SJ General Medicine Africa
Vol.1 No.9 (2024): September 2024 Issue
https://doi.org/10.51168/db13cr68
Original Article

FACTORS CONTRIBUTING TO SELF-MEDICATION AMONG ADULTS AGED 18-45 YEARS AT NTWETWE HEALTH CENTER IV, KYANKWANZI DISTRICT. A CROSS-SECTIONAL STUDY.

Teopister N. Nanyombi, Alex Katwe*
Kampala School of Health Sciences

Abstract

Background

Self-medication is the use of medications without prior medical consultation regarding indication, dosage, and duration of treatment. The purpose of the study is to identify factors contributing to self-medication among adults aged 18-45 years at Ntwetwe Health Center IV, Kyankwanzi district.

Methodology

A cross-sectional study using quantitative methods of data collection was used to determine
The study included all adults aged 18-45 years at Ntwetwe Health Centre IV. Data was entered into Microsoft Excel and checked for completeness then analyzed using Microsoft Excel.

Results

(68%) of the respondents were females while (42%) were males. Results on individual factors contributing to self-medication showed the presence of self-medication since (78%) had kept some medication at home, (70%) minor illness. (90%) had drug outlets like pharmacies around their homes, (60%) were recommended by someone in the community to acquire certain drugs. The study also established health-related factors contributing to self-medication indicated since, (36%) had no health facility around their homes (36%) had to move long distances to reach health facilities, (56%) found no drugs at public health facilities, (72%) had to wait long waiting hours at health facilities to see health workers and (72%) had a right to choose a drug after consultation from health workers.

Conclusion

The major factors contributing to self-medication were keeping some medication at home, minor illness, having drug outlets near home, recommendation from community members, absence of health center near home, absence of drugs in public health centers, long waiting hours, the right to choose drug after consultation

Recommendations

The Ministry of Health should design and implement health care that will ensure proper management of drugs at health facilities by health workers to improve handling drugs in health facilities

Keywords
Self-medication, Ntwetwe Health Center IV, Drug outlets, Medical consultation
Submitted: 2024-05-14 Accepted: 2024-08-04

Corresponding Author: *Teopister N Nanyombi*
Email: benardokidi@gmail.com
Kampala School of Health Sciences

Background

Self-medication is the use of medications without prior medical consultation regarding indication, dosage, and duration of treatment (Jafari F, 2015). In Taiwan, the prevalence of self-medication in the past years among the adolescents surveyed was (45.8%) and the most frequently reported drugs for self-medication included no steroidal anti-inflammatory drugs or pain relievers, cold or cough medicines, analgesics, and antacids (Lee CH, 2o17). In Africa, Togo (8.9%) had used medical prescription only, and (91.1%) had used self-medication only or associated with medical prescription. 67.7% practiced self-medication only or associated with a medical prescription for their dermatologic disease before consultation in the dermatology unit (Kombate. K, 2017). In East Africa, ten patients were unaware of the risks of self-medication in a study in Tanzania in the Kilosa district, Self-medication with anti-malarial was a common practice in rural communities, despite the reported decline of malaria, the commonly reported reasons for self-medication were shortages of drugs at health facilities, long waiting time at health facilities, long distance to health facilities, inability to pay for health care charges and the freedom to choose the preferred drugs(Chipwaza. B, 2014).

In Uganda, the prevalence of self-medication in rheumatology was (71.92%) and factors associated with self-medication were back pain (Ouedraogo.D, 2015). The purpose of the study is to identify factors contributing to self-medication among adults aged 18-45 years at Ntwetwe Health Center IV, Kyankwanzi district.

Methodology

Study Design

A cross-sectional study using quantitative methods of data collection was used to determine factors contributing to self-medication and this was opted for to provide comprehensive information about the study.

Study Area

The study was carried out at Ntwetwe Health Centre IV in Ntwetwe Sub County in Kyankwanzi district. This Health Centre is located in Ntwetwe town of, Kyankwanzi district, approximately 26.5 kilometers, away from Kampala –Hoima road, located in Kyankwanzi district, Uganda. The coordinates of the hospital are Latitude: 0.9488579.

Longitude31.5889059. Ntwetwe town is located in central Uganda. Ntwetwe is situated 26.6km away from Kampala-Hoima, Ntwetwe Health Centre IV was chosen because of its high number of patients attending OPD who always report a history of self-medication.

Study Population

The study included all adults aged 18-45 years at Ntwetwe Health Centre IV, during the study period for the first time in the month those re-attending in the month, and those referred from other facilities.

Sample Size Determination

The sample was estimated using Burton's formula given below (Burton 1965) for cross-sectional studies.

S=2(QR)O

Where,

S=required sample size

Q=number of days the researcher spent collecting data

R=maximum number of people per day

O=maximum time the interviewer spent on each participant in hours

S=2x5x10x0.5

S=50

Therefore 50 participants were used.

Sampling technique

A simple random sampling technique was used to attain the required number of participants.

Sampling Procedure

Simple random sampling was used to recruit participants into the study. Each sampling unit had an equal chance of being included in the sample. Sampling was generally done without replacement as this approach allowed for a wider coverage of sampling units, and as a result, smaller standard errors, would not make sense to enroll the same person twice

Data collection method

A pre-tested semi-structured questionnaire with both closed and open questions was written in English and later translated into the local language.

Data Collection Tools

The research instrument was a structured questionnaire in English language which consisted of both closed and open-ended questions. Before collecting data, pre-testing of A questionnaire was done at Nalinya Health Center IV in Kiboga district for validity and reliability.

Data Collection Procedures

The researcher introduced herself and explained the purpose of the study after which the participant signed a consent form before participating in the study indicating their willingness.

The participants were asked questions from the questionnaire to collect data. All information obtained from participants was kept confidential.

Study Variables

Variables are characteristics that take place on two or more values.

The independent variable of the study

Individual, community, and health centre-related factors were the dependent variables that contributed to self-medication among adults aged 18-45 years.

The dependent variables of the study

The patient's self-medication was by asking patients at the facility if they had used anything for treatment before coming to the facility.

Quality Control

The forms were checked for completeness before the respondent level to ensure that the methodology was able to answer the objectives of the study.

The questionnaire was pre-tested and administered to 10 respondents among health workers in Ntwetwe Health Centre IV and adjustments were made appropriately based on their responses.

The data collection tools were designed appropriately to ensure that they are of quality for example; questionnaires were restructured with non-ambiguous and well-spaced questions to avoid congestion and provide tidy work.

Data Analysis and Presentation

The raw data was entered into Microsoft Excel and checked for completeness then analyzed using Microsoft Excel after which it was presented in the form of frequency distribution tables, pie charts, and bar graphs.

Ethical Considerations

Permission was sought from the school's research and ethics committee then given an introduction letter which was taken to the in charge of Ntwetwe Health Centre IV, who allowed the researcher to carry out this research at the facility.

RESULTS

Table 1, majority (36%) of the respondents were aged between 25-19 years while the minority (16%) was aged 18-24 years.

The majority (68%) of the respondents were females while the minority (42%) was males.

Majority (56%) were married while the minority (4%) was widows. Also, majority (56%) were peasants while minority (4%) was civil workers.

The majority (54%) of the respondents had stopped at secondary level while the minority (4%) had reached tertiary level of education.

SJ General Medicine Africa
Vol.1 No.9 (2024): September 2024 Issue
https://doi.org/10.51168/db13cr68
Original Article

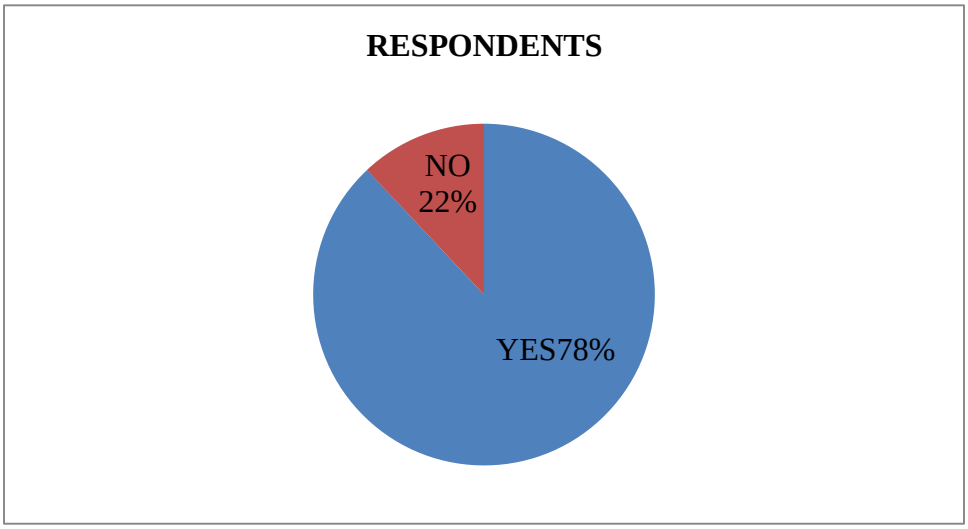
Table 1: Socio-demographic characteristics of the respondents N=50

Socio-demographic characteristics	N	(%)
Age		
18- 24,	8	16
25-29	18	36
30-36	14	28
37-45	10	20
TOTAL	**50**	**100**
Sex		
Female	34	68
Male	16	32
TOTAL	**50**	**100**
Tribe		
Banyankole	18	36
Baganda	10	20
Bakiga	8	16
Others	14	28
TOTAL	**50**	**100**
Marital status		
Married	28	56
Single	12	24
Divorce/Widowed	10	20
TOTAL	**50**	**100**
Religion		
Catholic	23	46
SDA	3	6
Protestant	8	16
Others	16	32
TOTAL	**50**	**100**
Occupation of respondent		
Peasant farmers	28	56
Employed	17	34
Un employed	3	6
Civil worker	2	4
TOTAL	**50**	**100**
Education level		
Never went to school	4	8
Primary	17	34
Secondary	27	54
Tertiary	2	4
TOTAL	**50**	**100**

SJ General Medicine Africa
Vol.1 No.9 (2024): September 2024 Issue
https://doi.org/10.51168/db13cr68
Original Article

Figure 1 below shows the number of respondents who self-medicate before visiting the health Centre.

N=50



Individual factors contributing to self-medication among adults aged 18-45 years.

Figure 1: majority of the respondents (78%) had used drugs prior to health Centre visits while the minority (22%), had never.

Table 2, majority (45%) of the respondents received monthly salary of less than 100,000 shillings while the minority (10%), receive a monthly salary of above 150,000 shillings.

Table 3, majority (92%) of the research participants were self-medicating while the minority (8%) of the participants had not self-medicated indicating that a high percentage of the population self-medicated. **The table 4**, the reasons for self-medication where majority (74%) of the respondents gave financial problems while minority (26%) said no.

For mild or chronic sickness majority (70%) of the respondents said yes while minority (30%) said no.

Then for lack of time majority (76%) of the respondents said yes while minority (24%) said no.

Having knowledge of diagnosis prior to self-medication, majority of the respondents (84%) said yes and the minority (16%) said no.

SJ General Medicine Africa
Vol.1 No.9 (2024): September 2024 Issue
https://doi.org/10.51168/db13cr68
Original Article

Table 2 The table below shows the number of respondents that self-medicated and their monthly salaries

N=50

Response	Frequency	Percentage (%)
Shs.100,000	5	10
Shs. Below 100,000	7	14
Shs 110,000-150,000	15	30
Above Shs. 150,0000	23	46
TOTAL	**50**	**100**

Table 3 below shows the number of the study participants reporting at Ntwetwe Health Centre IV, that self-medicated

N=50

Self-medicates	**Number**	**Percentage %**
No	**4**	**8**
Yes	**46**	**92**
Total	**50**	**100**

Table 4 Reasons for self-medication among participants reporting at Ntwetwe Health Centre IV.

N=50

The reasons for self-medications	**N**	**%**
Financial problem		
Yes	37	74
No	13	26
TOTAL	**50**	**100**
Mild sickness or chronic illness		
Yes	35	70
No	15	30
TOTAL	**50**	**100**
Lack of time		
Yes	38	76
No	12	24
TOTAL	**50**	**100**
Knowledge of diagnosis		
Yes	42	84
No	8	16
TOTAL	**50**	**100**

Community factors contributing to self-medication among adults aged 18-45 years.

FIGUER 2, majority (98%) of the respondents agreed to the presence of drug selling places in their community while the minority (2%) said no.

Table 5, majority (70%) of the respondents said that drugs are very cheap while the minority (2%), said they were very expensive.

Table 6, majority (36%), of the respondents self-medicated due to malaria while the minority (14%) self-medicated due to abdominal pain.

Figure 3: majority (38%) of the research participants that self-medicate use painkillers followed by anti-malarial (34%) and antibiotics (18%) while the minority (10%) of the respondents use other drugs.

Figure 4: shows that majority (64%) of the study participants that self-medicate get their drugs from drug shops which indicates many people get drugs from drug shops while the minority (4%), get drugs from relative/neighbors

Table 7: shows that majority (50%0, of the respondents sometimes get drugs from other family members while the minority (4%), never get drugs from family members.

Table 8, majority of the respondents (60%) get recommendations of the drugs from the community while the minorities (4%) never get information from the community.

Figure 2 shows the presence of drug selling places in the community.

N=50

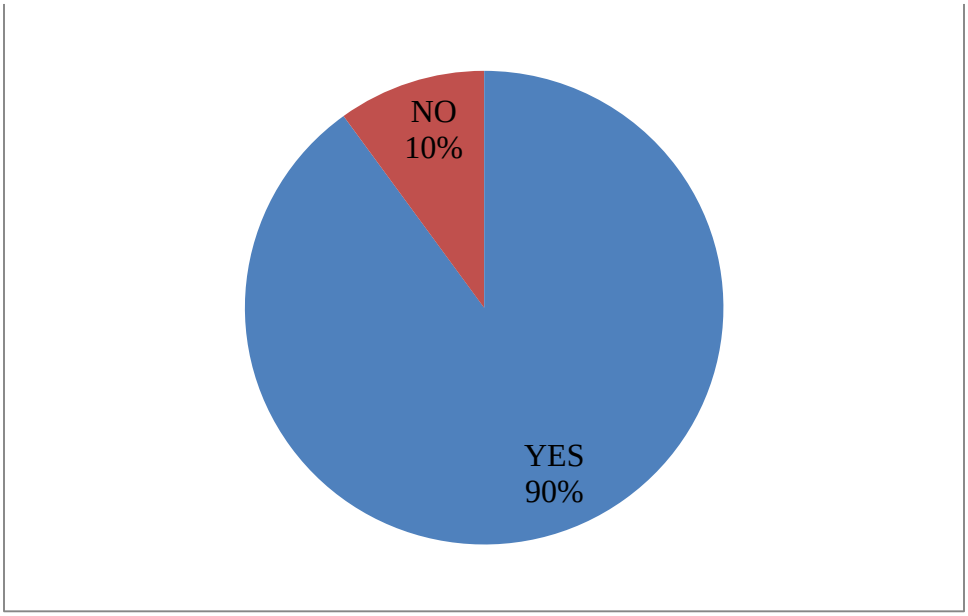


Table 5 Showing the prices of drugs of the drugs in the community drug outlets as reported by respondents.

N=50

Response	frequency	Percentage (%)
Cheap	35	70
Fairly priced	10	20
Expensive	4	8
Very expensive	1	2
Total	**50**	**100**

Table 6 Showing the medical conditions contributing to self-medication as reported by participants attending at Ntwetwe Health Centre IV.

N=50

Response	Frequency	Percentage (%)
Malaria	15	30
Headache	18	36
Cough	10	20
Abdominal pain	7	14
TOTAL	**50**	**100**

Figure 3 showing the kind of drugs used during self-medication

N=50

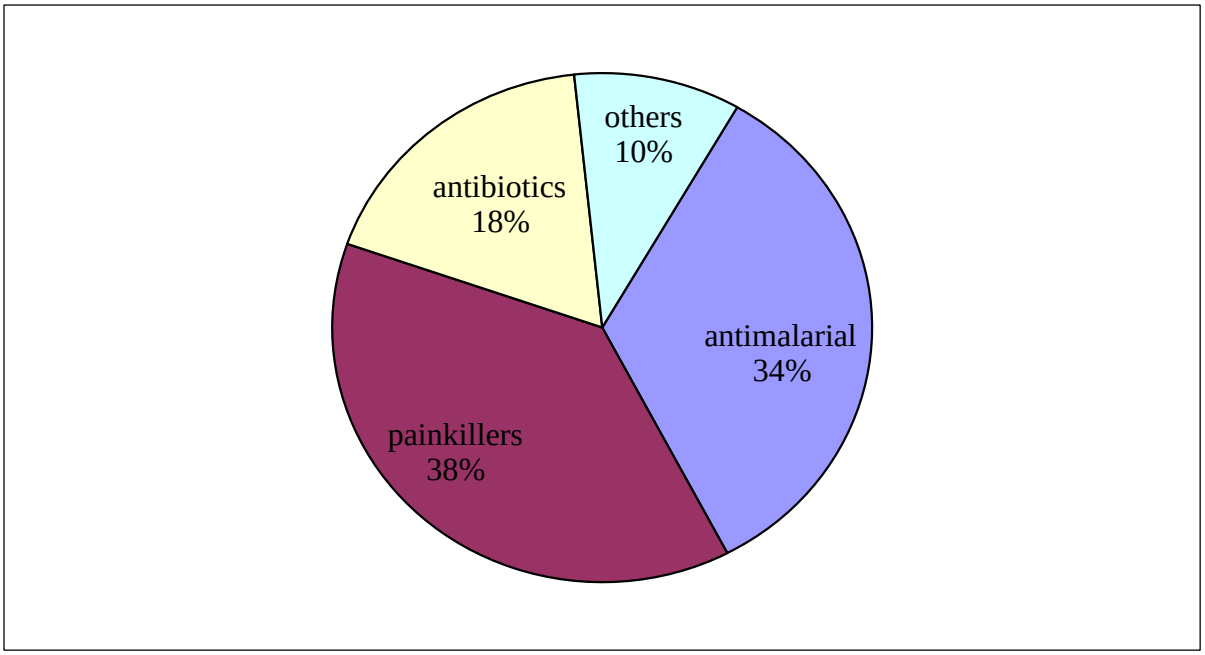


Figure 4 below showing the percentage of the source self-medication drugs for the study participants who self-medicate
N=50

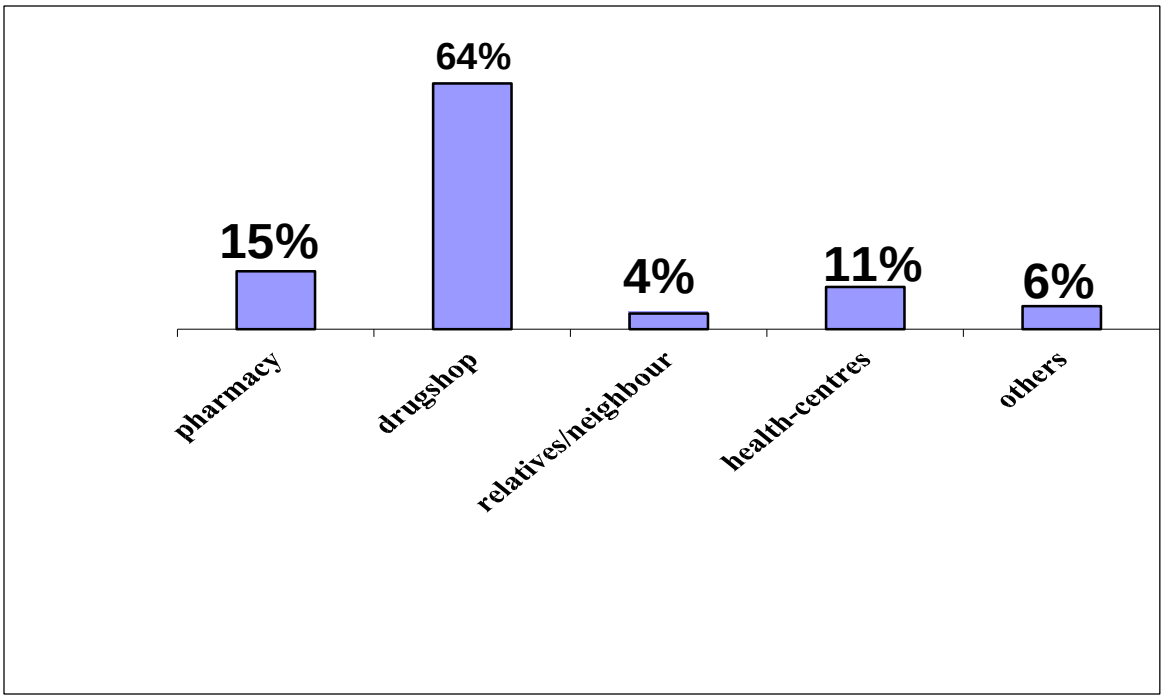


Table 7, below shows how often the respondents share the medicine prescribed to other family members. **N=50**

Response	**Frequency**	**Percentage**
Some times	25	50
Always	13	26
Rarely	10	20
Never	2	4
TOTAL	**50**	**100**

Table 8 below shows how often people in the community recommend drugs for respondents.

N =50

Response	Frequency	Percentage
Very often	30	60
Some times	15	30
Rarely	3	6
Never	2	4
TOTAL	**50**	**100**

SJ General Medicine Africa
Vol.1 No.9 (2024): September 2024 Issue
https://doi.org/10.51168/db13cr68
Original Article

Table 9 below presents health facility related factors contributing to self-medication as reported by participants.

N=50

Response	Frequency	Percentage (%)
Shortage of drugs	9	18
Long waiting time	15	30
Long distance	18	36
Expensive health care services	8	16
TOTAL	**50**	**100**

Figure 5 shows the respondents that reacted on availability of medicine at health service centers.

N=50

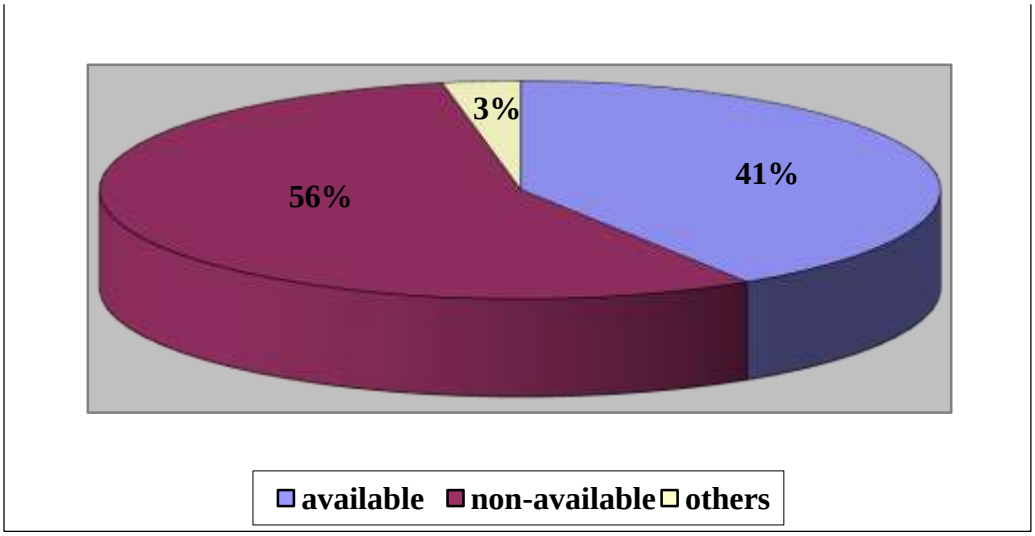


Table 10 shows time spent by the respondents at the health facility.

N=50

Response	**Frequency**	**Percentage (%)**
Less than 30 mins	4	8
One hour	10	20
More than 3 hours	36	72
Total	**50**	**100**

Health facility related factors contributing to self- medication among adults aged 18-45 years

The table 9, majority (36%), self-medicate because of shortage of drugs at health facility while the minority (16%), gave expensive health care services. Figure 5 shows that majority (56%) agreed that there were no available drugs at the facilities as compared to only (41%) who said drugs was available at the health facilities. The table 10, majority (72%) of the respondents spent more than 3 hours at the health

facility while minority (8%) spent less than 30 minutes at the waiting are the health facility.

DISCUSSION

Individual factors contributing to self-medication among adults aged 18-45 years.

The study indicated that the majority of the respondents (78%) had kept and used medicine at home before visiting the Health Centre. This implies that a large number of participants kept drugs at home. The findings are in agreement with the study done in Northern Uganda by Ocan et al., (2015) where results showed that (62.2%) of the respondents had used drugs before hospital visit.

In addition to that majority of the respondents (68%) had someone self-medicating at home. This indicated that having someone self-medicating at home can influence others to self-medicate.

This study showed that the majority (46%), of the respondents who had self-medicated, earned a monthly salary which was above 150,000 shillings which indicated that they had enough funds to buy the drugs from the available sources. The findings were in agreement with a study done in India by Kumar et al, (2019) where the results revealed that participants with a monthly salary above 3001 rupees made a maximum percentage (36.2%), of those who self-medicated. This was due to having more financial resources to attain medicine.

The study also revealed that the majority of the respondents (70%) had self-medicated because they had mild sicknesses like common flu and cough. This was in agreement with the study carried out by Helal et al., (2017) in Egypt where the common conditions that were suitable for self-medication were cold and cough (77.5%), and other minor infections.

Also, the study showed that the majority of the participants (36%) were aged between 25-29 years which was in agreement with the study carried out by Ethica, et al., (2014) in Ethiopia where majorities (42%) of the respondents were aged 24-25 years. This showed that the majority of the participants in this age group self-medicate a lot.

In addition, the study showed that the majority (68%), of the participants were females this indicates that females carry out self-medication than males. This disagreed with the study carried out by Ethica, et al., (2014) where the majority (73.7%) of the people that self-medicated were males.

Community factors contributing to self-medication among adults aged 18-45 years.

Meanwhile, almost all respondents (90%) had drug outlets like pharmacies in their community. The study results were in line with the results of the study conducted in Northern Uganda by Ocan et al., (2015) where the majority (80.3%) of the participants obtained antibiotics from drug outlets with ease and had no prescription.

Furthermore, the majority of the respondents (60%), who self-medicated had been recommended by someone in the community. This is attributed to the fact that most of the individuals who self-medicated had someone who had ever self-medicated around their community this was in line with a study carried out by Okello et al., (2015) where findings regarding community factors contributing to self-medication revealed that (93.2%) had self-medicated because they had been influenced by other community members, relatives, friends, and family members.

About (50%) of the respondents who had self-medicated had gotten drugs from their family members. This could have been attributed to the fact that most self-medicating individuals had someone self-medicating at home.

The study revealed that the majority (38%) of the respondents had self-medicated with painkillers which indicated that people with pain are more likely to self-medicate. Also, this study revealed that the majority (70%) of the respondents got drugs at a cheaper price. This indicates that poor communities sell medicine at a low cost which could have increased self-medication. This is in agreement with the study carried out by Awuah RB et al., (2018) in Accra Ghana, the reason for self-medication was poor economic status most patients in poor economic status were more likely to self-medicate than those in communities of high economic status.

Health facility-related factors contributing to self-medication among adults aged 18-45 years

The study further revealed that the majority (36%) of the respondents had no public health facilities near their

homes which could have forced many individuals to self-medicate. The study was in agreement with the study conducted in Nigeria by Eugene et al., (2021), where findings revealed that (23%) of individuals self-medicated due to low access to health facilities.

From the study findings, the majority (36%) of the respondents moved long distances to reach the health facility. This could have caused individuals to buy drugs from pharmacies and drug shops in their proximity this was in line with the study carried out by Eugene et al., (2021) in Nigeria.

The study reported that the majority (56%) of the respondents had self-medicated because they did not find drugs at the public health facility. This could have been attributed to the fact that they opted for other sources of medicine. This is in agreement with the study conducted in Wakiso in Uganda by Munyambabazi et al., (2022) where the majority of the respondents (65.7%) found no medicine at the health facility

The study showed that the majority of the respondents (72%) had self-medicated due to spending more than 3 hours at the health facility. This indicated that most people self-medicated because of the long waiting time to acquire medication and consultation at health facilities. This was in agreement with the study carried out by Munyambabazi et al., (2022) where the majority (38%) of the respondents would spend more than 60 minutes without being attended to, especially in public health facilities. This concluded with the fact that it was more convenient to buy medication from pharmacies and drug shops where they are attended to immediately.

The majority (75%) of the participants reported that they practiced self-medication because they have the right to choose their preferred drugs, thus an error, patients have to seek medical attention from a qualified health worker who discusses him or the diagnosis first thereafter the patients choose the preferred medication, however, most patients, perceive its right to walk to the drug shop or pharmacy and choose the medication you want, with no guidance of a health workers. Unable to access medication has been documented in France's Guiana region among illegal gold miners by Douine M et al., (2018), in Uganda there is no such inaccessibility, patients are free to access free medication even in transit to another country, and the main obstacle would be distance, but, Ntwetwe Health Centre IV is in the region where even community health workers examine and distribute free treatment to communities.

Conclusion

Keeping some medication at home, minor illness, having drug outlets near home, recommendations from community members, absence of health center near home, absence of drugs in public health centers, long waiting hours, the right to choose drug after consultation

Recommendations

The Ministry of Health should design and implement health care that will ensure proper management of drugs at health facilities by health workers to improve handling drugs in health facilities

The DHO Must strengthen policy implementation on the use of drugs to reduce the burden of irrational drug use that increases the cost of purchasing the wasted drugs, and increasing drug resistance.

Health workers should further be trained on medical ethics and handling patients at health facilities.

Community sensitization programs should be conducted to create awareness of the dangers to individuals by the government through local health village teams of Ntwetwe Sub- County.

Acknowledgement

This research has been an outcome of support from people who deserve special thanks. Especially, I want to thank the Almighty God for enabling me to do this research and finish this course.

My beloved parents Mr. and Mrs. Aligawesa for their unending support in my education, and the administration of Kampala School of Health Sciences for the good education background.

I wish to convey this gratitude to my supervisor, Mr. Katwe Alex, for his guidance has been instrumental in the satisfactory accomplishment of this report.

I also thank my husband Mr.Okidi Benard for his support in various aspects towards the accomplishment of my course.

I also take this opportunity to thank my classmates Kafuluma Marvin, Ayikoru Jackline, and Panacia Pimer for the support they have rendered to me during the formulation of this research report.

Abbreviations

DHO: District Health officer

OPD: Outpatient department

Source of funding

The study was not funded

Conflict of interest

The author did not declare any conflict of interest

Author Biography

Teopister N Nanyombi is a student of a diploma in Pharmacy at Kampala School of Health Sciences

Alex Katwe is a tutor at Kampala School of Health Sciences

References

1. Awuah R.B, A. P.-g. (2018). Factors associated with treatment-seeking for malaria in urban poor communities in Accra, Ghana. Malaria journal.
2. Chipwaza.B, M. J. (2014). Self-medication with anti-malarials is acommon practice in rural communities of Kilosa in Tanzania despite of the reported decline of malaria. Malaria Journal, 252.
3. Douine M, L. Y. (2018). Predators of anti-malarial self-medication in illegal gold miners in French Guiana. J Antimicrob Chemother.
4. Ethica.T, M. (2014). Self-medication practices in Makelle, Ethiopia. PLoS ONE.
5. Eugene V., B. (2021). Comparative assrssment of the prevalence, practices and factors associated with self-medication with antibiotics in Africa. Wiley Online Library.
6. Helal.R.M, A.-E. H. (2017). Self-medication in University Students from the City of Mansoura, Egypt. Journal of Environmental and public health.
7. Jafari F, K. (2015). Prevalence of Self-medication among the Elderin Kermanshah-Iran. Global Journal of Health Sciences, 360-365.
8. Kombate.K, T. N.-T. (2017). Prevalence and Factors associted with self-medicationin Dermatology in Togo. Dermatology Research and practice.
9. Kumar. A.G, A. B. (2019). A comparative study among medical and non-medical under graduate students Kolkata, India. The Saudi Journal and Pharmacuetical Science.
10. Lee CH, C. F. (2o17). Inappropriate self-medication among adolosencents and with its associatiation with lower medication litracy and substance use. Journal pone.
11. MUnyambabazi M, M. P. (2022). Factors contributing to self-medication among adults aged 18-50 years in Lyamutundwe Village,Busiro County, Wakiso District. Students Journal.
12. Ocan M., Y. C. (2015). Prevalence andpredators of prior anti-bacterial Use among patients presenting to hospitals in NORTHERN uganda. BMC Pharmacology and Toxicology.
13. Okello, S. J. (2015). Factors associated with self-medication among adults in Entebbe municipality division A in wakiso district. Bachelors in Nursing, 415.
14. Ouedraogo.D, Z. J. (2015). Prevalence and factors associated with self-medication in rheumatology in Sub-Saharan Africa. European Journal of rheumatology, 52-56.

SJ General Medicine Africa
Vol.1 No.9 (2024): September 2024 Issue
https://doi.org/10.51168/db13cr68
Original Article

Publisher details

SJC PUBLISHERS COMPANY LIMITED

SJC Publishers Company Limited
TODAY AND TOMORROW

Catergory: Non Government & Non profit Organisation
Contact: +256 775 434 261 (WhatsApp)
Email: info@sjpublisher.org or studentsjournal2020@gmail.com
Website: https://sjpublisher.org
Location: Scholar's Summit Nakigalala, P. O. Box 701432,Entebbe Uganda, East Africa