

ECONOMIC AND HEALTH FACILITY FACTORS ASSOCIATED WITH SELF-MEDICATION AMONG ADULTS AGED 18 TO 50 YEARS ATTENDING HENROB HOSPITAL ZANA. A CROSS-SECTIONAL STUDY.

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Abstract.

Background.

Despite the control measures that were put in place by the Ministry of Health and the National Drug Authority, the number of people practicing self-medication was gradually increasing, and this continued to be a threat to the community and the country at large. This study examined the economic and health facility factors associated with self-medication among Adults aged 18 to 50 years attending Henrob Hospital Zana.

Methodology.

A cross-sectional study was conducted targeting adults attending Henrob Hospital. A total of 40 respondents were systematically selected and interviewed using a semi-structured questionnaire. The outcome variable was the medication with or without a prescription from a doctor / medical worker. The information was manually tallied, and scientific measures were used to analyze the recorded information. Thereafter, Microsoft Word and Excel programs were employed, followed by presentation in the form of frequency tables, graphs, and figures like pie charts and bar graphs.

Results.

19 (47.5%) of the respondents had gained tertiary education, and 19 (47.5%) of the respondents were married. The majority of the respondents reported buying medicine without a prescription from a doctor 25(62.5), 38(95 %) of the participants replied Yes to having nearby pharmacies, and 36 (90%) of the respondents lived in urban areas. 20 (50%) strongly agreed to wait for a long time in Health Care facilities, 19 (47.5%) of the respondents agreed with lack of access or long distance to Health Care facilities, and most participants, 21 (52.5%), agreed on Non-affordability of Health Care services

Conclusion.

The study found that self-medication in adults is associated with waiting for a long time in Health Care facilities, non-affordability of health care services, and buying medicine without a prescription from a doctor who had no health insurance.

Recommendation.

Ministry of Health should also plan and carry out support supervision to all government and non-government health organizations.

Keywords: Self-medication, Economic factors, Health facility factors, Adults (18-50 years), Henrob Hospital.

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Background.

At Henrob Hospital, 48.9% of the patients practiced self-medication, of which 30.7% were females aged 18-48years, 21.1% showed anti-bacterial resistance, 8.1% anti-malarial resistance and 18.2% were males aged 23-45years that practiced self-medication, 10.3% showed ant-bacterial resistance, 6.9% anti-malarial resistance (HMIS OPD 002, 2023). One of the major trends emerging in the area of health in Uganda was the practice of self-medication, as reports showed. According to the World Health Organization, self-medication cases in Uganda have increased by 30% as of 2020, which has caused death and resistance to drugs

(WHO, 2020). The National Drug Authority attributed these to an increased number of drug shops and pharmacies, expensive treatment from clinics, and long distances to health facilities (Monitor, 2021).

According to a study in Wakiso district by Akande-Sholabi et al. (2021), findings showed that 78% of the respondents practiced self-medication and 56.2% showed different drug resistance: 18.2% anti-bacterial resistance and 9.1% anti-hypertensive resistance. Despite the control measures that were put in place by the Ministry of Health and the National Drug Authority, the number of people practicing self-medication was gradually increasing, and this continued to

be a threat to the community and the country at large. However, there was still limited information as to why people carried out self-medication, providing a challenge to public health interventions and increasing the risk of drug resistance, morbidity, mortality, ineffective treatment, economic losses, and drug wastage among communities in the country (Nabaweesi, 2021). This study examined the economic and health facility factors associated with self-medication among adults aged 18 to 50 years attending Henrob Hospital Zana.

Methodology.

Study design and rationale.

The study was a cross-sectional design in nature and quantitative. The cross-sectional design research was used because it aided in rapid data collection and allowed a snap interaction with a few respondents at a certain point in time, thus allowing conclusions about phenomena across a wide population to be drawn.

Study setting and rationale.

The research was conducted at Henrob Hospital Zana in the Wakiso district. It is a private for-profit non-government Organization located 200m off Entebbe Road in Zana near Millennium Hotel, approximately 5km from Kampala city and near Kirimanyaga police station. The latitude of Henrob Hospital is 0.25568. Zana is a neighborhood in Ssabagabo Municipality, Kyaddondo County, and Wakiso district in central Uganda. The hospital has outpatient and inpatient departments, receiving an average of 50 patients daily and a 32-bed inpatient capacity. The hospital has an active operating theater that does various procedures, including Laparoscopic and open surgeries. The facility has a total of 125 workers, including both medical and support staff. The researcher works and stays near the facility; it was, therefore, easy and convenient for the researcher to collect data.

Study population

All adults defined by Uganda attending Henrob Hospital Zana to seek medical care.

Sample size determination

The sample size is the size of the population selected to participate in the study, which was determined using the Yamane formula of 1967, as follows.

$$N$$

$$n = 1 + Ne^2$$

Where n= desired sample size;

N Population size (minimum number of outpatient department patients in 5 days at Henrob hospital =45)

e= Acceptable sampling error (0.05)

Therefore;

45

$$n = 1 + 45 \times 0.052$$

$$n = 40$$

Therefore n = 40 participants

Sampling procedure.

A manageable representative sample of respondents was obtained using convenient sampling, which is a non-probability sampling method. In this method, participants were selected based on their convenient accessibility and proximity to the researcher. Convenient sampling was cheap as data collection was conducted in a short period.

Inclusion criteria

All adults aged 18 to 50 years at Henrob hospitals consented to be part of the study.

Exclusion criteria

All non-consenting adults, staff, and children were not part of the study.

Definitions of Variables Dependent variables.

Self-medication is the selection and use of medicines by individuals to treat self-diagnosed illnesses or symptoms without a prescription.

Independent variables.

Economic and health facility-related factors.

Research instruments

A structured questionnaire was used to collect the data. It was chosen because it was easy to use, less time-consuming, and could be used to collect a large amount of data in a short time.

Data collection procedures

The researcher visited Henrob Hospital, introduced herself to the participants, and read to the individual participants the consent form that was detailed with the title and purpose of the study as well as the rights of the participant. Agreed participants were interviewed and asked to provide written consent by signing or fingerprinting. For those who refused to participate, the interview did not proceed. After obtaining a written consent form, the researcher then entered the questionnaire's serial number and date of the interview; the participants were then required to independently fill the questionnaires from the first up to the last question, and the researcher checked for completion. Upon completion by every participant, the questionnaires were immediately handed over to the researcher. The process of data collection continued until every effort to contact every study participant in the sample had been exhausted.

All questionnaires were kept safe by the researcher until the time for analysis.

Data management.

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

Thereafter, the use of Microsoft Word and Excel programmers were employed, followed by presentations in the form of frequency tables, pie charts, graphs, and figures.

Results

Individual Factors and Self-Medication.

Data analysis

The information was manually tallied, and scientific measures were used to analyze the recorded information.

Table 1: Individual factors and self-medication (n=40).

Variables		Frequency	Percentage (%)
Sex	Male	21	52.5
	Female	19	47.5
Age group (years)	18 to 24	2	5
	25 to 34	5	12.5
	35 to 44	9	22.5
	45 to 50	24	60
Educational level	No education	3	7.5
	Primary	2	5
	Secondary	16	40
	Tertiary	19	47.5
Marital status	Single	14	35
	Married	19	47.5
	Divorced	2	5
	Widowed	5	12.5
	Others	1	2.5

Table 1 shows that the majority of respondents were males 21, 52.5%) compared to females (19, 47.5%), and the highest proportion of respondents 24, 60%) were in the age

group of 45-50 years. Most 19 (47.5%) of the respondents had gained tertiary education, and the highest proportion 19 (47.5%) of respondents were married.

Socio-Economic Factors and Self-Medication

Table 2: Socio-economic factors and self-medication (n=40).

Variables		Frequency	Percentage (%)
Occupation	Unemployed	14	35
	Employed	21	52.5
	Business person	5	12.5
	Yes	15	37.5

Health insurance	No	25	62.5
Average monthly income	Small	9	22.5
	Medium	12	30
	Big	11	27.5
	Others	8	20

Table 2 indicates that the majority of the respondents who reported buying medicine without a prescription from a doctor had no health insurance 25(62.5%), were employed 21 (52.5%), and were in the medium average monthly income category 12 (30%).

Figure 1: Distribution of respondents according to whether they live near pharmacies or clinics. (n=40).

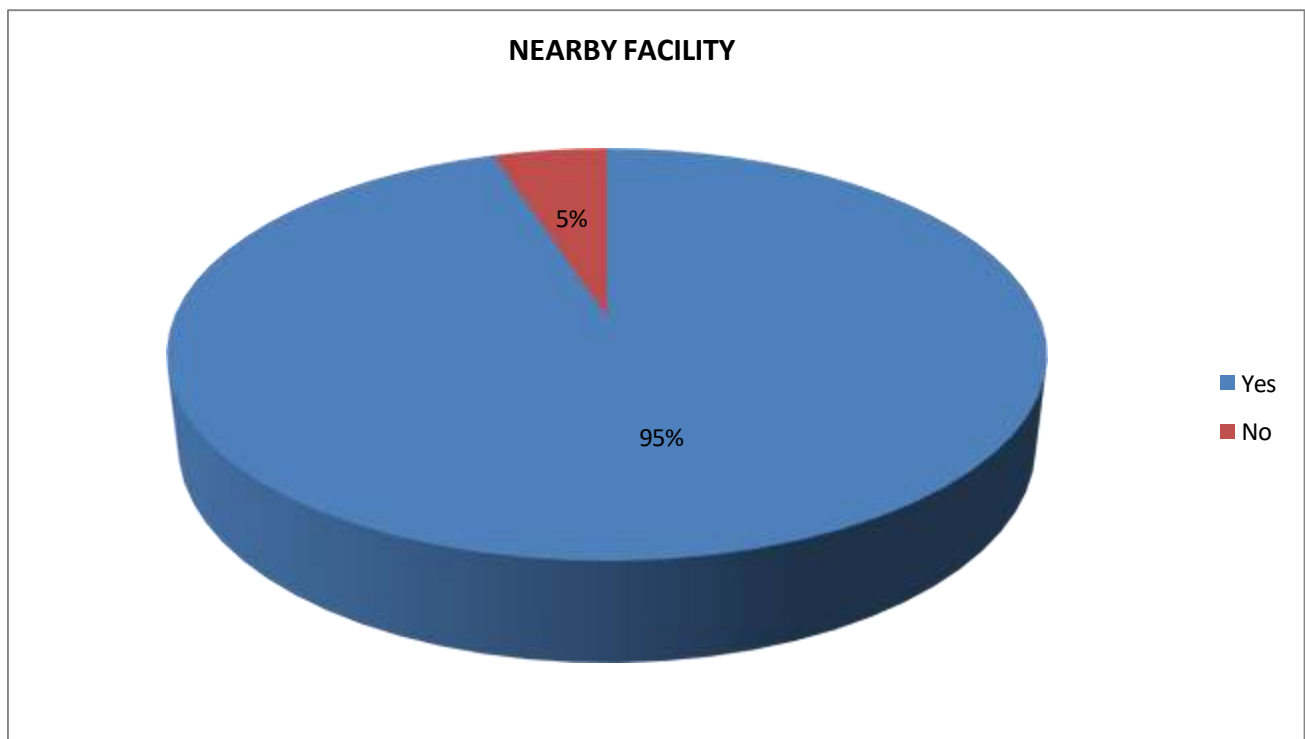


Figure 1 indicated that most 38(95 %) of the participants replied Yes to having nearby pharmacies or clinics while 2 (5%) responded No.

Figure 2: Distribution of respondents according to where they live. (n=40).

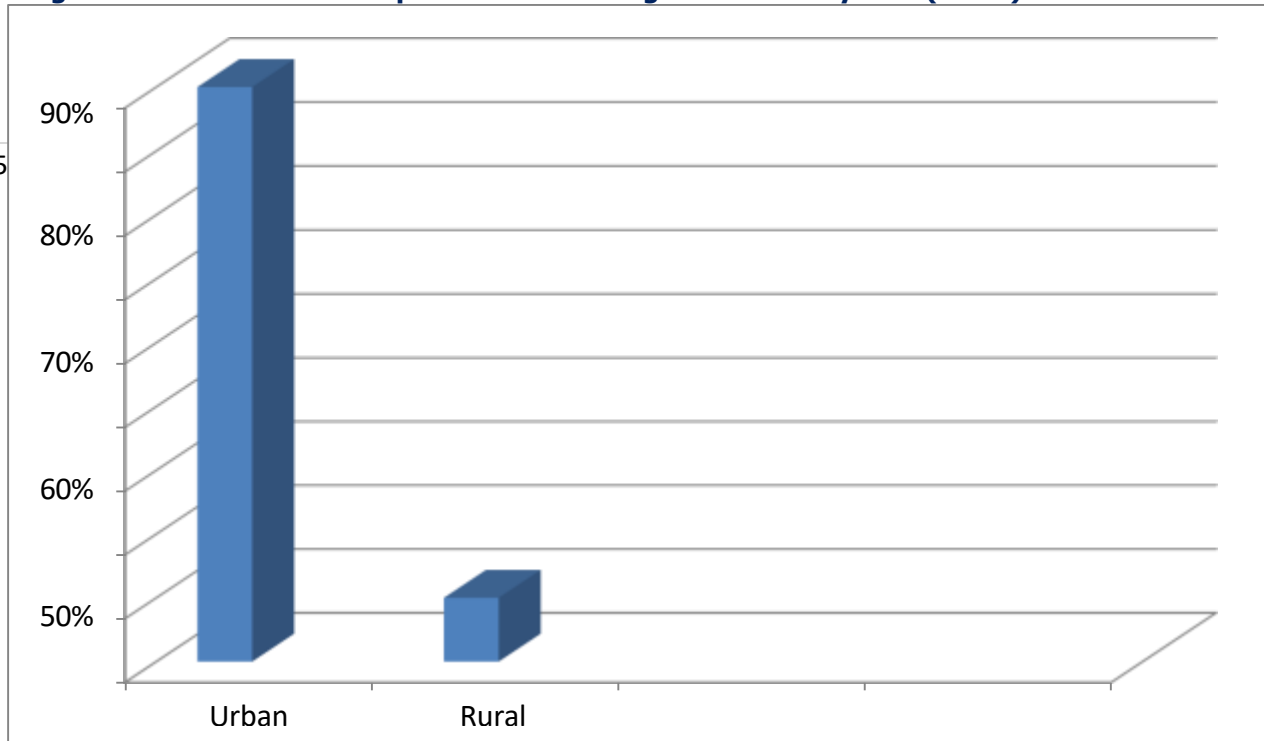


Figure 2: Most 36 (90%) of the respondents live in urban areas, and 4 (10%) of the participants lived in rural areas.

HEALTH PROVIDER RELATED FACTORS.

Table 3: Health provider-related factors contributing to self-medication. (n=40).

Variables	Strongly agreed	(%)	Agreed	(%)2	Disagreed	(%)
Long waiting time in Health Care facilities	20	50%	15	37.50%	5	12.50%
Lack of access or long distance to Health Care Facilities	5	12.50%	19	47.50%	16	40%
Non-affordability of Health Care services	15	37.50%	21	52.50%	4	10%
Non-availability of Health Care Facilities	13	32.50%	19	47.50%	8	20%
Lack of drugs in Health Care facilities	11	27.50%	22	55%	7	17.50%

Lack of health workers in Health Care Facilities	8	20%	22	55%	10	25%
Poor attitude of health workers in Health Care facilities towards patients	14	35%	23	57.50%	3	7.50%

Table 3 shows that the majority of respondents, 20 (50%), strongly agreed to wait for a long time in Health Care facilities. 19 (47.5%) of the respondents agreed that lack of access or long distance to Health Care facilities is the factor to self-medicate themselves. Most participants, 21 (52.5%), agreed on the Non-affordability of Health Care services, and 19 (47.5%) of the respondents agreed on the availability of Health Care facilities. 22 (55%) of the respondents agreed to the lack of drugs in Health Care facilities as well as the lack of health workers in Health Care facilities. Poor attitude of health workers in Health Care facilities towards patients was agreed to by 23 (57.5%).

Discussion of results.

Socioeconomic factors and self-medication.

Regarding the question about respondents' occupation, the majority, 21 (52.5%) of the respondents were employed. The least 5 (12.5%) replied that they had retired. This showed that many of the respondents were financially well and therefore could afford to pay for services like medicine and any other thing that could be needed during the self-medication process, something that kept them home before seeking health care services. The study is in agreement with the Shah et al.'s (2009) study on socio-demographic characteristics and the three delays of self-treatment in Ethiopia that noted that people with high household income were about 2 times more likely to delay in seeking care than those with low household income. According to the findings, the majority of the respondents, 25 (62.5%), didn't have health insurance, and 15 (37.5%) had health insurance. Respondents who didn't have health insurance reported buying medicine over the counter without medical consultation. In this case, the reason for self-medication could be due to fear of hospital costs probably because of poverty which is brought about by too many family responsibilities like paying monthly house rent, and school fees for children that don't allow them to have money by side for health and being that they had no health insurance, they resorted to buying medicine from the pharmacies which seemed cheaper. This agrees with the study conducted by Behzadifar M (2020), which concluded that financial constraints were a primary reason why people practiced self-medication. Poverty due to lack of health insurance led to an inability to afford health care.

Medium monthly income contributed to self-medication because this exposed the respondents to different medical services as reported by 12 (30%) of the respondents. They never had helpers in decision-making on what type of treatment to take. In contrast, Pandey et al. (2018), in a study on the reasons for self-treatment, revealed that individuals who were middle-earning class received self-treatment. Findings indicated that most 36 (90%) of the respondents lived in urban areas. This is due to the availability and presence of nearby health services so individuals could easily access drugs than in the rural areas.

Health provider-related factors and self-medication.

Regarding the length of time respondents spent at the facility waiting to be worked on, most (50%) of them strongly agreed that they waited for more than an hour while the least (12.5%) disagreed. This implies that the longer respondents have to wait, the higher the chances of self-medication. The long turnaround time was brought about by the hospital procedures, of which, when one enters a hospital for a service, he or she is registered at the reception taken to triage for vital observation then goes to the doctor. From the doctor, he or she goes to the laboratory, and then when the results are back, he or she goes back to the doctor for medicine prescription and then to the pharmacy for the drugs. So, the procedure takes some good time, and the patients end up spending a lot of time at the hospital. Patients are always irritable people who don't want anything that could frustrate them. And so, they could wish to spend a limited time only. The study agrees with Awoke and Awoke & Seleshi's (2013) study on maternal delays in utilizing health care services.

The majority, 19 (47.5%) of the respondents agreed that lack of access to health care or long distance to Health Care facilities contributed to self-medication. This meant that they could not go to the facility to seek medical consultation and opted for self-treatment. This is in agreement with. This consequently influenced how many could get to receive institutional delivery (Debel et al., 2024).

Regarding respondents' non-affordability of Health Care Services, the majority, 21(52.5%), agreed. These could be the ones that did not respect their appointment days and avail themselves of consultation or may have come on un-

appointment days or even late. Important to note that maybe even they came when the medical staff was not around or they ignored them. When such a thing happens, this could push them away and cause them to self-medicate themselves. This is in agreement with a study by Yarinbab (2018) on delays in the utilization of institutional delivery of medical services in Ethiopia, which revealed that participants who did not get skilled health providers at the facilities were more likely to self-medicate. When asked if there was a lack of drugs in the health care facilities, responses were equally shared as (55%) agreed and (25%) disagreed with the effect. This could be because drugs are consumed a lot by the patients and therefore one could come when they are out of stock. Then, individuals did not see the need to go to the facility when not sure if they could get help, hence resorting to self-treatment. Related to this is Mogues et al.'s (2023) study on the community perspective of maternal mortality in Nigeria. They showed that the absence of obstetric drugs was associated with a maternal delay in the uptake of institutional delivery service as mothers who did not get drugs at the facility previously were at higher risk of self-medicating.

Regarding how the respondents rated the attitude of health workers during their previous visit, most (57.5%) agreed that they were rude. Such a complaint is not a new thing where patients are harassed by the people they go to in need of care and answers. These respondents may have experienced several times. The least (7.5%) noted that they were polite. This was also stressed by Manda-Taylor, Sealy, & Roberts (2017) study about the factors associated with self-medication in Malawi: which noted that previous poor experience of health care, lack of politeness from health care professionals; pregnant women stated that some health staff members were merely rude (Mugweni et al., 2018). Health providers, too, need to orient themselves to the existing cultural norms that encourage people to self-medicate.

Conclusion.

The study found that self-medication in adults is associated with waiting for a long time in healthcare facilities, Non-affordability of healthcare services, and buying medicine without a prescription from a doctor who had no health insurance.

Recommendation.

Ministry of Health should also plan and carry out support supervision to all government and non-government health organizations.

Acknowledgment

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List of abbreviations.

COVID-19:	Corona Virus Disease 2019.
HMIS :	Health Management Information System.
NDA :	National Drug Authority.
SM :	Self-medication.
SPSS :	Statistical Package for the Social Sciences.
USD :	United States Dollar.
WHO :	World Health Organization.

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There is no source of funding.

Conflict of interest.

The authors declare no conflict of interest.

Availability of data.

Data used in this study is available upon request from the corresponding author.

Authors contribution

EII designed the study, conducted data collection, cleaned and analyzed data, and drafted the manuscript. SN supervised all stages of the study, from the conceptualization of the topic to manuscript writing.

Ethical approval.

The permission was sought from the Mildmay Research Ethics Committee, which later provided the researcher with an introductory letter upon submission and approval of the research proposal. The letter was then presented to the Henrob hospital administration to seek approval for data collection within the hospital premises.

Informed consent.

Consent was sought from the participants after a brief introduction. The participants were made aware of their rights during the process, including withdrawal from the exercise at any time.

Authors biography

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