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Factors Influencing Self-Medication Practice among Undergraduate Medical Students of Kampala International University-Western Campus

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ABSTRACT

This study investigated factors influencing self-medication among medical students at Kampala International University-Western Campus, focusing on factors such as quality of health services, commonly used medicines, and education level. The cross-sectional study design allowed for a combination of quantitative and qualitative approaches to interpret data. The study population consisted of medical students aged 18-30, enrolled in any medical course at KIU-WC, and of any gender. The sample size was determined using Fisher's formula, with a minimum of 220 students. Data collection involved random sampling, and the study utilized questionnaires with both structured and unstructured questions. The study found that 80.0% of participants self-medicate. Painkillers (52%), anti-malarials (31%), and antibiotics (12%) are the most commonly used drugs for self-medication. Most people (85.5%) get their drugs from drug shops, as they do not require prescriptions from doctors. The majority (80.0%) prefer easy access to drugs and cheap sources, which may be a factor in self-medication practices. The study also found that 97.3% of participants were within a 5-kilometer radius of KIUTH, and 79.1% self-medicate. The majority (10%) had to reach KIUTH by vehicle due to the numerous and easily accessible sources of self-medicated drugs. However, 18.2% of participants concluded that the quality of services offered within KIUTH facilities was poor, which could account for the decision to self-medicate rather than seek help from health professionals. Higher education level was found to be more likely to self-medicate, as students in higher classes were more likely to self-medicate. This could be due to increased knowledge and experience about medicines and drugs, or greater financial stability, enabling them to travel and seek care at private and government health facilities.

Keywords: Self-medication, Self-care, Undergraduates, Medical Students

INTRODUCTION

Self-medication is a prevalent human behavior wherein individuals utilize substances or external influences to self-administer treatment for physical or psychological ailments [1]. Concurrently, self-care encompasses the actions individuals take toward their own health and well-being, including care extended to family members and others [2]. Notably, each patient is considered to have at least two prescribers: their own doctor and themselves, with additional prescribers often including friends or well-wishers [3]. In Uganda, self-medication has been characterized as a form of "mob justice," reflecting a loss of faith in the existing healthcare system [4]. In Uganda, due to prevailing ideologies surrounding childhood and medical expertise, there exists ease of access to knowledge regarding medication use, including potent hospital medicines [4]. Moreover, studies have shown that individuals express overwhelming satisfaction with non-prescription medicines, often believing them to be as effective as prescription counterparts [5]. Medical knowledge is widely dispersed within communities, with many possessing knowledge of treatments for common ailments affecting themselves or family members [6].

Self-medication practice (SMP) constitutes one facet of self-care and involves the use of medicines without healthcare professional prescriptions, such as reusing old prescriptions or sharing medications with relatives [7]. SMP patterns vary across populations and are influenced by diverse factors including age, sex, income, education level, and perception of illness [7]. Globally, SMP is considered a component of self-care, albeit one with the potential for both positive and negative outcomes due to the use of drugs with associated benefits and risks [8]. Responsible self-medication, if practiced appropriately, can offer cost-effective treatment for certain conditions, preventing unnecessary medical consultations and alleviating burdens on healthcare facilities [9]. However, self-medication encompasses not only the use of approved over-the-counter (OTC) drugs but also traditional remedies, non-compliance with prescribed medications, and the use of stored medications from previous prescriptions [10].

Despite its ancient roots, self-medication remains underexplored. When used judiciously, it could alleviate strain on healthcare professionals and promote health consciousness; however, misuse may lead to delayed diagnosis and treatment [11]

Studies have identified medical and health science students as a demographic particularly prone to recurrent self-medication practices, with prevalence rates ranging from 69.4% to 74% in Indian studies [12]. Globally, the prevalence of SMP varies widely, ranging from 32.5% to 81.5%, with potential implications for antibiotic resistance, resource wastage, and delayed treatment [12]. In developing countries like India, SMP serves as a cost-effective alternative for individuals lacking access to clinical services, with many drugs available over the counter. Additionally, socio-economic factors, lifestyle choices, and access to drugs contribute to the prevalence of self-medication [13].

In Uganda, the aftermath of armed conflict has resulted in self-treatment practices due to challenges within the healthcare system [8]. Factors influencing self-medication in northern Uganda include gender, drug knowledge, advice from friends, and distance to health facilities [13]. This practice can contribute to antimicrobial resistance, particularly in regions where antibiotics are easily accessible without prescriptions [14]. Despite its potential benefits, self-medication poses risks, including misdiagnosis, adverse drug reactions, and delayed treatment (PubMed). Moreover, frequent use of unprescribed drugs can damage organs and hinder the utilization of medical facilities [15]. Given these complexities, further research is warranted to elucidate the prevalence and factors influencing self-medication practices and their associated impacts. This study aimed to explore factors influencing self-medication among medical students at Kampala International University-Western Campus, including quality of health services, commonly used medicines, and education level.

METHODOLOGY

Study Design

A cross-sectional study design was utilized to better understand the factors associated with self-medication among medical students. This design allowed for a combination of quantitative and qualitative approaches to interpret the data required to answer the research questions. While the quantitative approach aided in collecting numerical data, such as the level of self-medication, the qualitative approach helped interpret non-numerical data for a deeper understanding of the study variables.

Study Area

The study was conducted among medical students at Kampala International University Western Campus (KIU-WC). This specific location was chosen due to its large population of individuals with knowledge about medicine usage, who frequently practice self-medication. Since self-medication is predominantly observed among informed individuals, this population was deemed representative of Uganda's self-medication practices.

Study Population

The study population comprised medical students aged between 18-30 years enrolled in any medical course at KIU-WC, including degree, diploma, or certificate levels.

Inclusion Criteria

Subjects included in the study were between 18-30 years old, medical students pursuing any medical course at KIU, and of any gender.

Exclusion Criteria

Excluded from the study were medical students below 18 years or above 30 years of age, individuals with mental disabilities, students from other institutions or universities, and those unwilling to consent to participate.

Sampling Size Determination

The sample size was determined using Fisher's formula, considering a prevalence of 17.4% based on the Uganda Demographic Health Survey (2011). With a margin of error of 5%, the minimum sample size was calculated to be 220 students.

Sampling Procedures/Techniques

Participant selection involved random sampling, wherein study areas were visited, and present students were interviewed and asked to complete questionnaires.

Data Collection and Management

Data collection focused on factors influencing self-medication among medical students at KIU-WC. Research assistants received two days of training on data collection tools. The study utilized questionnaires, comprising structured (closed-ended) and unstructured (open-ended) questions. Pretesting of tools ensured questionnaire validity, and collected data were entered into SPSS for analysis.

Data Analysis

Quantitative data were analyzed using descriptive statistics and multivariate analysis in SPSS, while qualitative data were reviewed to ensure coverage of variables of interest.

Quality Control

Pretesting of questionnaires was conducted to ensure validity and reliability. Data were reviewed for completeness, and confidentiality was strictly maintained.

Ethical Consideration

Ethical approval was obtained from the faculty of clinical medicine and dentistry at KIU-WC, and informed consent was obtained from all participants. Confidentiality and equity were prioritized throughout the study.

Data Processing

Data processing involved editing and standardizing questionnaires for completeness and consistency, followed by data entry into SPSS for analysis.

RESULTS

The Prevalence of Self-medication

Table 1: Self-medication

Self-medicates	Number	Percentage (%)
No	22	20
Yes	88	80
Total	110	100

Table 2 shows that majority (80.0%) of the research participants were self-medicating indicating that a high percentage of the population self-medicate.

Socio-demographic factors

The Socio-demographic characteristics of the participants have been presented in table below.

Table 2: Socio demographic factors

CHARACTERISTICS	TOTAL (X= 110)X (%)	NON-SELF-MEDICATE(X=22)X (%)	SELF-MEDICATE (X=88) X (%)
SEX			
MALE	52(47.3)	10(19.2)	42(80.8)
FEMALE	58(52.7)	12(20.7)	46(79.3)
AGE GROUP			
18-20	27(24.5)	15(55.6)	12(44.4)
21-24	61(55.5)	5(8.2)	56(91.8)
25-30	22(20.0)	2(9.1)	20(90.9)
RELIGION			
MOSLEM	10(9.1)	3(30.0)	7(70.0)
ANGLICAN	33(30.0)	6(18.2)	27(81.8)
CATHOLIC	22(20.0)	8(36.4)	14(63.6)
SEVENTH DAY ADVENTISTS	37(33.6)	4(10.8)	33(89.2)
8(7.3)	1(12.5)	7(87.5)	
Source of income			
PARENTS	66(60.0)	12(18.2)	54(81.8)
SELF DONATION /SCHOLARSHIP	10(9.1)	4(40.0)	6(60.0)
34(30.9)	6(17.6)	28(82.4)	
level of studies			
FIRST YEAR	15(13.6)	8(53.3)	7(46.7)
SECOND YEAR	17(15.5)	7(41.2)	10(58.8)
THIRD YEAR	33(30.0)	3(9.1)	30(90.9)
FOURTH YEAR			
FIFTH YEAR			

	27(24.5)	3(11.1)	24(88.9)
	18(16.4)	1(5.6)	17(94.4)

Frequency of Self-medication

The frequency of self-medication among the study participants is presented in table 3 below.

Table 3: Frequency of self-medication

Frequency	Number	Percentage (%)
Each time I am sick	11	10.0
Sometimes when am sick	18	16.4
If I have similar symptoms Toprior sickness	28	25.5
Rarely	27	24.5
When symptoms are mild	26	23.6

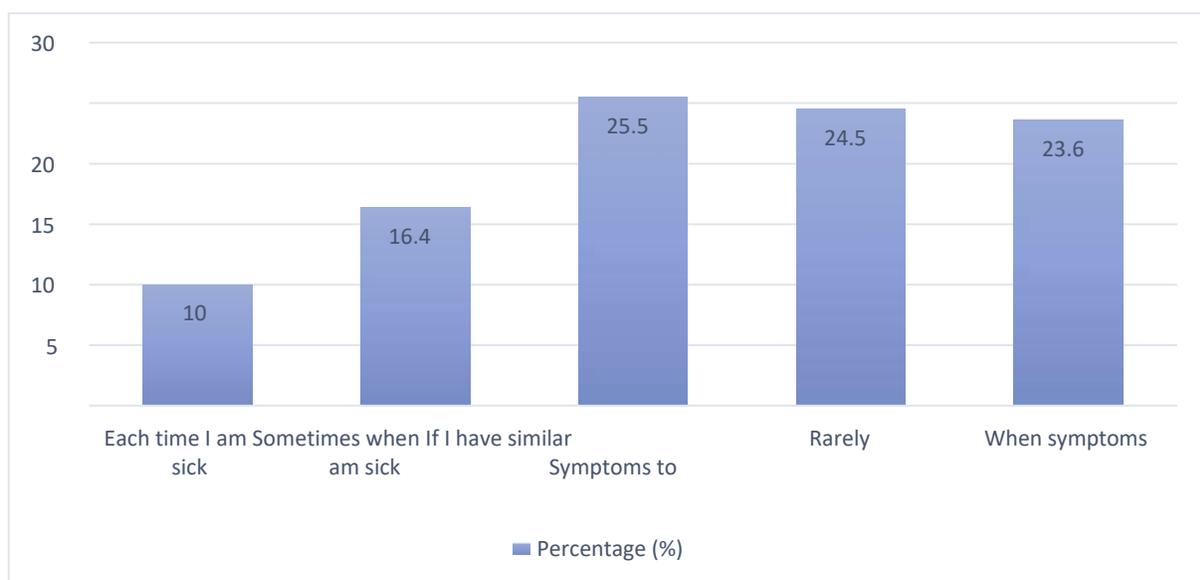


Figure 1: Frequency of self-medication

Figure 1 shows majority (25.5%) of the participants that self-medicate do so because they have similar symptoms to previous sickness, 24.5 self-medicate rarely while 23.6%, also a very big percentage medicate when the symptoms are mild. Minority of the participants (10.0%) self-medicate each time they feel sick.

Source of Self-medicated Drugs

The source of the self-medication drugs for the study participants who self-medicate have been shown in table 6 below.

Table 4: Source of self-medicated drugs

Source	Number	Percentage (%)
Home	7	6.4
Drug shop	94	85.5
Relatives/neighbor	6	5.5
Others	3	2.7

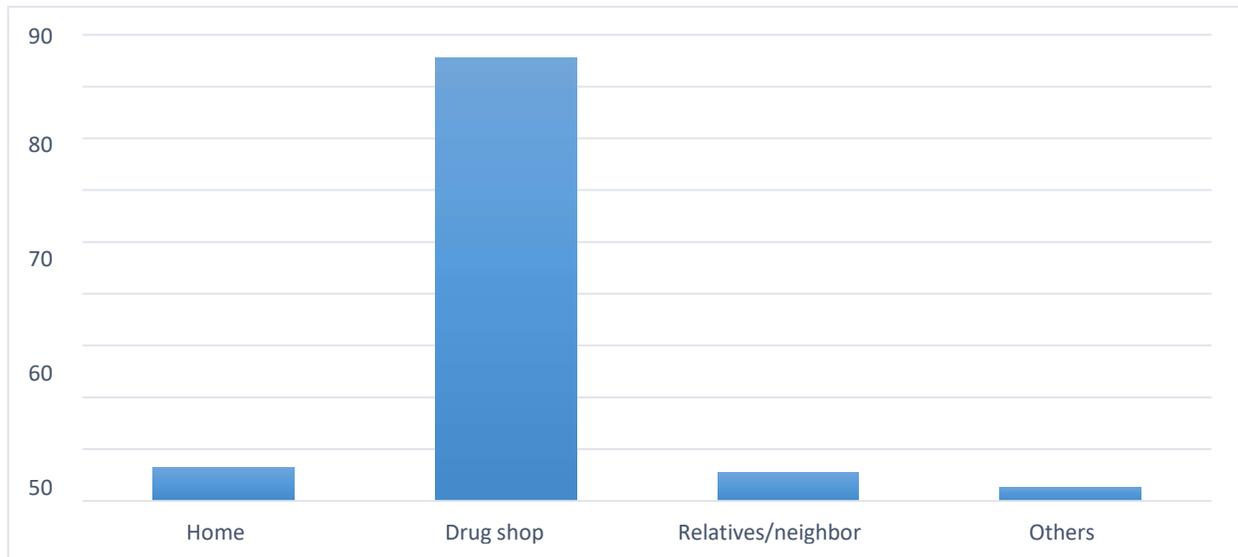


Figure 2: Sources of self-medicated drugs

Figure 2 shows that majority (85.5%) of the study participants that self-medicate get their drugs from drug shops which indicates many people get drugs from drug shops as compared to other sources of medicines

Reason for Referred Source of Self-medication Drugs

The reason for the selection of the preferred source of self-medication drugs are presented in the table below,

Table 5: Reason for preferred source of self-medication

REASON	NUMBER	PERCENTAGE (%)
EASILY ACCESSIBLE	88	80.0
SHORT DISTANCE		
CHEAP	14	12.7
OTHERS	8	7.3

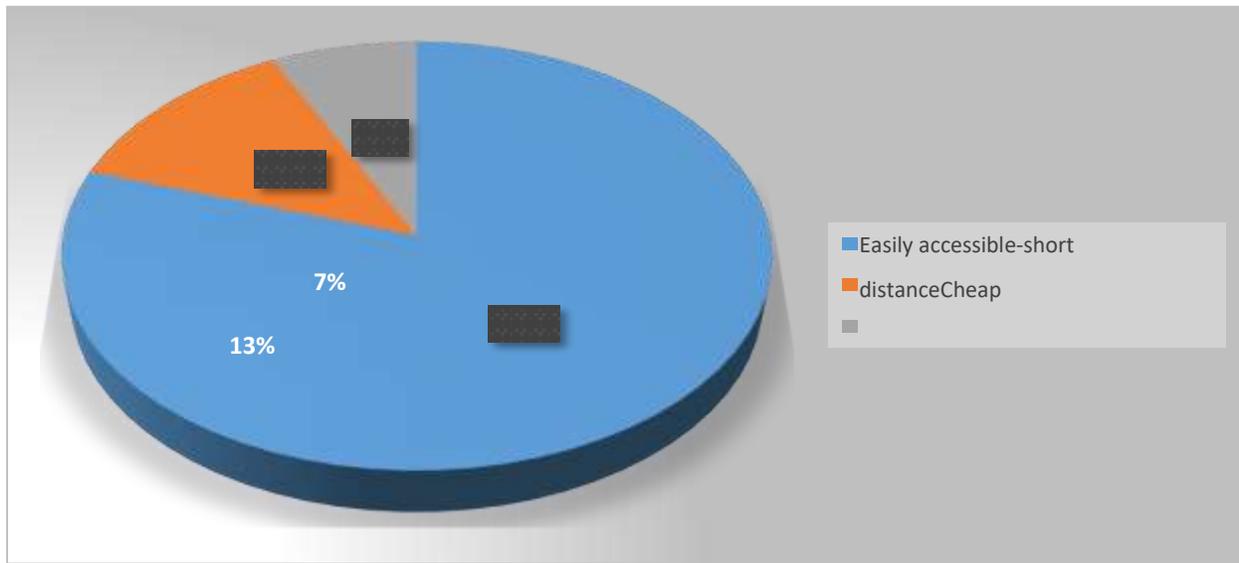


Figure 3: Reason for preferred source of self-medication

Figure 3 shows that majority (80.0%) of the participants who self-medicate prefer their source of self-medicated drugs because it is easily accessible or near to their places of residence while 13.0% of the participants that self-medicate prefer their source of self-medication drugs because it is cheap.

The Distance to Source of Self-medication Drugs in Comparison to Distance to KIUTH

The distances to source of self-medication drugs as compared to distance to KIU-TH among the students that self-medicate are shown in the table below.

Table 6: Comparison between distance to preferred source of self-medicating drug to distance to KIUTH

Distance	Number		Percentage (%)	
	To preferred Source	To KIU-TH	To preferred source	To KIU-TH
Less than 5km	107	87	97.3	79.1
5km-10km	3	22	2.7	20.0
More than 10km	0	1	0.0	0.9

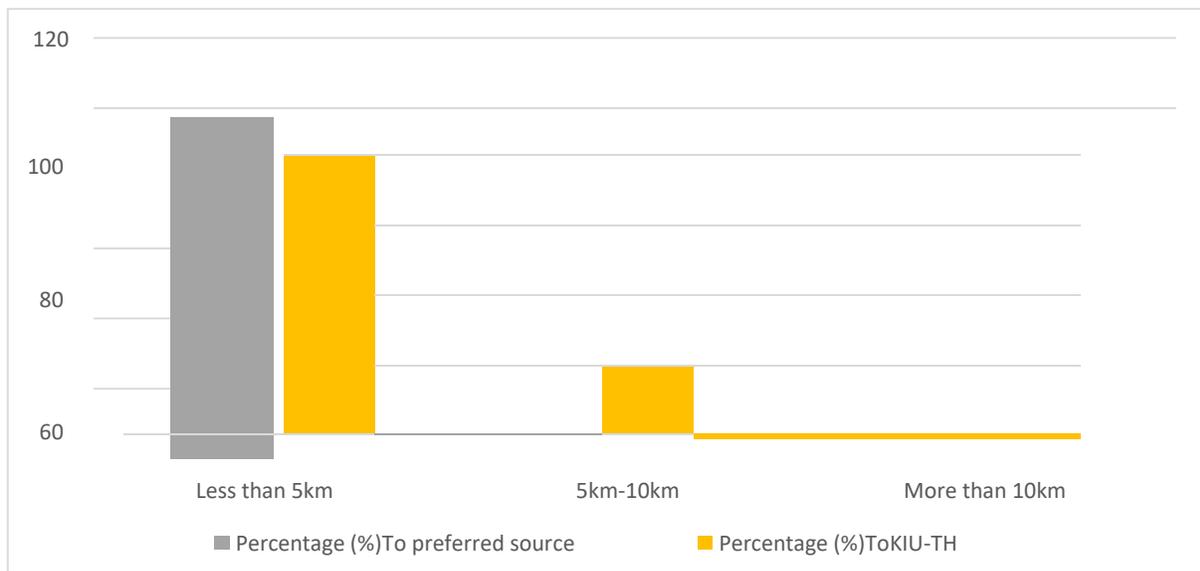


Figure 4: Comparison between distances to preferred source of self-medicating drug to distance to KIUTH
 Figure 4 shows that majority (97.3%) of study participants that self-medicate are within 5km from their preferred source of self-medication drugs as compared with 79.1% being within 5km from KIU-TH. The figure also shows that majority (20.0%) of the people who self-medicate are within 5-10km from KIU-TH. This is in accordance to one key informant that stated, “most of the people who self-medicate are nearer to drug shops and hence find it easier to just go buy the medicine nearby than coming all the way to the health centre”.

Common Drugs used for Self-medication.

The kind of drug used for self-medication are shown below

Table 7: Common drugs used for self-medication

Drug	Number	Percentage (%)
Anti-malarial	34	30.9
Painkiller	57	51.8
Antibiotics	13	11.8
Others	6	5.5

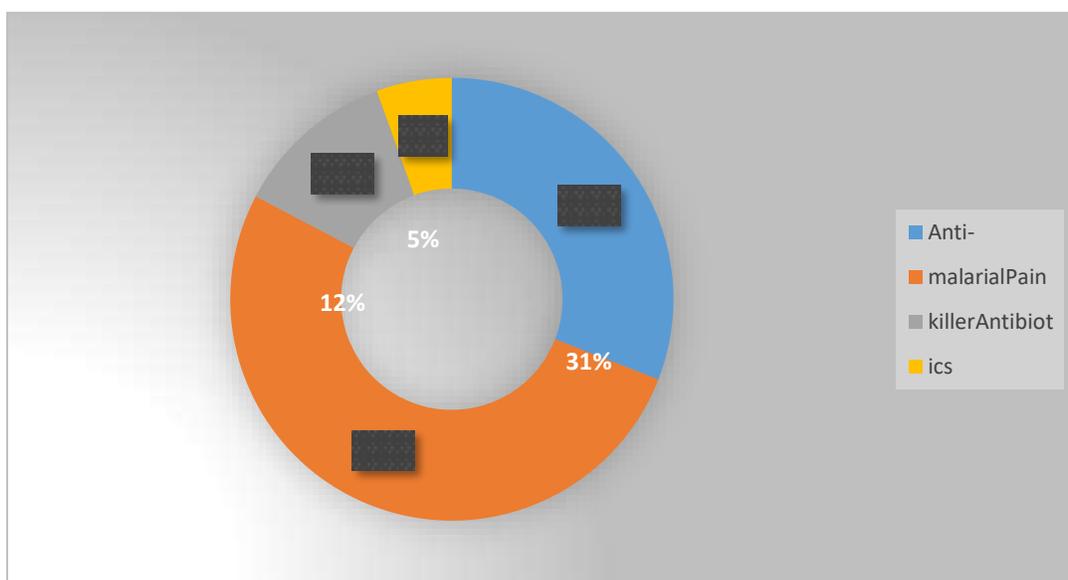


Figure 5: Common drugs used for self-medication

Figure 5 shows that majority (52%) of the research participants that self-medicate use pain killers followed by anti-malarials (31%) and antibiotics (12%). Other drugs are rarely used to self-medicate

Comparison between Means of Transport to Source of Self-medication Drugs and KIU-TH.

The means of transport to the source of self-medication drugs and preferred choice of health service provider is shown in the table below,

Table 8: Comparison between means of transport to source of self-medication drugs and KIU-TH

Mean of transport	Number		Percentage (%)	
	To preferred source	To KIU-TH	To preferred source	To KIU-TH
Walk	89	53	80.9	48.2
Bicycle	9	20	8.2	18.2
Motorcycle	11	26	10.0	23.6
Vehicle	1	11	0.9	10.0

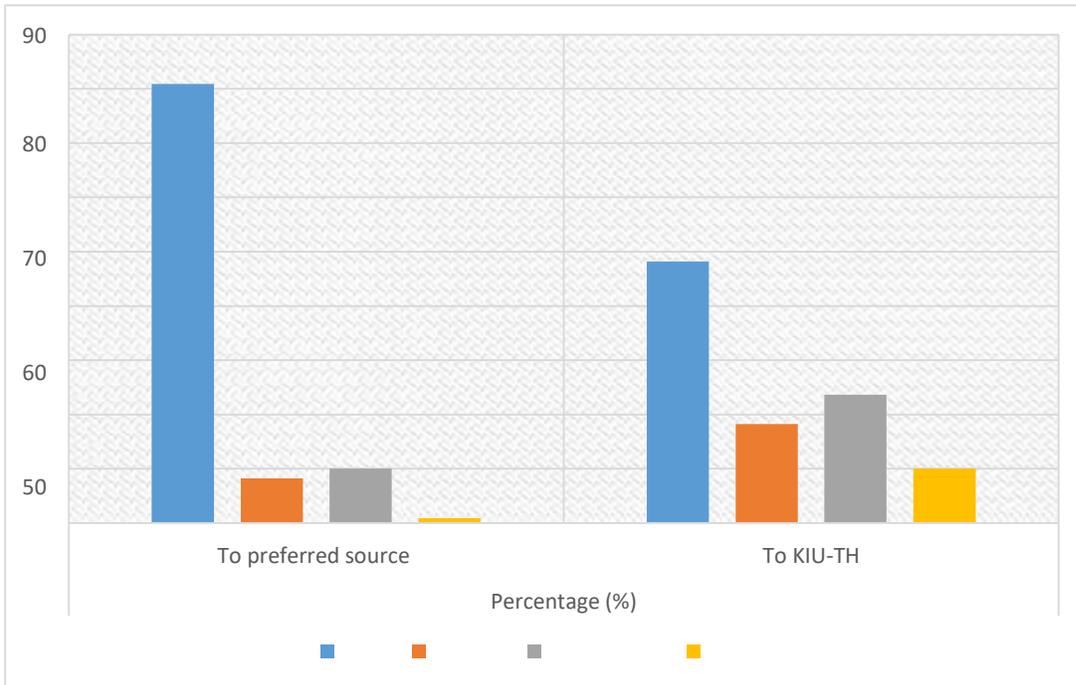


Figure 6: Comparison between means of transport to source of self-medication drugs and KIUTH

Figure 6 shows that majority (80.9%) of the study participants walk to acquire medicines for self-medication as compared to only 48.2% who can walk to KIU>TH. It also shows that majority (10.0%) of the study participants that self-medicate have to use vehicles to access KIU.TH. This is supported by one of the key informants that stated, “within the community, you will find many people have to either use a vehicle or bicycle to travel to health facilities where they feel comfortable getting the service they need.”

Quality of Health Services Rendered to Students by KIU-TH

The quality of health services was rated by all the study participants and presented below,

Table 9: Quality of health services rendered to students by KIU-TH

Quality rating	Number	Percentage (%)
Good	28	25.5
Average	62	56.4
Poor	20	18.2

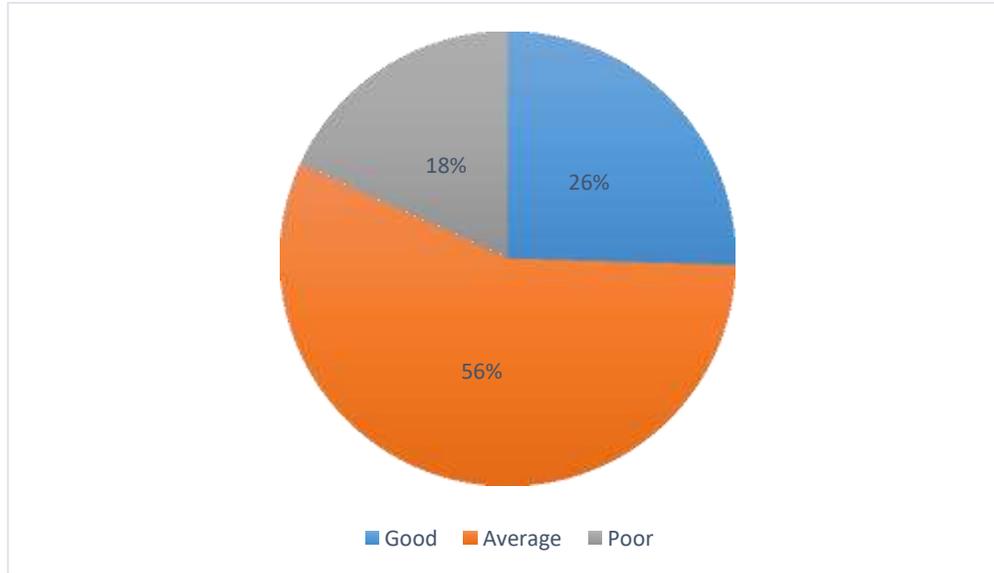


Figure 7: Quality of health services rendered to students by KIU-TH

Figure 7 show that majority (56%) agreed that the quality of services in health facilities was average as compared to only 26% who said it was good.

This was collaborated by one key informant who said, “the quality of services being provided in health facilities is still lacking and hence people will only come if they believe the disease is getting worse”

Table 10: The courses of the participants who self-medicate at Kampala International University-Western Campus

COURSE	NUMBER	PERCENTAGE (%)
BMS	35 out of 39	89.7
BCM	5 out of 9	55.6
BPH	14 out of 24	58.3
DCM	21 out of 24	87.5
BNS	3 out of 3	100
CNS	10 out of 11	90.9

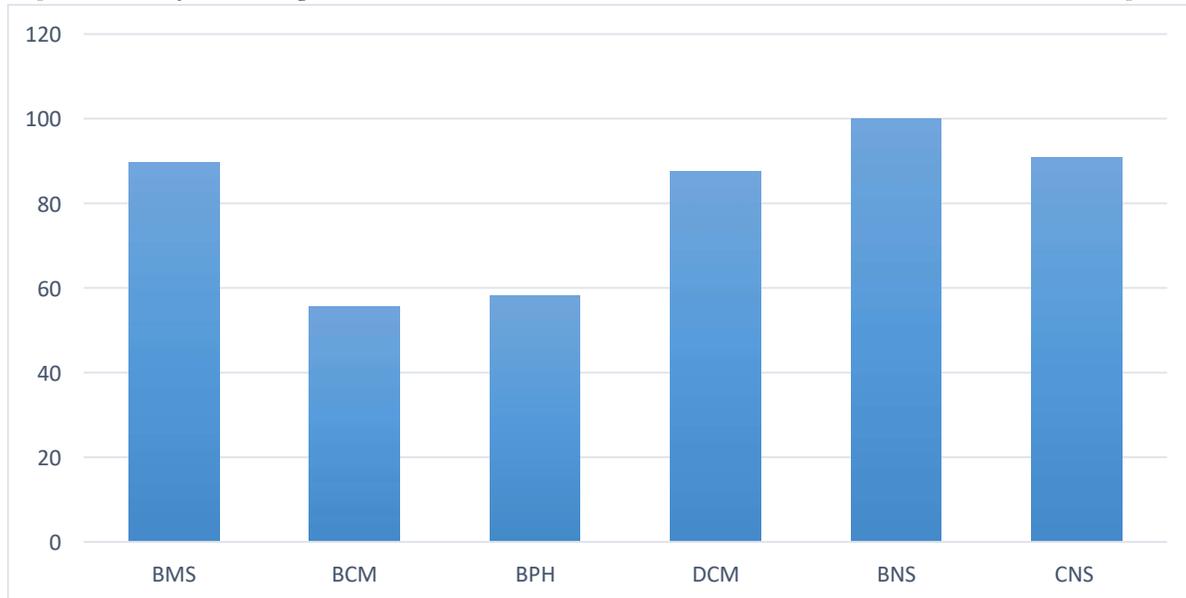


Figure 8: The courses of the participants who self-medicate at Kampala International University-Western Campus

Figure 8 shows that a big percentage of participants in every course do self-medicate with BMS having the greatest percentage. This is attributed to the fact that the BMS students tend to know more about drugs and medications as compared to any other group. BNS, CNS and DCM also have a high percentage however there were fewer participants as compared to BMS so the percentage of participation is not that dependent on.

Rating of the Different Dimensions of Quality of The Health Services

Table 11: Rating of the different dimensions of quality of the health services

<i>Dimension of Quality</i>	<i>Poor X (%)</i>	<i>Average X (%)</i>	<i>Good X (%)</i>	<i>Total X (%)</i>
<i>Technical competence</i>	67(60.9)	21(19.1)	22(20.0)	110(100)
<i>Accessibility</i>	19(17.3)	70(63.6)	21(19.1)	110(100)
<i>Effectiveness</i>	52(47.3)	40(36.4)	18(16.4)	110(100)
<i>Efficiency</i>	83(75.5)	16(14.5)	11(10.0)	110(100)
<i>Inter personal relationship</i>	51(46.4)	34(30.9)	25(22.7)	110(100)
<i>Continuity</i>	57(51.8)	28(25.5)	25(22.7)	110(100)
<i>Safety</i>	52(47.3)	21(19.1)	37(33.6)	110(100)
<i>Choice of services</i>	62(56.4)	14(12.7)	34(30.9)	110(100)
<i>Amenities</i>	78(70.9)	24(21.8)	8(7.3)	110(100)

Table 12 shows that the majority (60.9%) of the study participants agree that the technical competence is poor within KIUTH. also, majority (17.3%) also agree that the health services are not easily accessible. Furthermore, majority (47.3%) of the study participants agree that the effectiveness of the health services provided is poor. Also, majority (75.5%) agreed that the efficiency of the services provided is poor. (51.8%) agreed that there was no

continuity of services provide. Majority (47.3%) agreed that services were limited and not safe. Lastly majority (70.9%) agreed that the amenities were poor.

DISCUSSION

The study revealed that, within a sample of 220 people, 80.0% were self-medicating, which is similar to a study to an earlier study [16]. Although, the frequency of self-medication varied among the different studies, this particular study revealed that the majority (24.5%) of the study participants rarely self-medicated. 23.6% only self-medicated when the symptoms were mild, and 25.5% self-medicated if they had similar symptoms. This pattern suggests that even though a high number of people self-medicate, the frequency of self-medication in KIUTH is relatively low. In addition, the study shows the routinely used drugs in self-medication are painkillers (52%), anti-malarials (31%), and antibiotics (12%). People who have previously suffered from malaria and respiratory tract infections may self-medicate with anti-malarials and antibiotics, as they can associate the symptoms with the disease. Hence, they might not realize the value of seeking medical care from a service provider when they clearly have an idea of the disease they are suffering from and know the medication to use. The study showed that most people (85.5%) get the drugs they use to self-medicate from drug shops. This could be because the country's drug shops do not require prescriptions from doctors to issue medicines to people in the community. The study revealed that the majority (80.0%) of the study participants declared that the reason they chose the preferred source of the self-medication drugs to get was because of easy access, and 12.7% revealed that they self-medicate because their sources of drugs are cheap. Therefore, a combination of easy access and cheap sources of drugs will surely promote self-medication practices as compared to travelling long distances so as to access cheaper drugs, which definitely will make it expensive however much the drugs are given free of charge, which is not always the case in KIUTH. In the comparison of the distance to attain the self-medicated drugs and the distance to KIUTH, 97.3% of the study participants were within a 5-kilometre reach of the source of self-medicated drugs. The study found that 79.1% of participants self-medicate, compared to 79.1% within a 5-kilometer radius of KIUTH. Additionally, 80.9% of self-medicators walk to their drug sources, compared to 48.2% who walk to KIUTH. The majority (10%) have to reach KIUTH by vehicle, likely due to the numerous and easily accessible sources of self-medicated drugs. The study revealed that the majority (18.2%) concluded that the quality of services offered within KIUTH facilities is poor. The majority agreed that each dimension of quality was poor. This could also account for the decision to self-medicate rather than seek help from health professionals.

Higher education level: Compared to students in BMS 1st (46.7%) and 2nd (58.8%) years, students in higher classes, such as 3rd (90.9%), 4th (88.9%), and 5th (94.4%) years, were more likely to self-medicate. Higher education leads to increased knowledge and experience about medicines and drugs. Fourth- and fifth-year students who are almost doctors, nurses, or pharmacists know quite a lot, and most of them prefer to treat themselves or help treat their other colleagues who have mild or familiar illnesses or symptoms, resulting in an increased incidence of self-medication. Several pieces of collected data also support the idea that self-medication is more prevalent in an educated population. This study showed that self-medication was more prevalent in the less educated class. This could be due to the fact that individuals with higher education may be aware of the potential risks associated with self-medication and incorrect diagnosis, leading them to prefer seeking medical care. Alternatively, it could be due to their greater financial stability, which enables them to travel and seek care at private and government health facilities of their choice, as supported by previous studies [17] Which revealed that several data collected in previous studies indicated that self-medication is more prevalent in populations with low levels of education. In addition, distance was found to be a predictor of self-medication; longer distances from participants' places of residence to KIUTH were associated with self-medication.

CONCLUSION

The goal of this paper was to conduct a psychological investigation to examine the factors associated with self-medication at Kampala International University Teaching Hospital. On the basis of a literature review, two outstanding factors were identified: distance from health facilities (KIUTH) and quality of health services provided. A study was then conducted in order to collect empirical data about the frequency of the occurrence of these factors in Kampala International University Teaching Hospital. On the basis of the binary regression analysis, we can conclude that level of education, distance from health facilities, quality of health services, source of income, and the course a medical student is taking are associated with self-medication at Kampala International University Teaching Hospital.

RECOMMENDATION

The evidence in this paper shows that people self-medicate due to long distances from students' places of residence to health providers (KIUTH), poor health services, and expensive costs of treatment. Therefore, it would be of value to lower the cost of treatment for students so as to motivate them to always seek medical attention from KIUTH despite the long distance. Also emphasise the staff-student relationship to improve the quality and efficiency of health services provided to KIU students since there will be a good channel of communication and an appropriate flow of information.

REFERENCES

1. Siraj, Ebrahim Abdela, et al. "Self-Medication Prevalence and Factors Associated with Knowledge and Attitude Towards Self-Medication Among Undergraduate Health Science Students at GAMBY Medical and Business College, Bahir Dar, Ethiopia." *Patient Preference and Adherence*, vol. Volume 16, Dec. 2022, pp. 3157–72, doi:10.2147/ppa.s390058.
2. Dare, Samuel Sunday, et al. "Behavioural Response to Self-Medication Practice Before and During Covid-19 Pandemic in Western Uganda." *Patient Preference and Adherence*, vol. Volume 16, Aug. 2022, pp. 2247–57, doi:10.2147/ppa.s370954.
3. Araia, Z.Z., Gebregziabher, N.K. & Mesfun, A.B. Self-medication practice and associated factors among students of Asmara College of Health Sciences, Eritrea: a cross sectional study. *J of Pharm Policy and Pract* **12**, 3 (2019). <https://doi.org/10.1186/s40545-019-0165-2>
4. Irene, Nabaweesi., Ronald, Olum., Arthur, Brian, Sekite., Willy, Tumwesigye, Suubi., Prossy, Nakiwunga., Aron, Machali., Richard, Kiyumba., Peter, Kalyango., Allen, Natamba., Yokosofati, Igumba., Martin, Kyeyune., Harriet, Mpairwe., Eric, Katagirya. "Antibiotic Practices, Perceptions and Self-Medication Among Patients at a National Referral Hospital in Uganda." *Infection and Drug Resistance*, undefined (2021). doi: 10.2147/IDR.S303075
5. Laranjeira, Carlos, et al. "Therapeutic Adherence of People with Mental Disorders: An Evolutionary Concept Analysis." *International Journal of Environmental Research and Public Health/International Journal of Environmental Research and Public Health*, vol. 20, no. 5, Feb. 2023, p. 3869, doi:10.3390/ijerph20053869.
6. Baryakova, T.H., Pogostin, B.H., Langer, R. et al. Overcoming barriers to patient adherence: the case for developing innovative drug delivery systems. *Nat Rev Drug Discov* **22**, 387–409 (2023). <https://doi.org/10.1038/s41573-023-00670-0>
7. Kwame, A., Petrucka, P.M. A literature-based study of patient-centered care and communication in nurse-patient interactions: barriers, facilitators, and the way forward. *BMC Nurs* **20**, 158 (2021). <https://doi.org/10.1186/s12912-021-00684-2>
8. Ikwara, Asher Emmanuel, and Humphrey Atwijukiire. "Self-medication and Medication Storage Practices Among Lira University Students in Lira City, Northern Uganda." *Frontiers in Public Health*, vol. 11, Nov. 2023, doi:10.3389/fpubh.2023.1259279.
9. Priya, Shaw., Sutapa, Mandal., Md., Samsuzzaman., Sulagna, Das. "Prevalence and the factors associated with self-medication practice: A community-based cross-sectional study in an Urban Area of Purba Bardhaman, West Bengal, India." *Acta medica international*, undefined (2022). doi: 10.4103/amit.amit_33_23
10. L., Divya., Ektha, Promoth, Kumar., G., M., sulaiman., Piekarz, Monika. "A Cross Sectional Study on Perception of Self-medication Practice among General Population - A Questionnaire Based Survey." *International journal of pharmaceutical sciences review and research*, undefined (2022). doi: 10.47583/ijpsrr.2022.v76i01.010
11. Rawan, N, K, Abdelwahed. "Self-Medication Practices, Prevalence, and Associated Factors among Syrian Adult Patients: A Cross-Sectional Study." *Journal of Environmental and Public Health*, undefined (2022). doi: 10.1155/2022/9274610
12. Vivek, Sharma. "Self-medication: A Mechanistic Review of Common Drugs." *International journal of pharmaceutical sciences review and research*, undefined (2023). doi: 10.47583/ijpsrr.2023.v80i02.020
13. Shatrughan, Pareek. "A review of self-medication practices among students of health-care professions in India." *Medical journal of Dr. D.Y. Patil Vidyapeeth*, undefined (2021). doi: 10.4103/mjdrdypu.mjdrdypu_81_20
14. Aruna, Baskar., Neethu, M, George., M, L, Sarika., Lakshmi, Ramamoorthy. "Self-Medication Practices: A Threat to Health Care." *Indian Journal of Community Medicine*, undefined (2020). doi: 10.4103/IJCM.IJCM_368_19
15. Isha, Anwar., Krishna, Minimol., Manjunath, Narasimhaiah. "Self-Medication Practices among Medical and Non-Medical Students." *Journal of Evolution of medical and Dental Sciences*, undefined (2020). doi: 10.14260/JEMDS/2020/652
16. Golnesa, Kazemioula., Shayan, Golestani., Seyed, Mohammad, Alavi., Forough, Taheri., Reza, Ghanei, Gheshlagh., Mohammad, Hasan, Lotfalizadeh. "Prevalence of self-medication during COVID-19 pandemic: A systematic review and meta-analysis." *Frontiers in Public Health*, undefined (2022). doi: 10.3389/fpubh.2022.1041695
17. Kruk, Margaret E., et al. "High-quality Health Systems in the Sustainable Development Goals Era: Time for a Revolution." *the Lancet. Global Health/the Lancet. Global Health*, vol. 6, no. 11, Nov. 2018, pp. e1196–252, doi:10.1016/s2214-109x(18)30386-3.

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