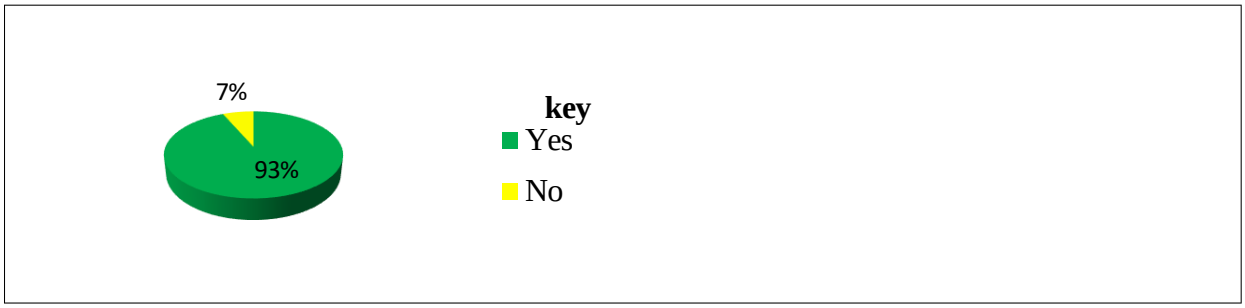
The majority of the respondents 67 (67%) admitted to keeping medication in the hostel for use when thfalllls sick while the minority 33(33%) didn't.

Table 3: Distribution of respondents according to which medicines are kept in the hostel and who prescribed medication for them during previous illness. (N=67)

Medicines	Frequency (f)	Percentage (%)
Panadol	44	65.67
Septrin	7	10.47
Amoxicillin	4	5.97
Coartem	12	17.91
Total	67	100
Prescriber		
Medical personnel from Pharmacy	20	29.85
Worker in the drug shop	5	7.46
Used previous treatment	9	13.43
None	33	49.25
Total	67	100

The majority of the respondents 44(65.67%) were keeping Panadol while the minority4 (5.97%) were keeping Amoxicillin. Most of the respondents 33(49.25%) said no one prescribed the d while the least of the respondents 5 (7.46%) were prescribed in the drug shop. (Table 3)

Figure 3: Response to if they have ever taken or given medication without a prescription. (N=100)



The majority of respondents 93(93%) said they have ever taken or given medication without a prescription while the minority 7(7%) have never.

Table 4: Distribution of respondents on how often they have been giving medication without prescription and respondents according to what sources of medicines were used (N=93)

Response	Frequency	Percentage (%)
Frequently	60	64.52
Occasionally	20	21.5
Rarely	13	13.97
Total	**93**	**100**
Source of medicine		
Bought from the drug shop	8	8.6
Left over from previous illness	14	15.05
Bought from the pharmacy	30	32.26
Got from other students	15	16.13
Got from the market	5	5.38
Got from the clinic	21	22.58
Total	**93**	**100**

The majority of respondents 60(64.52%) frequently gave medications without a prescription while the minorityrarely13 (13.97%) gave medications. Most of the respondents 30(32.26%) said they bought drugs from the Pharmacy while at least 5(5.38%) said they got them from the market. (Table 4)

Attitude towards Self-medication among medical students in Kampala School of Health Sciences, Wakiso district.

Table 5: Distribution of respondents according to their feelings about self-medication being better than going to the hospital, feelings if one should first take medication before going to the hospital, and if Self-medication can result in harmful effects. (N=100)

Response	Frequency(f)	Percentage (%)
Self-medication is better than going to the Hospital		
Strongly agree	20	20
Agree	63	63
Disagree	7	7
Taking medicine first before going to the hospital		
Strongly agree	4	4
Agree	50	50
Disagree	20	20
Strongly disagree	26	26
Self-medication can result into harmful effects		
True	97	97
Not true	2	2
I do not know	1	1
Total	**100**	**100**

The majority of the respondents 63(63%) agreed with the statement that Self-medication is better than going to the hospital while the minority 7(7%) disagreed. Most of the respondents 50(50%) agreed on taking action before going to the hospital while at least 20(20%) disagreed. The majority of respondents 97(97%) believed Self-medication can result in harmful effects while the minority1 (1%) didn't know that self-medication can result in harmful effects. (Table 5)

Practices towards Self-medication among medical students in Kampala School of Health Sciences, Wakiso district.

Table 6: Distribution of respondents as to whether Self-medication can be practiced on all drugs, Response as to whether medicines can be shared between two people having different illnesses, Response as to whether self-medication can delay one from seeking health facility intervention, responses as to if Self-medication can cause addiction and responses as to if Self-medication saves time in case of emergency. (N=100)

Response	Frequency(f)	Percentage (%)
Self-medication can be practiced on all drugs		
Strongly agree	17	17
Agree	63	63
Disagree	20	20
Medicines can be shared between two people having different illness		
Agree	2	2
Disagree	28	28
Strongly disagree	70	70
self-medication can delay one from seeking health facility intervention		
True	89	89
Not true	11	11
Responses as to whether Self-medication can cause addiction		
True	67	67
Not true	33	33
Self-medication saves time in emergency		
Strongly agree	68	68
Agree	20	20
Disagree	12	12
Total	100	100

The majority of the respondents 63 (63%) said Self-medication can be practiced on all drugs while the minority 17 (17%) strongly agree. The majority of the respondents 70(70%) strongly disagreed with the sharing of medicines between two people with different illnesses while the minority 2(2%) agreed that medicines can be shared. The majority of the respondents 89 (89%) said self-medication can delay one from seeking health facility intervention while the minority 11(11%) said it's not true. The majority of respondents 67(67%) said self-medication causes addiction while the minority 33(33%) said it cannot cause addiction. The majority of respondents 68(68%) strongly agreed and said self-medication saves time in case of emergency while the minority12 (12%) disagreed with the statement. (Table 6)

DISCUSSION.

Knowledge of students on self-medication.

In a study carried out on 100 participants, studies showed that the majority of the respondents75 (75%) had fallen sick in the past month of the study, this finding was in line with that of a study conducted in Kampala International University Western Campus Uganda (Ruzindana 2018) confirmed that more than a half of the participants had someone sick and self-medicated a month before the study.

According to this study, the most suffered condition was a headache at 41(54.66%); this finding was about a study conducted at Qassim University by (Razan et al 2022) where study participants reported self-medication use in a variety of conditions including headache.

The study also evidenced that most of the respondents 45(60%) got medication from a pharmacy which was in line with findings from a study conducted in developing countries (Ocen et al 2015) that showed drugs were obtained from a pharmacy, leftover, friends/relatives.

The majority of the respondents 44 (65.67%) kept medicines in the hostel for use when someone fell sick and the most kept drug was Panadol this makes it the most self-medicated drug this finding was in line with that of the study conducted in Punjab by (Mannat et al 2017) that showed the most commonly used drugs as Analgesics.

The study also showed that 93 (93%) had ever given or taken medications without a prescription. As evidenced by a different study conducted in Chennai the prevalence of self-medication was found to be 80% (Paranginalai et al 2018) people are self-medicating

Additionally, the majority of the respondents 60 (64.52%) administered medications without a prescription frequently, the major source of medicines used was pharmacy30 (32.26%) and this was in line with findings in a study conducted at Kampala International University Western Campus (Ruzindana 2018) that confirmed 66% got medications from pharmacies.

The attitude of students towards self-medication.

In a study carried out on 100 participants, when respondents were asked if self-medication was better than going to the hospital 63 (63%) agreed with the statement, and this affirms findings by (Kumar et al 2015) thatwasconductedamongmedicalstudentsand50.7%ofthe students a good attitude towards self-medication.
When respondents were asked if whenever one is sick should always take medications before going to the health facility 50(50%) agreed this shows that they had a good attitude towards self-medication and this was about a study conducted among medical students by (Kumar et al 2015) which found out that many students end up self-medicating due to the feeling that their ailments can be managed by themselves since they know the drugs to use when managing their conditions.
When respondents were asked if self-medication can result in harmful effects, the majority of the respondents 97 (97%) said it's true, and this was in line with a study conducted at Kampala International University Western Campus Uganda 87 (87) % in a study by(Ruzindana 2018) students agreed that self-medication had negative consequences.

Practices of students towards self-medication students of Kampala School of Health Sciences, Wakiso district.

According to this study carried out on 100 participants, most of the respondents 63 (63%) agreed that self-medication can be practiced on all drugs this showed that at Kampala School of Health Sciences, self-medication is being practiced on many drugs, this contradicts with WHO that acknowledges and recommends self-medication in PHC since there is need for one to take charge in conditions like diabetes and additionally, the above finding was in relation with the study conducted among medical and pharmacy students by (Razan et al 2022) was 77.8% of the respondents had confidence in self-medication.
The findings of this study revealed that most of the participants 70(70%) strongly disagreed with issues of sharing medicines between two people with different illnesses, despite the high prevalence of self-medication; the participants had a negative attitude towards sharing medicines and this was in line with a study at Kampala international university western campus Uganda by (Ruzindana 2018) which showed that 12% of the respondents got the medication from friends therefore few respondents shared medicines.
However, when asked if self-medication can delay one from seeking health facility care, most of the respondents 89(89%) said it was true this is evident in a study by (Paranginalai et al 2018) which 72% of respondents agreed that self-medication is not a good practice. On the other hand, when asked if self-medication can cause addiction, most of the respondents 67(67%) agreed that self-medication can cause addiction this is in line with a study by (Ruzindana 2018) in which 57% of the respondents agreed that SM can cause dependence.
Further findings showed that a percentage of respondents 68(68%) strongly agreed that self–medication saves time in case of emergency; this finding is about a study at Kampala International University Western Campus Uganda by (Ruzindana 2018) in which 47% of the respondents agreed that they use SM in case of emergency.

LIMITATION TO THE STUDY.

The study was carried out in only one institution in Uganda. The results therefore may not be generalized to the whole student community in the Uganda institution.
The study was based on self-reporting on self-medication, therefore dependent on the respondent's honesty. Convenience sampling was done and this may introduce bias and the results should be treated cautiously.

CONCLUSION.

According to the study, the following are factors contributing to self-medication. Poor knowledge of self-medication because 60% sought medical care from a pharmacy, coupled with the above the respondents lacked knowledge of prescription-only drugs and OTC drugs.
Positive attitude towards self-medication since 63(63%) of respondents agreed that "Self-medication is better than going to the hospital.
The prevalence was high since 93(93%) of the respondents had ever given or taken medication without a prescription.
Worst of all 67(67%) of respondents had a practice of keeping medications in the hostel that would predispose one to self-medication.

RECOMMENDATIONS.

To the Ministry of Health.

There is a need for the Ministry of Health to stipulate information and strengthen campaigns on prescription-only medications and OTC medications, that the public is made aware of.
Strengthening of rules and regulations by which pharmacies, and drug shops are guided and supposed to operate in regards to selling medicines.
To strengthen the rules on issuing of licenses to drug shops, Clinics, and Pharmacies

To the District Health Office.

Frequent supervisory visits to the drug shops and pharmacies to keep reminding them of what is to be done by the concerned authorities.
Furthermore, there is a need for continuous health education by health workers on self-medication and its complications.
There is a need for further study to be conducted in other medical institutions with a larger sample size to substantiate the findings of this study for possible generalization.
In addition to that, there is a need for sensitization of students on OTC drugs and the dangers of self-medication.

To the Community members.

There is a need to continuously inform fellow students about self-medication and its implications by informed students.
With combined administration effort, there is a need to eradicate self-medication practices by developing good health-seeking habits among students.

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LIST OF ABBREVIATIONS.

ADR: Adverse Drug Reaction.
CHW: Community Health Workers.
KSHS: Kampala school of health sciences
MDR: Multi-Drug Resistance
NDA: National Drug Authority.
NSAIDS: Non-steroidal anti-inflammatory drugs
OTC: Over–the–Counter.
PHC: Primary Health care.
SM: Self-medication
WHO: World Health Organization

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CONFLICT OF INTEREST.

The author declares no conflict of interest

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2. Harrison Sida, lecturer at the Kampala School of Health Sciences.

REFERENCES.

1. Alshashrani SM, A.S.-W. (2019). self-medication among King Khalid University students in Saudi Arabia. Risk Management Policy 2019. *Taylor& Francis online*, *12*(243).
2. Mannat KB, S.R.(2017).knowledge attitude and practices of self-medication among undergraduate medical students of Punjah. *Journal of medical research*.
3. Ocen M, E.A.(2015). Household antimicrobial SM: a systematic review and meta-analysis of the burden, risk factors and outcomes in developing countries. *BMC Public Health.*
4. Paranginalai DMK, K. R. (2018). Knowledge attitude and practices of self-medication among patients visiting in gadental hospital in Chennai-A. *international journal of Recent scientific research.*
5. Kumar Mehta,S.S.(2015).knowledge attitude and practices of SM among medical students. *IOSR Journal of nursing and health science*.
6. DC Ruzindana · 2018 Self-medication practices among senior students attending Bachelor of Medicine and Surgery at Kampala International University Western Campus, Uganda
7. Razan Alduraibi, R.K., Altowayan, W.M. A cross-sectional survey: knowledge, attitudes, and practices of self-medication in medical and pharmacy students. *BMC Health Serv Res* 22, 352 (2022). https://doi.org/10.1186/s12913-022-07704-0

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