

Factors contributing to Self-Medication among adults aged 18-50 years in Lyamutundwe Village, Busiro County, Wakiso District. A Cross-sectional Study.

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Abstract



Background:

Self-medication is the use of drugs to treat self-diagnosed disorders or symptoms. The purpose of the study is to assess the factors contributing to self-medication among adults aged 18-50 years in Lyamutundwe village, Busiro County, Wakiso district.

Methodology:

The study design used was a descriptive cross-sectional study with a purposive sampling technique as a sampling technique. Data were collected on a sample of 50 respondents using structured questionnaires and later analyzed manually using tally sheets and presented in frequency distribution tables and figures with the support of narratives.

Results:

Findings related to individual factors contributing to self-medication reported that 78% of the respondents had kept some medications at home, 68% had someone self-medicating at home, 56% had medical personnel in the family, 70% usually took medicines that remained home, 78% took medicine without first visiting the hospital, 41% had taken medicines without prescription more than thrice, 60% self-medicated more in pain killers. 94% of the respondents had pharmacies/ drug shops around their homes, 85% were influenced by the pharmacies/drug shops to buy drugs whenever they got sick before visiting a health practitioner, 68% had ever been recommended drugs by a community member.

Conclusion:

The researcher, therefore, concluded that most individuals practiced self-medication since most of them found it time-saving and affordable for them.

Recommendation:

Individuals should always first attain prescriptions before taking any drug and conducting community sensitization programs by public health officers to create awareness of the dangers of self-medication

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1 Background of the study.

According to World Health Organization (WHO), self-medication is the use of drugs to treat self-diagnosed disorders or symptoms, (Lukovic, 2014). Self-medication includes acquiring medicine without a prescription and sharing medicine with fam-

ily members. It also involves taking medicine on a friend's advice without first consulting a physician. Self-medication is common both in developing and developed countries though more prevalent in developing countries, (Esan *et al.*, 2018).

Recent studies in Africa showed that the prevalence of self-medication ranged from 12.1% to 93.9%. West Africa reported the highest prevalence of self-medication at 70.1 %, (Eugene Vernyuy *et al*, 2021).

According to Olumide Ajibola *et al*, (2018), the prevalence of self-medication in Nigeria was found to be (82.2%) and the major contributing factors reported were affordability (79.3%), accessibility (68.4%), and application of previous prescription (60.4%). In East Africa, self-medication is a public health concern, more than half of adults were found victims of self-medication. According to Faith Nakiwanda *et al*, (2020), a study to estimate the patterns and practices of self-medication in Mbarara showed that the prevalence of self-medication in Uganda was found (63.5%) and the major contributing factors were, classifying illness as minor (33%), time-saving (15%), saving old prescriptions at home (11%) and high consultation fees (9%).

A study conducted in Wakiso district, Entebbe municipality to determine factors associated with self-medication showed that 70% of the people in different communities practiced self-medication and the prevalence in the area was 93.2%, (Okello *et al*, 2015). The specific objectives are to assess the; individual factors contributing to self-medication among adults aged 18-50 years, community factors contributing to self-medication among adults aged 18-50 years, and health facility-related factors contributing to self-medication among adults aged 18-50 years.

2 Methodology

Study design.

The research design used was a quantitative, descriptive cross-sectional study. This was to help in the collection of the data from adults self-medicating.

Study area

The study was carried out in Lyamutundwe village, in Busiro County, Wakiso district. Most of the individuals in this area are self-employed in businesses.

Study population

The study population was comprised of all adults aged between 18-50 years of Lyamutundwe village, Wakiso district. Most of these individuals are businessmen and women.

Sample size determination

The sample size was determined using the formula for simple random sampling using a single proportion given by the Kish and Leslie formula of 1967 by assuming that 50% of the respondents participated in self-medication.

The equation of the Kish and Leslie formula is $n = \frac{z^2 pq}{d^2}$

Where n = sample size, z = value corresponding to 95% level of significance = 1.96, p = expected proportion of adult population practicing self-medication 50% = $0.5 = p$, $q = 1 - p = (1 - 0.5) = 0.5$, d = absolute precision 5% = 0.05.

$$N = \frac{z^2 pq}{e^2} = \frac{(1.96)^2 (0.5)^2}{(0.05)^2} = 384.$$

Since the sample size is less than 100 respondents, $nf = \frac{n}{1 + n/N}$, $nf = \frac{384}{1 + 384/40}$ $nf = 50$ respondents.

Where nf is the sample size of respondents.

The sample shall consist of 50 adult respondents practicing self-medication. The sample was obtained from different kinds of individuals in the village.

Sampling technique

The sampling technique employed was purposive sampling.

Sampling procedure.

The study was purposive sampling was only adults in Lyamutundwe village aged (18-50 years) who participated in the research that was believed to be knowing the topic. The researcher was guided by the local council (LC1) of the village.

Data collection method.

Questionnaires were written in English, these questionnaires were delivered to each respondent individually and were individually answered. An interpreter was employed because some respondents understand English and others were better in Luganda and were able to read and write with ease. The questionnaires were distributed, collected, and kept safe and confidential by the researcher.

Data collection tools

Structured questionnaires with open and closed-ended questions written in English were used. This tool refers to the collection of items in which the respondents reacted by writing. It was preferred because it saves time and was easy to apply and also suitable for large populations.

Quality control

The questionnaires were pretested from Nkumba village. This was intended to determine

the validity and reliability of the questions in the questionnaire.

Selection criteria.

Inclusion criteria.

All adults aged 18-50 years were willing to participate in the study and have ever self-medicated in the last six months.

Exclusion criteria

Individuals who were below the age of 18 and those above 50 years, unwilling individuals, mentally ill individuals, and those that were drunk.

Data collection procedure

An introductory letter for data collection from Lyamutundwe village was got from the principal of Kampala School of Health Sciences and was taken to the local council one Lyamutundwe village. Then the researcher requested permission to collect the data. Then respondents falling in the inclusion criteria were given questionnaires which were collected after filling, checked for completeness, then later analyzed and interpreted.

Data management

The questionnaires collected from every individual were kept under lock and key where only the researcher and the assistant were able to get access to them.

Variables

Dependent variables

Self-medication practice among adults.

Independent variable

Individual, community and health-related factors contribute to self-medication.

3 Data analysis and presentation.

After data collection and checking of the questionnaires for completeness and accuracy, the data was analyzed by using tally sheets. Then the information was presented in form of pie charts, tables, and frequency distribution.

Ethical considerations

An introductory letter was obtained from the Kampala school of health sciences department of research. Then the letter was taken to the local council 1 of Lyamutundwe village where the study was conducted from. When permission was granted, the researcher and her assistant introduced themselves before conducting the study. Respondents received an explanation of the study before commencing and only those who consented to

participate were involved. Respondents were free to withdraw from the study at any time and strict confidentiality was observed. Codes were used to identify the respondents instead of full names. Respondents' participation was voluntary.

4 Limitations of the study

1. Shortage of funds; the study required a lot of resources and funds to be carried out.
2. Recall bias from some respondents.
3. Poor weather conditions.

5 Study Findings

BIO DATA

From the tables above, the majority of the respondents (44%) were between the age of 18-27 and the least (10%) were in the age of >48

Based on the study findings relating to religion, most of the respondents (36%) were Catholics and the least (16%) were Muslims.

In regards to education levels, half of the respondents (50%) had attained a tertiary level of education whereas the least (2%) had never gone to school.

The study further revealed that more than half of the respondents (54%) were business people whereas the least (20%) were public servants

In addition to that, the study findings revealed that the majority of the respondents (56%) were married whereas the minority (4%) were divorced.

6 Individual factors contributing to self-medications among individuals aged 18-50 years.

According to the figure 1, the majority of the respondents (78%) kept some medicines in their homes and the least (22%) never kept any medicines in their homes.

From the above figure, the majority of the respondents (68%) had people self-medicating at home and the least (32%) had no one self-medicating at home.

From the table 4, the majority of the respondents (56%) did not have medical personnel in their family and the least (44%) had medical personnel in their family.

Table 1. Shows the distribution of respondents according to their bio data (N=50)

Age	Frequency(f)	Percentage (%)
18-27	22	44
28-37	11	22
38-47	12	24
>48	5	10
Total	50	100
Gender		
Male	16	32
Female	34	68
Total	50	100
Tribe		
Muganda	26	52
Munyankole	8	16
Musoga	5	10

Table 2. Shows the distribution of respondents according to their bio data (N=50)

Others	11	22
Total	50	100
Religion		
Catholic	18	36
Moslem	8	16
Protestant	10	20
Others	14	28
Total	50	100
Education level		
Primary	6	12
Secondary	18	36
Tertiary	25	50
No formal education	1	2
Total	50	100
Occupation		
Business person	27	54
Public servant	11	22
Employee	12	24
Total	50	100
Marital status		

Table 3. Shows the distribution of respondents according to their bio data (N=50)

Married	29	56
Divorced	2	4
Single	15	30
Cohabiting	4	8
Total	50	100

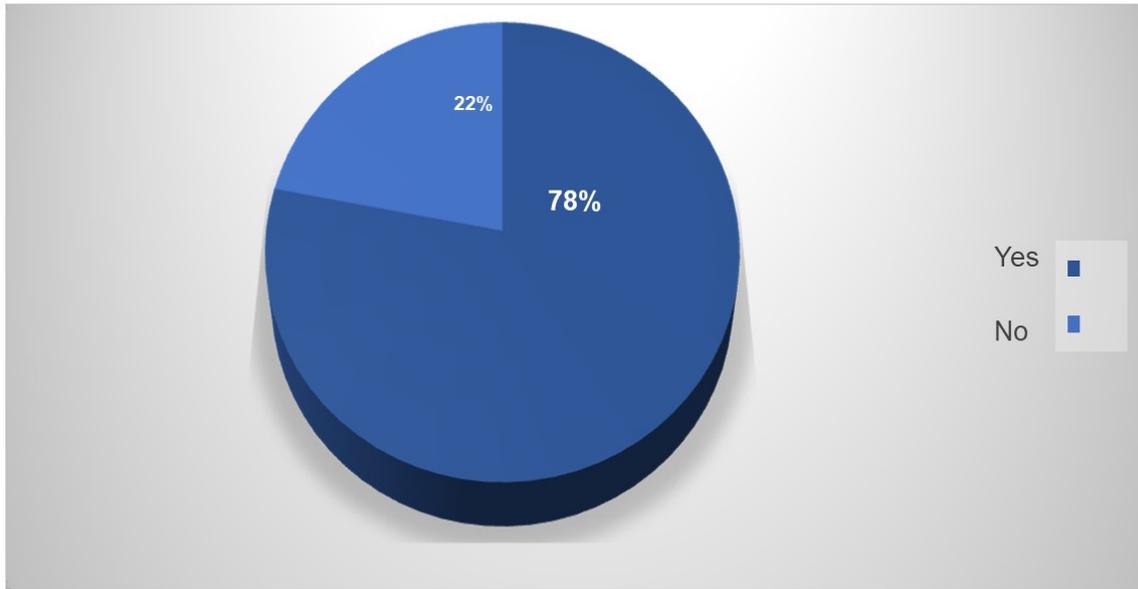


Figure 1. Show the distribution of respondents according to whether they were keeping some medicines at home.

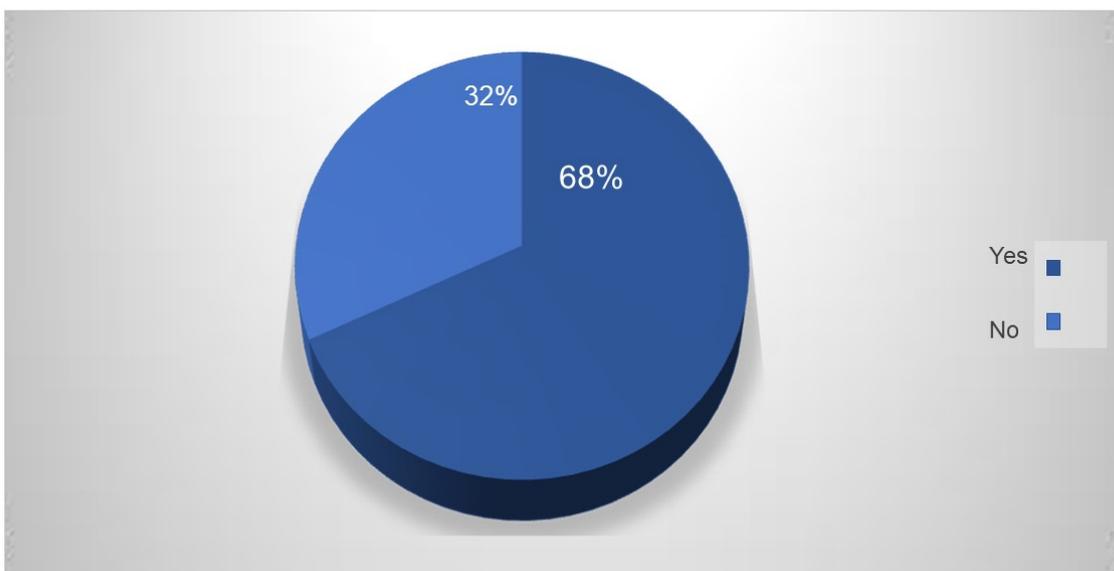


Figure 2. Shows the distribution of respondents according to whether they had someone self-medicating at home (N=50)

Table 4. Shows the distribution of respondents according to whether they have any medical personal in their family. (N=50)

Response	Frequency(f)	Percentage (%)
Yes	22	44
No	28	56
Total	50	100

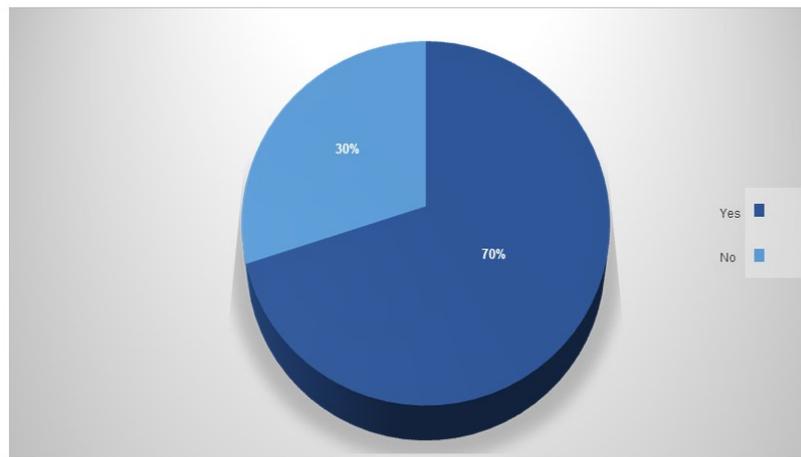


Figure 3. Shows the distribution of respondents according to whether they usually take the medicines remaining at home. (N=50)

From the figure 3, the majority of the respondents (70%) usually took the medicines that remain at home and the least (30%) of the individuals did not.

From the above figure, the majority of the respondent (78%) had ever taken medicines without first visiting the hospital and the least (22%) had not taken any medicines without first visiting the hospital.

From the figure 5, the majority of the respondents (41.0%) had taken medicines without first visiting the hospital more than three times and the least (2.6%) had taken medicines before visiting the hospital only once.

From the figure 6, the majority of the respondents (60%) had self-medicated pain killers and the least (12%) had self-medicated other drugs.

From the above table, majority of the respondents (40%) were in the salary range of shs 100000-200000 and the least (16%) were in the range of shs 20000-50000 and shs 50000-100000.

7 Community Factors Contributing To Self-Medication among Individuals Aged 18-50 Years.

From the table 6, majority of the respondents (94%) had pharmacies or drug shops around their homes and the least (6%) didn't have pharmacies or drug shops around their homes.

From the figure 7, the majority of the respondents (85%) had been influenced by pharmacies or drug

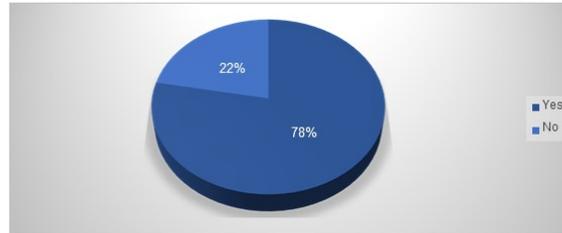


Figure 4. Shows the distribution of respondents according to whether they have ever taken medicines without visiting the hospital. (N=50)

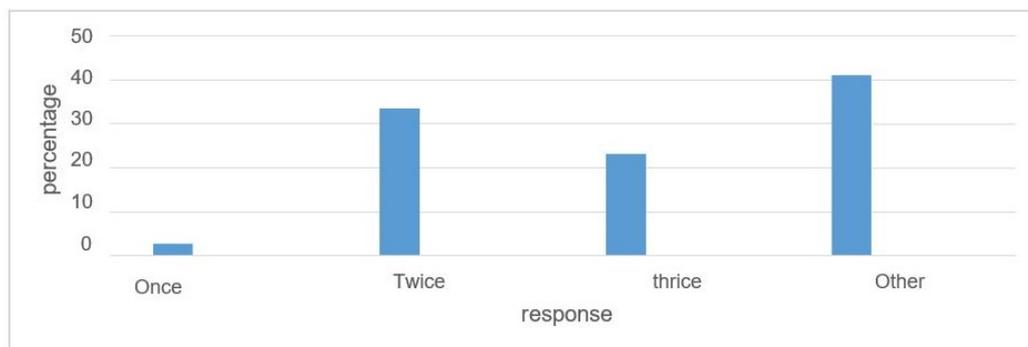


Figure 5. Shows the distribution of respondents according to how many times they had ever taken the medicines without first visiting the hospital.

Table 5. Shows the distribution of respondents according to how much they earn monthly (N=50)

Response	Frequency (f)	Percentage (%)
20000-50000	8	16
50000-100000	8	16
100000-200000	20	40
Others	14	28
Total	50	100

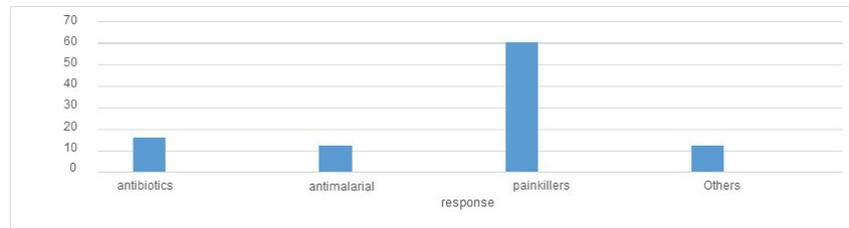


Figure 6. Shows the distribution of respondents according to which drugs individuals self-medicated with.

Table 6. Shows the distribution of respondents according to whether they have pharmacies or drug shops around their homes. (N=50)

Response	frequency	Percentage
Yes	47	94
No	3	6
Total	50	100

shops around their homes and the least (15%) were not influenced.

From the above table, the majority of the respondents (68%) had at least been recommended by some for a certain medication and the least (32%) had not been recommended by anyone.

From the figure 8, the majority of the respondents (47.5%) had been recommended by relatives and the least (5.0%) had been recommended by others sources.

From the above figure, the majority of the respondents (30%) had been recommended others times more than thrice and the least (15%) had been recommended once.

8 Health facility related factors contributing to self-medication among individuals aged 18-50 years.

From the figure 10, the majority of the respondents (72%) had no health facility around their homes and the least (28%) had health facilities around their homes.

From the above figure, the majority of the respondents (50%) were six kilometers and above away from the nearest public health facility and the least (21.4%) were one to three kilometers away from the nearest public health facility.

From the table 8, the majority of the respondents (68%) found health workers friendly and the least (10%) were ignored by the health workers.

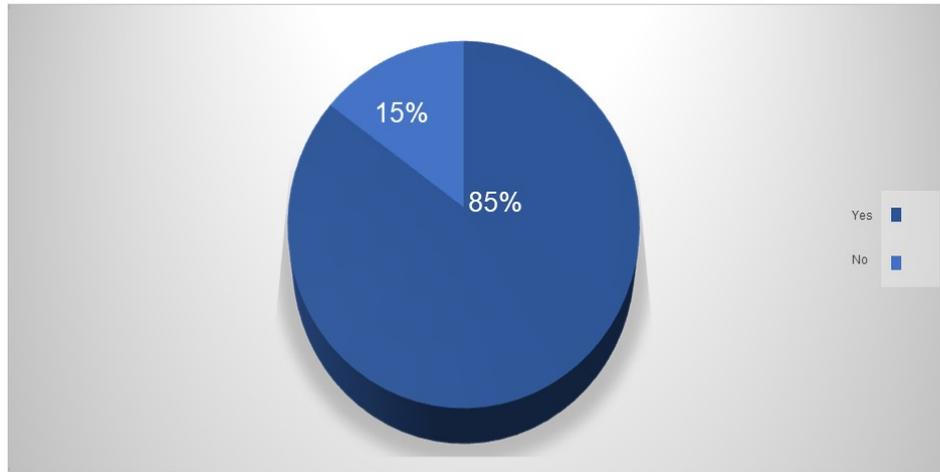


Figure 7. Shows the distribution of respondents according to whether they think that the pharmacies or drug shops around their homes influenced them to buy medicines from them whenever they got sick before visiting the hospital. (N=50)

Table 7. Shows the distribution of respondents according to whether anyone recommended any medication for them (N=50)

Response	Frequently	Percentages (%)
Yes	34	68
No	16	32
Total	50	100

Table 8. Shows the distribution of respondents according to how health workers react towards them while at the hospital. (N=50)

Response	Frequency(f)	Percentage (%)
Friendly	34	68
Rude	11	22
Ignore you	5	10
Total	50	100

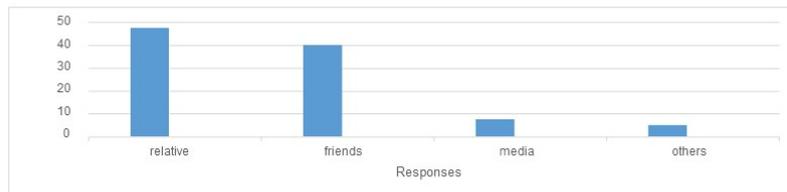


Figure 8. Shows the distribution of respondents according to who recommended them to the pharmacy or drug shop.

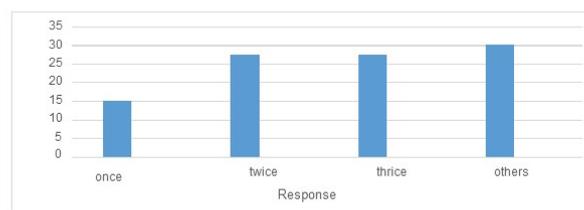


Figure 9. Shows the distribution of respondents according to how many times they were recommended.

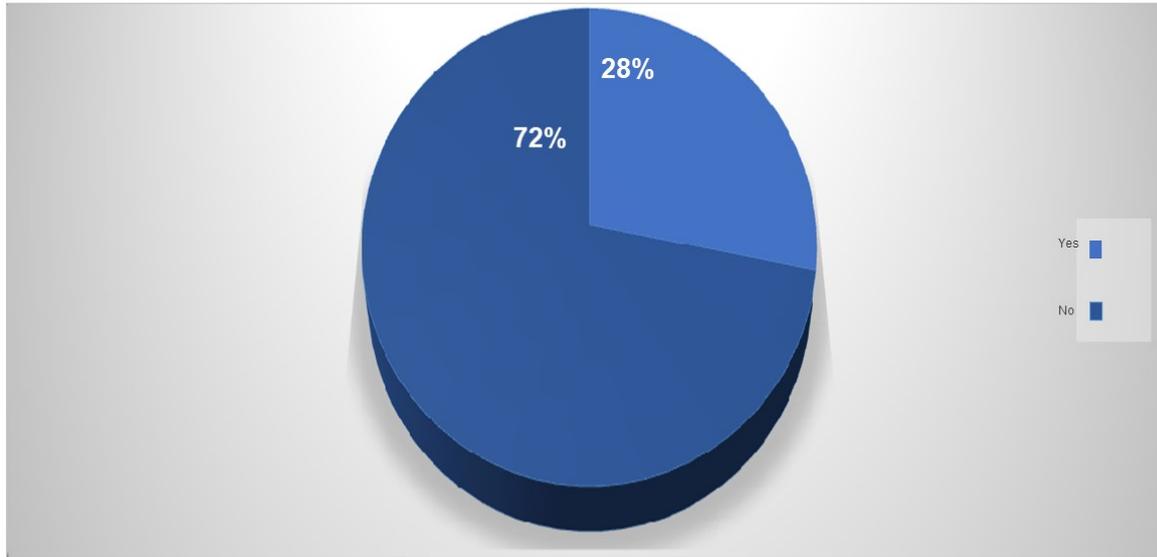


Figure 10. Shows the distribution of respondents according to whether there are health facilities around their homes. (N=50)

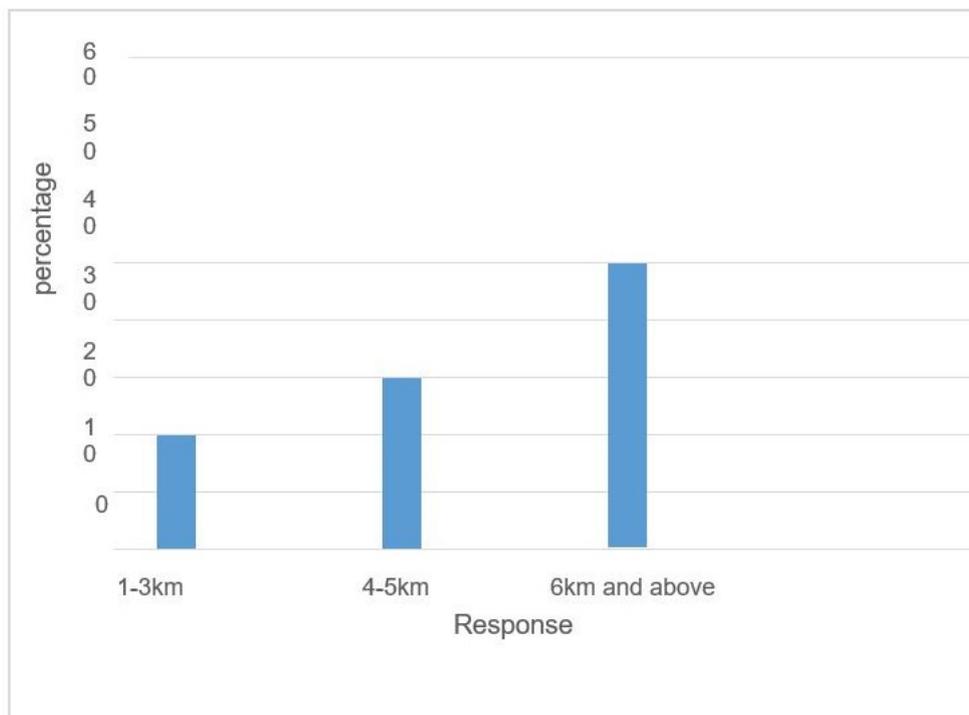


Figure 11. Shows the distribution of respondents according to how far it is from the nearest public health facility to their homes

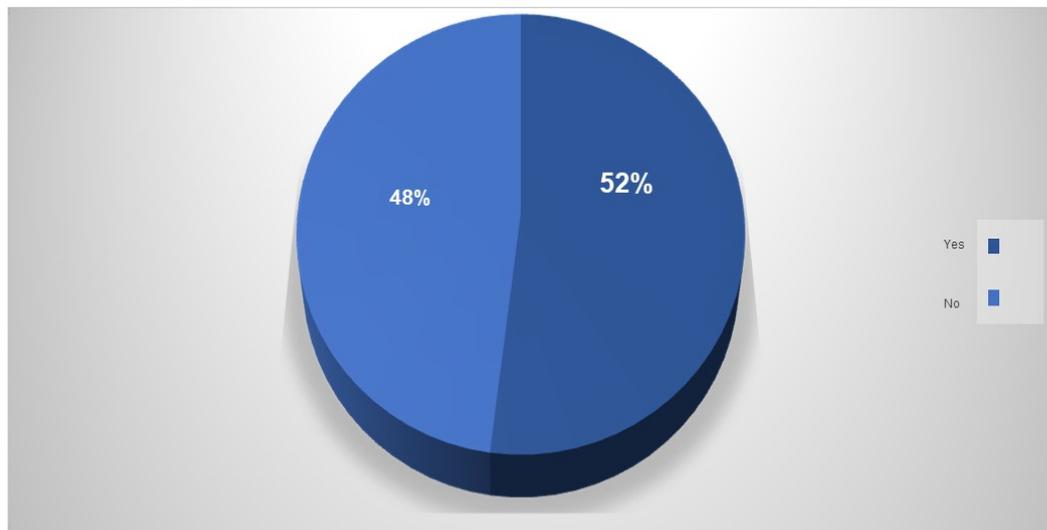


Figure 12. Shows the distribution of respondents according to whether they have ever left a health facility without treatment (N=50)

From the figure 12, the majority of the respondents (52%) had ever left the health facility without treatment and the least (48%) received treatment whenever they went to a health facility.

From the above figure, the majority of the respondents (65.7%) found no medicines at the health facilities and no one found no health worker at the health facility.

From the above table, majority of the respondents (38%) spent 30-60 minutes before being attended to and least (16%) spent 10 minutes and other unspecified time.

9 Discussion, Conclusions and Recommendations.

Discussions

Individual factors contributing to self-medication among adults aged 18-50 years.

The study indicated that the majority of the respondents (78%) had kept some medicines at home. This implies that a substantial number of participants had kept medicines at home. The current findings were in agreement with the study that was conducted in Northern Uganda by Moses Ochan et al, (2014), where results showed that 68.1% of the individuals had 1-10 drugs at home.

In addition to that, more than half of the respondents (68%) had at least someone self-medicating at home. This is attributed to the fact that having someone self-medicating at home can influence others to self-medicate and possibly be the main source of self-medication and therefore, was expected to be very high. Furthermore, the majority of the respondents (70%) had ever taken medicines remaining at home. This is attributed to the fact that most individuals have ever bought medicines and kept some at home. This is in line with Moses Ocan, (2014), where findings regarding individual factors contributing to self-medication revealed that (68.1%) took the medicines remaining at home.

To the study results, the majority of the respondents (78%), had ever obtained medicines without first visiting the hospital. With all this, the study is yet to discover where they obtained the medicines from. The study results were in agreement with the study that was carried out in Ethiopia by Aster Desalew Kassie et al, (2017), where findings regarding individual factors contributing to self-medication revealed that (95%) were obtaining medicines without first visiting the hospital.

Based on the study findings majority of the respondents (60%) self-medicated with pain

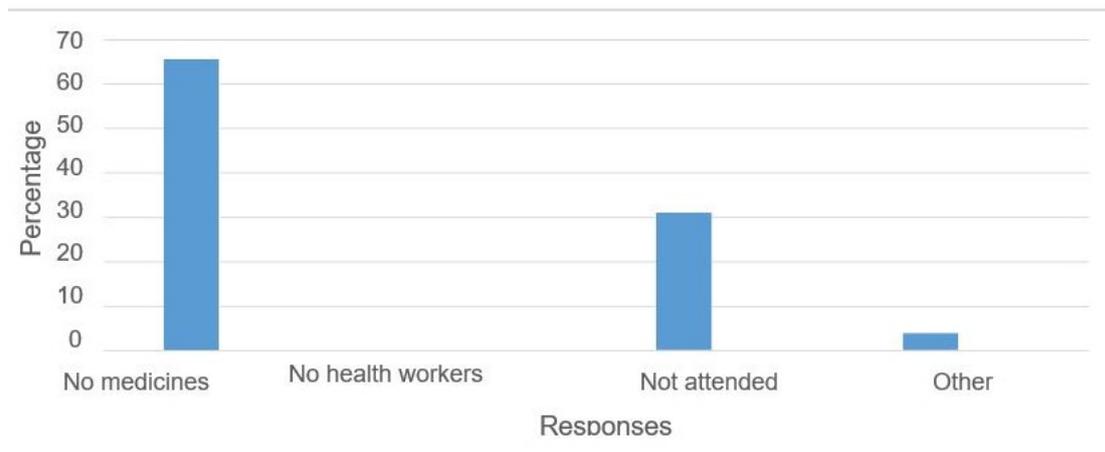


Figure 13. Shows the distribution of individuals to what could have attributed to their failing to get treatment

Table 9. Shows the distribution of respondents according to how much time they spend before they are attended to at a health facility. (N=50)

Response	Frequency	Percentage (%)
<10 minutes	8	16
10-30 minutes	15	30
30-60 minutes	19	38
Others	8	16
Total	50	100

killer. This is attributed to the fact that most of these respondents self-medicated mostly for self-limiting conditions such as headaches. Given the study results, 40% of the respondents were salary earners in the range of shs100000 to shs.200000. This is attributed to the fact that most of them are unable to first visit hospitals for treatment. This is in agreement with the study conducted in Uganda by Faith Niwandinda et al, (2020), where findings regarding individual factors to self-medication revealed (that 11%) of the individuals self-medicated because of high consultation fees.

Community factors contributing to self-medication among adults aged 18-50 years.

Meanwhile, almost all the respondents (94%), had pharmacies and drug shops around their homes. This could have attributed to the fact that many of these respondents had never obtained medicines without first visiting a hospital. The study results were in line with the results of a study conducted in Greece by Alistofan Gikes et al, (2010), where findings regarding community factors contributing to self-medication revealed (that 77.9%) of individuals obtained medicines from community

pharmacies and drug hops with ease without prescriptions.

The study results regarding community factors contributing to self-medication showed that the majority of the respondents (85.1%) had been influenced by the pharmacies and drug shops around their homes to self-medicate before first visiting the hospital. This could be attributed to the fact that individuals around such places rampantly practiced self-medication. The study results were in agreement with a study conducted in Nigeria by Olumide Ajibora, (2018), where findings regarding community factors contributing to self-medication revealed (that 68.4%), of the individuals self-medicated because of accessibility to community pharmacies without a prescription.

Furthermore, the majority of the respondents (68%) 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 agreement with the study carried out by Okello et al, (2015), where findings regarding community fac-

tors contributing to self-medication revealed (that 93.2%) of individuals had self-medicated because they had been influenced by community members, relatives, friends, and family.

About the study results, (47.5%) of the respondents who self-medicated had been recommended by their relatives. This could be attributed to the fact that most self-medicating individuals at least had someone self-medicating at home.

Health-related factors contributing to self-medication among adults aged 18-50 years.

The study further revealed that more than half of the respondents (72%) had no public facilities around their homes. This could have been attributed to the fact that many individuals have self-medicated for a long time. The study results were in agreement with the study conducted in Nigeria by Eugene Venyuy et al, (2021), where findings revealed (that 23%) of the individuals self-medicated because of low accessibility to health facilities.

From the study findings, the majority of the respondents (50%) had to move six kilometers and above to reach the nearby health facility. This could have attributed to individuals buying medicines from pharmacies because of their approximations compared to health facilities. This is in line with the study conducted in Nigeria by Anthony Ike Wegbom, (2021), where findings revealed (that 23%) of the individuals self-medicated due to long distances to the health facilities.

Findings revealed that most of the respondents (38%) would spend between 30-60 minutes before they are attended to especially in public health facilities. This could have attributed to the fact that individuals found it convenient to buy medications from pharmacies and drug shops without prescriptions. This is in line with the study conducted in the Uganda Wakiso district by Okello and Simon Jean, (2019), where findings revealed (that 93.2%) of the individuals self-medicated because of long waiting hours at the hospital.

From the findings, the majority of the respondents (52%) had never left a public health facility without receiving treatment. This could have been highly attributed to the fact that most people opted for pharmacies and drug shops where they are sure they have left with drugs. This is in line with the study conducted in Uganda by Kyalimpa and Doreen, (2015), where findings on health facility-related factors contributing to self-medication revealed (that 69.8%) of the individuals

had self-medicated due to poor health facility policies for implementing services at these facilities.

About the study, the majority of the respondents (65.4%) self-medicated because they did not find medicines at the public health facility. This could have attributed to the fact that they opted for private facilities like pharmacies which were accessible even without prescriptions. This is in agreement with the study conducted in Africa by Eugene Venyuy et al, (2021), where findings regarding health facility-related factors contributing to self-medication were because of poor policies governing health facilities and hence insufficient medicines for patients.

10 Conclusion.

Results on individual factors contributing to self-medication greatly showed the presence of self-medication since 78% of the respondents had kept some medications at home, 68% had someone self-medicating at home, 56% had medical personnel in the family, 70% usually took medicines that remained at home, 78% took medicines without first visiting the hospital, 41% had taken medicines without prescription for more than three times, 60% self-medicated more in pain killers.

Furthermore, community factors contributing to self-medication were quite agreeable since 99.4% had pharmacies/drug shops around their homes, 85.1% were influenced by those pharmacies /drug shops to buy medicines from them whenever they got sick before visiting a health practitioner, 68% had ever been recommended by someone around the community for certain medications.

The study also established the health-related factors contributing to self-medication indicated the presence of self-medication since 72% had no health facilities around their homes, 50% had to move 6KM and above to reach the nearby public health facility, 38% spent 30-60 minutes before being attended to, 68% found health workers at private health facilities friendly, 53% had ever left a health facility without treatment and 65.4% found no drugs at the facility.

Overall, the researcher concluded that the majority of the respondents had ever self-medicated due to it being time-saving, accessible, and economical.

Recommendations:

The Ministry of health should design and implement health care policies that will ensure proper

management of drugs at health facilities by all health workers to improve on handling of drugs in the hospital.

Health workers should further be trained on medical ethics through continuous medical education to prevent mishandling of patients and provide a conducive environment for patients.

The government through the MOH should construct more public health facilities for easy access to healthcare services.

Community sensitization programs should be conducted to create awareness of the dangers of self-medication among individuals by the government through the local councils and health workers of Lyamutundwe village.

11 Acknowledgement:

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I would like to send my sincere acknowledgement to my classmates of 2021/2022 Kampala school of health science for their endless support.

12 List of Abbreviations

ABR: Antibiotic Resistance

AMR: Anti-microbial resistance

AMS: Self-Medication with Antibiotics

DHO: District Health officer

FDA: Food and Drug Association

MOH: Ministry of Health

NGOS: Non-Government Organization

OTC: Over the Counter

SM: Self-Medication

WHO: World Health Organization

13 Operational Definitions

Self-medication: The use of drugs to treat self-diagnosed symptoms and diseases (WHO, 2014).

Antibiotics: These are chemotherapeutic agents used for the clinical Management of infectious diseases in humans, plants and animals (WHO, 2014)

Antibiotic Resistance: This is when bacteria change over time and no longer respond to medicines making infections harder to treat and increasing the risk of disease spread, severe illnesses and death (WHO,2020)

Over the counter medicines : These are medicines that you can buy without prescriptions (FDA, 2018)

Self-limiting conditions: A condition that resolves on its own and has no long term harmful effects on people's health (Antimicrobial stewardship, 2016).

Pharmacy: The science and art concerned with the preparation and standardization of drugs.

Prescription: Is a formal communication from a physician or other registered health care professionals to a pharmacist authorizing them to dispense a specific prescription drug for a specific patient.

Side effects: These are undesirable but expected results from a drug.

Table 10. References

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