PREVALENCE AND ASSOCIATED FACTORS OF UNDIAGNOSED HYPERTENSION IN ADULTS AGED 25-64 YEARS IN LUGAZI MUNICIPAL COUNCIL, BUIKWE DISTRICT

PEARL KYOMUHENDO

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UGANDA CHRISTIAN UNIVERSITY

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DECLARATION

This dissertation is my original work and has never been presented for a degree award in any other university.

Date: August 2025

KYOMUHENDO PEARL

REG NO: RJ23M21/028

APPROVAL

This Dissertation has been submitted with my approval as a University Supervisor.

Banson Barugahare, BSc., MSc., MPhil

Signature

Date: August, 2025

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ACRONYMS

BMI	Body Mass Index
CDC	Centre for Disease Control
HIC	High-Income Countries
LMIC	Low- and Middle-Income countries
MOH	Ministry of Health
NCDs	Non-communicable Diseases
QALYS	Quality Adjusted Life Years.
WHO	World Health Organization

OPERATIONAL DEFINITIONS

Hypertension refers to a persistent blood pressure greater than 140(systolic) and a diastolic blood pressure of 90mm/Hg according to WHO.

Undiagnosed hypertension refers to individuals who are hypertensive but do not report having been told by health professionals that they have hypertension.

Body Mass Index refers to the measure of body fat based on weight and height in adults.

ABSTRACT

Introduction

Hypertension is an important public health challenge worldwide due to its high prevalence and potential to cause complications such as myocardial infarction, stroke, and renal failure, among others. Despite its burden, some individuals live with undiagnosed hypertension, which poses a risk of health complications if not treated early. This, therefore, necessitated studies to be conducted to provide more evidence that can be used to inform interventions.

Study objectives

To determine the prevalence of undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe district.

To determine life style factors associated with undiagnosed hypertension among adults aged 24-64 years in Lugazi Municipal Council, Buikwe district.

To determine barriers to screening of hypertension among adults aged 24-64 years in Lugazi Municipal Council, Buikwe district.

Methodology

This was a mixed-methods study. Quantitative data were collected electronically using a structured questionnaire, measurement of blood pressure, and body mass index. Qualitative data were collected using key informant interviews and in depth interviews. 3 key informant and 4 in depth interview participants were used to collect qualitative data. Thematic analysis was employed to analyze qualitative data. Quantitative data were analyzed using descriptive statistics. Bivariate and multivariable logistic regression were used to determine factors associated with undiagnosed hypertension.

Results

The prevalence of undiagnosed hypertension among adults aged 25-64 was 9.77%. Being obese ($p<0.001$), older than 44 years ($P=0.03$), and male ($P=0.037$), increased the likelihood of undiagnosed hypertension. Cultural influence, fear of being diagnosed, high costs, inadequate medical staff, laziness, and unawareness hinder the screening of hypertension

Conclusion.

The prevalence of undiagnosed hypertension among adults aged 25-64 in Lugazi Municipal Council was lower than previous studies, but almost one-in-ten remain unaware of their hypertensive status and therefore at risk of complications. Gender, age, and BMI were

significantly associated with undiagnosed hypertension. Barriers such as cultural beliefs, fear, cost, limited staff, and low awareness hinder effective screening.

1 CHAPTER ONE: INTRODUCTION

1.1 Introduction

The World Health Organization (WHO) defines hypertension as persistent blood pressure greater than 140mm/Hg (systolic) and a diastolic blood pressure of 90mm/Hg. It may present with symptoms such as dizziness, blurred vision, headaches, and abnormal heart rhythm in the early stages and many people go undiagnosed.

Hypertension is an important public health challenge worldwide because of its high prevalence, which results in major diseases like myocardial infarction, stroke, and renal failure, among others (Chataut, Rk and Np, 2011). Globally, approximately 1.28 billion adults aged 30-79 years are hypertensive, of which two-thirds are from Low and Middle-Income countries (LMICs). In Africa, the prevalence of hypertension is estimated at 46% prevalence accounting for approximately 7.5 million deaths annually (Gadisa, 2020). This is attributed to poor access to health information and services, but also low socioeconomic status.

In Sub-Saharan Africa a large proportion of the population with hypertension remains undiagnosed, untreated, or inadequately treated, a large proportion of the population with hypertension remains undiagnosed, untreated, or inadequately treated, which results in a significant burden on health and the economy (Dejenie, Kerie and Reba, 2021).

Undiagnosed hypertension refers to individuals who are hypertensive but do not report having been told by a health professional that they have hypertension. This causes high morbidity and mortality (Dejenie, Kerie and Reba, 2021).

A study conducted in Ethiopia established that the magnitude of undiagnosed hypertension is 15.6%, and only a very small percentage of people are aware of their high blood pressure (Dejenie, Kerie and Reba, 2021).

It was established that Kenya and Tanzania have the highest prevalence of hypertension in East Africa, and this has brought about severe consequences such as high morbidity and mortality from cardiovascular diseases like stroke, myocardial infarction, and hypertensive heart diseases (Okello *et al.*, 2020).

A study conducted in Tanzania showed a high prevalence of hypertension ranging from 19% in rural areas to 35% in urban areas, with its peak among the elderly, 70 years and above. (Mosha *et al.*, 2017).

Younger and older populations, populations of lower socioeconomic status, alcohol consumption, obesity, absence of associated cardiovascular co-morbidities, no familial history of hypertension, and low education levels are more likely to have undiagnosed hypertension (Dejenie, Kerie and Reba, 2021).

The National NCDS Risk Factor Survey established that the prevalence of hypertension in Uganda was 26.4% with a higher prevalence in urban areas compared to rural areas, albeit only 7.7% of the proportion with hypertension know their hypertension status (Guwatudde *et al.*, 2015).

Therefore, this research assessed the prevalence and risk factors of undiagnosed hypertension among adults aged 25-64, as there was a reported increase in high blood pressure among children and adolescents that poses a high risk of developing hypertension in young adulthood (Chowdhury and Chakraborty, 2017).

1.2 Problem Statement

Hypertension remains a public health concern for Uganda, with a prevalence of approximately 33% (WHO, 2023b), and it accounts for about 50% of cardiovascular-related mortalities annually (Wanzhu *et al.*, 2024). In Central Uganda, the prevalence of hypertension is 32% (Lunyera *et al.*, 2018). Even though the Ministry of Health and the implementing partners have put in place interventions such as mass sensitization and screening to prevent hypertension, the burden of the disease remains high. However, little was known about undiagnosed hypertension among adults in the Lugazi Municipal Council. This study sought to assess the prevalence of undiagnosed hypertension and associated factors among adults in Lugazi Municipal Council, Buikwe district.

1.3 Study Purpose and Objectives

1.3.1 Study Purpose

To determine the prevalence and associated factors of undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe district.

1.3.2 Objectives

1. To determine the prevalence of undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe district.
2. To determine factors associated with undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe District.
3. To establish barriers to screening for hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe District.
4. To determine the lifestyle factors associated with undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe District.

1.4 Research Questions

1. What is the prevalence of undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe District?
2. What factors are associated with undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe District?
3. What are the barriers to screening for hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe District?
4. What are the lifestyle factors associated with undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe district?

1.5 Scope of the Study

This study was conducted in the Lugazi Municipal Council among adults aged 25-64 years from April to May 2025. The study assessed the prevalence of undiagnosed hypertension and its associated factors, but also barriers to screening for hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe District.

1.6 Justification.

There was a shift in high blood pressure cases in children and adolescents that predisposed them to hypertension in adulthood (Chowdhury and Chakraborty, 2017). The age range 25- 64 years was at greater risk for cardiovascular diseases, and a big majority are unaware (Kilama *et al.*, 2023). Having a community that was unaware of their hypertensive status increased the risks of mortality due to the complications resulting from delayed diagnosis of hypertension.

1.7 Significance

This study provided the current evidence on the prevalence of hypertension and associated factors among adults aged 25-64 years in Lugazi Municipal Council, Buikwe District. It highlighted significant barriers to early diagnosis and management of hypertension. The evidence shall be used by relevant stakeholders, including the health department, Buikwe local government, to inform interventions aimed at preventing cardiovascular diseases in the district, but also in other parts of the country.

1.8 Conceptual framework

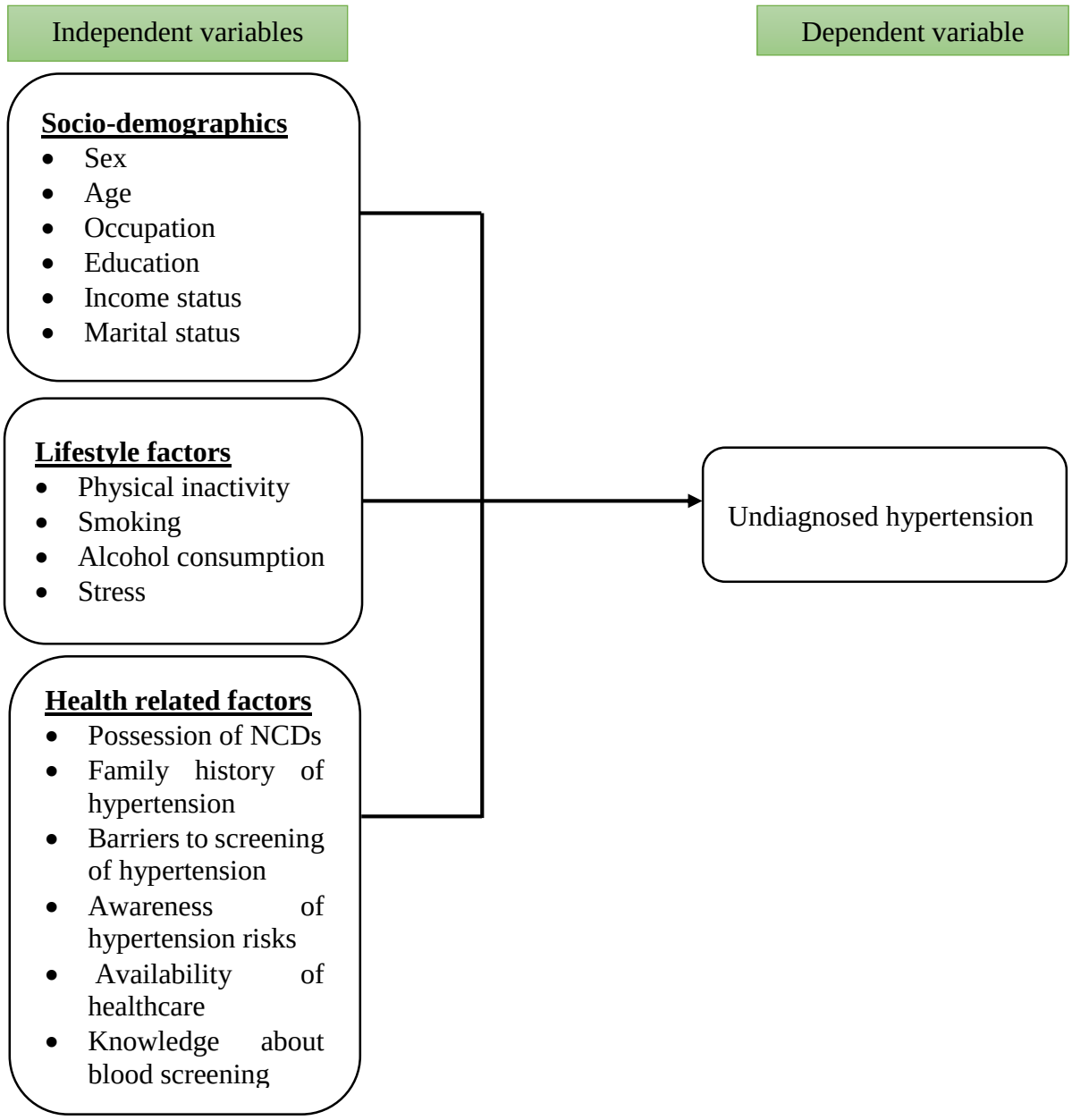


Figure 1: Conceptual framework

Figure 1 shows that undiagnosed hypertension can be affected by socio-demographic characteristics, lifestyle factors, and health factors. Socio-demographic characteristics include sex, age, occupation, education, income status, and marital status, while lifestyle factors include physical inactivity, smoking, alcohol consumption, and stress. On the other hand, health-related factors include: possession of NCDs, family history of hypertension, awareness of hypertension

risks, availability of healthcare, knowledge about blood screening, and health-seeking behaviour of the population and the barriers to screening for hypertension in the above age group.

2. LITERATURE REVIEW

Previous studies showed that hypertension is the most common cardiovascular disorder affecting a large proportion of people globally, and it leads to complications like myocardial infarction, stroke, and renal failure, according to (Chataut, R.K., and Np, 2011), who speculate a 29.2% increase by 2025.

Hypertension is the leading cause of mortality and has been ranked third as a risk factor for years of life lost due to morbidity (Boro and Banerjee, 2022). Hypertension is associated with many risk factors such as high sodium intake, poor fruit and vegetable intake, smoking, inactivity or lack of exercise, obesity, and alcohol intake (Mumena *et al.*, 2023).

Globally, cardiovascular diseases are a leading cause of death because of undiagnosed hypertension, with 17.9 million deaths worldwide in 2019. (Ahmed *et al.*, 2023). It accounts for a 37.5% disease burden with 45% of cardiovascular-related deaths, 51% stroke-related, and 3.7% DALYS. The medical cost of hypertension is approximately 370 billion US$ per year globally (Gelassa *et al.*, 2022).

More cases of hypertension have been reported recently among the younger generation, and this has been attributed to obesity and other lifestyle factors such as alcohol consumption, smoking, and lack of exercise, with 35% of them being urban dwellers (Mosha *et al.*, 2017).

In Africa, undiagnosed hypertension cases have increased steadily from 54.6 million in 1990 to 92.3 million (70%) in 2000 and 130.2 million (41%) in 2010, and there is a projected rise to 216.8 million (66%) by 2030 (Okello *et al.*, 2020).

Asymptomatic (undiagnosed) hypertension in central and Eastern Europe is estimated to have a prevalence of 23% among hypertensive women and 37% among hypertensive men, with 17% of those with undiagnosed hypertension (Uhernik *et al.*, 2023).

Hypertension is more prevalent in low and middle-income countries (LMIC) than in high-income countries (Gadisa, 2020). In Nigeria (West Africa), there was an 11.2% increase in hypertension cases to approximately 28.9% in 2013 prevalence (Banigbe *et al.*, 2020), and in Ethiopia, the magnitude of undiagnosed hypertension was 15.6% (Dejenie, Kerie and Reba, 2021).

In East Africa, Kenya and Tanzania have the highest prevalence rate of hypertension from recent studies (Okello *et al.*, 2020). A few studies done in Uganda established that out of the 3906 participants, 1033 were classified as hypertensive, with a prevalence of 26.4% with rural areas having fewer cases compared to the urban areas. (Kilama *et al.*, 2023).

Perceived barriers to hypertension screening included lack of money, lack of motivation to exercise, and fear of exercising, insufficient knowledge pertaining hypertension, cultural practices and beliefs surrounding seeking medical care , long distances of travel to access medical facilities, poverty, and laziness. (Kilama *et al.*, 2023).

In relationship to the above, high blood pressure was reported to be increasingly common in children and adolescents, which posed a great risk to them of developing hypertension in their adult age group and in their old age too(Chowdhury and Chakraborty, 2017)

Blood pressure screening in communities is a good measure in raising awareness to curb undiagnosed hypertension and to refer cases for better management and control of advanced cardiovascular diseases such as stroke and heart attack, among others (Mosha *et al.*, 2017).

3 CHAPTER THREE: METHODOLOGY

3.1 Study design:

This was a community-based cross-sectional mixed-methods study design. The quantitative research method was used to assess the prevalence and associated factors of undiagnosed hypertension in adults aged 25-64 years. The qualitative method was used to complement the quantitative findings and also assess the barriers to screening for hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe,

3.2 Study area:

This study was conducted in the Lugazi Municipal Council, Buikwe District. Buikwe district is located in the central region of Uganda, and it neighbors Kayunga to the north, Jinja to the east, Buvuma to the southeast, the Republic of Tanzania to the south, and Mukono to the west.

Lugazi Municipal Council is located 47km by road, East of Kampala along the Kampala – Jinja highway in Buikwe District. It shares borders with Nkokonjeru Town Council in the south, Wakiso division in the north, Njeru Municipal Council in the East, and Nagojje sub-county in the west. Lugazi Municipal Council is served by Kawolo Hospital, which is the main government health facility, and has a population of 114,524 and 99,401 households (Buikwe_LG, 2024).

3.3 Sources of Information

The study utilized primary data sources, including interviews with adults aged 25-64 years, blood pressure and anthropometric measurements, and key informant interviews.

3.4 Study Population

The study population was adults aged 25-64 years in Lugazi Municipal Council, Buikwe District.

3.5 Eligibility criteria

3.5.1 Inclusion criteria

All adults aged 25-64 years who have lived in Lugazi Municipal Council for at least 2 months were included in the study.

3.5.2 Exclusion criteria

The study excluded adults aged 25-64 years but are visitors to Lugazi Municipal Council at the time of the study; or those who had stayed in Lugazi Municipal Council for less than 2 months who were visitors to Lugazi Municipal Council at the time of the study, or those who had stayed

in Lugazi Municipal Council for less than 2 months, or those who were unavailable at the time of the study.

3.6 Sampling.

For quantitative data, two of the three divisions in Lugazi Municipal Council were selected using simple random sampling. During simple random sampling, the divisions were written in small pieces of paper, folded, and placed in a container. The container was shaken, after which only two divisions were picked. From each selected division, two parishes were selected using simple random sampling. Systematic random sampling was used to select the households, and participants were selected at calculated intervals, with only one eligible participant recruited to participate in the study. This ensured that the population under study was well-represented in the sample

For qualitative data, key informants were selected using purposive sampling and health workers provided data on cases and possible challenges of promoting the diagnosis of hypertension among adults aged 25-64 years in Lugazi Municipal Council.

Sample size determination

Sample size was determined using the Cochrane formulae

$$n = \frac{Z^2 P(1-P)}{d^2}$$

Where n = sample size required, z= 95% confidence interval = (1.96) p= proportion, which was the approximated prevalence of undiagnosed hypertension in one of the regions in Uganda (17%) sx (Kilama et. al., 2023) and d was margin of error (5%)

$$n = \frac{1.96^2 0.17(1-0.17)}{0.05^2}$$

n= 217

When a 15% non-response rate is added,

n= 250.

Assuming the design effect of 1.25 for using multistage sampling, which is in the allowed range for smaller clusters (Bilukha, 2008)

Thus, the sample size was 313 adults.

3.7 Study variables

3.7.1 Dependent variable

The prevalence of undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council, Buikwe District. An adult is considered to have undiagnosed hypertension if he or she is hypertensive but unaware.

3.7.2 Independent variables

Socio-demographic characteristics, which included sex, age, occupation, education, income status, and marital status

Lifestyle factors included physical inactivity, smoking, alcohol consumption, and stress.

Health-related factors included: possession of NCDs, Body Mass Index, family history of hypertension, awareness of hypertension risks, availability of healthcare, barriers to screening of hypertension, knowledge about blood screening, and health-seeking behavior.

3.8 Data collection tools and techniques

After obtaining informed consent, a pretested semi-structured questionnaire was used to gather information on participant demographics, health-related and lifestyle factors. Blood pressure measurements were done for each participant using a digital blood pressure machine. Participant heights and weights were taken using a stadiometer and a stand-on weighing scale, respectively. The data was captured on the KoBo Collect Android application.

Qualitative data were collected from the key informants using a key informant interview guide, which consisted of open-ended questions regarding the current status of hypertension among adults aged 25-64 years at Lugazi Municipal Council. After seeking informed consent from the key informants, the researcher proceeded with the interviews, which were recorded using an audio recorder. The audio was saved on a computer with a password to prevent unauthorized access. The recorded audios were then transcribed verbatim, and the transcripts were labelled as their respective audios.

3.9 Data analysis

Quantitative data

Quantitative data was downloaded in XLS format from the Kobo Collect central web server and saved to the computer. The data in XLS format was then exported to Stata 14 software for cleaning and statistical analysis.

Data were summarized using descriptive statistics in the form of tables and graphs. The prevalence of undiagnosed hypertension was determined from average blood pressure results for at least three readings taken in intervals of three minutes.

In bivariable analysis, binary logistic regression was employed to establish factors associated with undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council. In bivariable analysis, binary logistic regression was employed to establish factors associated with undiagnosed hypertension at a 95% confidence interval (CI), and a p-value of 0.05 was considered significant. Multivariable logistic regression was used to adjust for confounders.

Qualitative data

Qualitative data were analyzed thematically using Atlas.ti7 software. The transcripts were sorted and checked for spelling, consistency, and incompleteness. The transcripts were read and reread to familiarize with the qualitative data. The transcripts were coded using initial codes. Duplicated codes were merged, and redundant codes were deleted during analysis. At this point, all new ideas and thoughts were coded, and they were grouped to form themes. Qualitative data were presented in the form of quotes.

Ethical consideration

Ethical Clearance was obtained from the Higher Degrees Research Committee Board of Uganda Christian University and the Research and Ethics Committee of Uganda Christian University. Administrative clearance was also obtained from the health department of Buikwe district prior to the study. Informed consent was sought from each study participant before participation in the study, and no participant was coerced into participating in the study. The anonymity and privacy of the study participants was ensured by assigning a unique code to the participant instead of using their names and titles but also, were ensured by assigning a unique code to the participant instead of using their names and titles, and the interviews were conducted in areas that ensure audio privacy.

Quality control

Research assistants were trained on study objectives, tools, and data collection methods before data collection. Additionally, routine supervision of research assistants was conducted to ensure that quality data was collected. The research assistants were also trained in research ethics, which contributed to the quality of the collected data. A pretest of the questionnaire was carried out before the actual data collection to ensure high quality data for this research.

Quantitative data was collected electronically using KoBo data collection software, which allowed data consistency checks and skips to be incorporated into the questionnaire, ensuring data consistency, accuracy, and completeness. The collected data was uploaded to the central data server daily using Android devices that were used by the research assistants for the safe custody of the collected data.

Study limitations

The study was affected by recall bias where some participants had difficulty remembering their medical history and the level of physical activity. However, this was mitigated by directly measuring their blood pressure, but also probing them further so that they could remember.

Dissemination

This data was disseminated to;

1. Health Department, Buikwe district
2. Department of Public Health, Uganda Christian University, College of Medicine.
3. Uganda Christian University Library.
4. The results will be shared with the scientific community by publishing in journals

4 CHAPTER: FOUR RESULTS

4.1 Socio-demographic characteristics

Out of the targeted 313, a total of 307 study participants responded to the questionnaire, translating into a 98.08% response rate. 6 participants declined to participate because of lack of interest in the study and also failure to give the questionnaire time for response. Table 1 below shows that 69.06% (n=307) of the study participants were females and 35.18% (n=307) were aged 20-34 years, with a mean age of 40.69, and a standard deviation of 10.83. About 36.48% (n=307) of the study participants had attained the primary level of education, and 49.19% (n=307) reported business as their main occupation.

Table 1: Socio-demographic characteristics

Variable	Frequency (n=307)	Percentage
Gender		
Male	95	30.94
Female	212	69.06
Age group (mean age=40.69, SD=10.83)		
25-34	108	35.18
35-44	94	30.62
>44	105	34.20
Marital status		
Unmarried	61	19.87
Married	194	63.19
Widowed	21	6.84
Separated	31	10.10
Education level		
No formal education	66	21.50
Primary	112	36.48
Secondary	92	29.97
Tertiary	37	12.05
Occupation		
Unemployed	49	15.96
Peasant	41	13.36
Business	151	49.19
Labourer	20	6.51
civil servant	46	14.98
Monthly income		
<100000	106	34.53

Variable	Frequency (n=307)	Percentage
100000-200000	102	33.22
>2000000	99	32.25

4.2 Health-related factors

Table 2 below shows that 42.675% (n=307) of the study participants had a family history of hypertension, and only 28.34% (n=307) had ever been diagnosed with hypertension. Approximately 16.51% (n=307) of the study participants suffered from other NCDs such as diabetes, heart disease, and cancer, while 58.96% (n=307) were aware that salt increases the risk of hypertension.

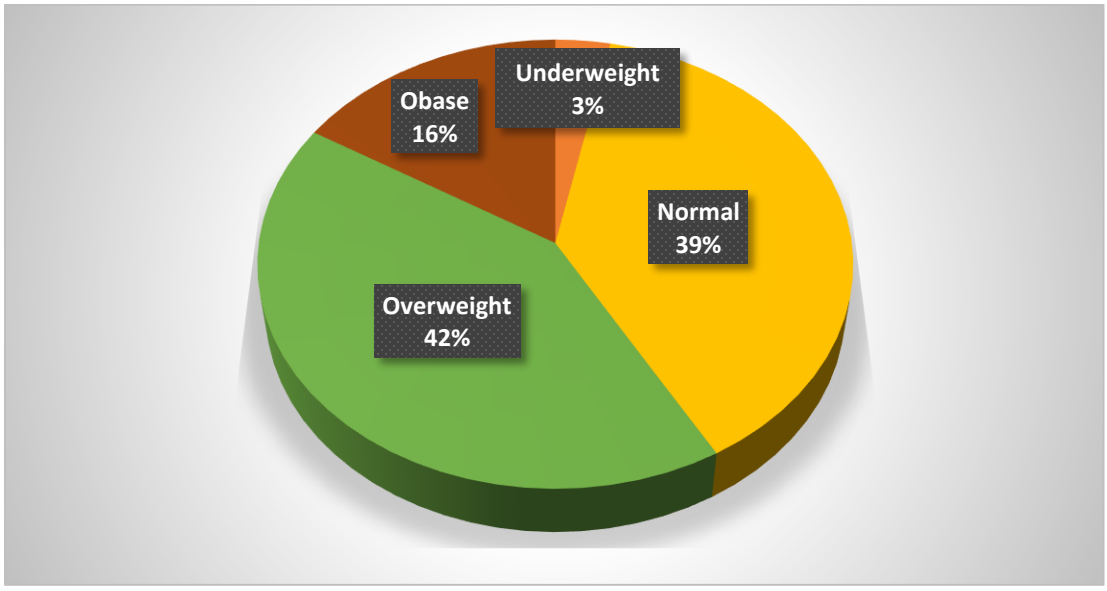
Table 2: Health-related factors

Variable	Frequency (n=307)	Percentage
Family history of hypertension		
No	121	39.41
Yes	131	42.67
Don't know	55	17.92
Ever been diagnosed with hypertension		
No	220	71.66
Yes	87	28.34
Having others NCDS		
No	237	77.20
Yes	50	16.29
Don't know	20	6.51
Other NCDs (N=50)		
Cancer	13	26.00
Diabetes	33	66.00
Heart disease	2	4.00
Lung disease	1	2.00
Nervous issues	1	2.00
Aware of salt increasing the risk of hypertension		
No	39	12.70
Yes	181	58.96
Don't know	87	28.34
Facility distance		
<2km	231	75.24
=>2km	76	24.76
Health facility visiting frequency for general check ups		

Variable	Frequency (n=307)	Percentage
Never	160	52.12
Rarely	56	18.24
Occasionally	59	19.22
Regularly	32	10.42
Place for hypertension checkup		
Don't know	3	0.98
Health facility	304	99.02
Health facility visit frequency when feeling unwell		
Never	18	5.86
Rarely	53	17.26
Occasionally	219	71.34
Regularly	17	5.54

Figure 2 below shows the Body Mass Index that was calculated from the anthropometric measurements (weight and height). Out of 307 participants, 42% were overweight, while 16% were obese.

Figure 2: Body mass index of the study participants:



4.3 Lifestyle factors

Table 3 below shows that approximately 36.16% (n = 307) of the study participants occasionally engaged in physical exercise, and only 1.95% (n = 307) smoked tobacco. Only 18.24% (n=307) of the study participants consumed alcohol, and 59.76% (n=307) consumed milk occasionally.

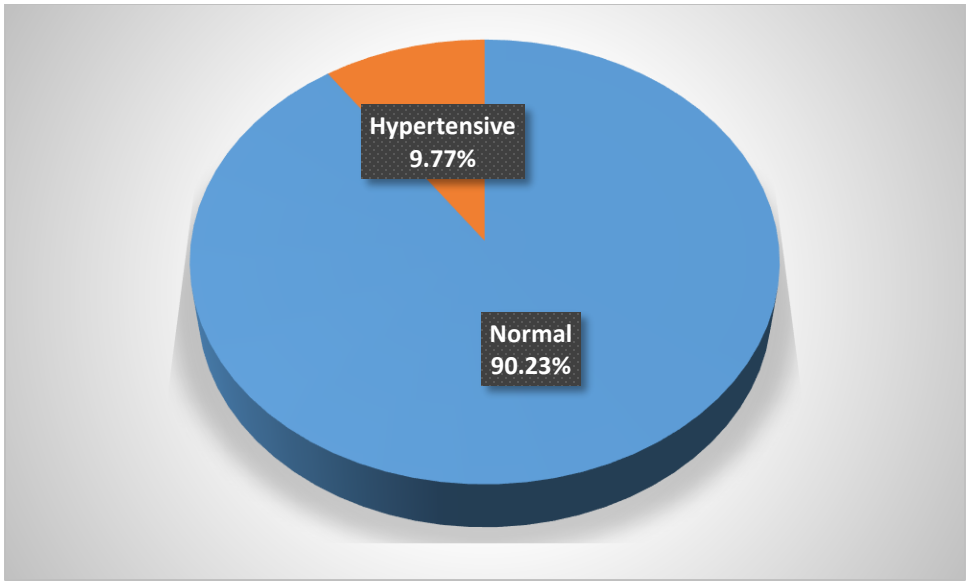
Table 3: Lifestyle factors

Variable	Frequency (n=307)	Percentage
Physical exercise frequency		
Never	74	24.10
Rarely	44	14.33
Occasionally	111	36.16
Regularly	78	25.41
Participants smoke tobacco		
No	301	98.05
Yes	6	1.95
Smoking frequency (N=6)		
Daily	3	50.00
once a week	2	33.33
less than once a week	1	16.67
Alcohol consumption		
No	251	81.76
Yes	56	18.24
Alcohol consumption frequency		
Daily	2	3.57
once a week	44	78.57
less than once a week	10	17.86
Milk consumption		
Never	4	1.63
Rarely	11	4.47
Occasionally	147	59.76
Regularly	84	34.15
Experiences stress		
No	142	46.25
Yes	165	53.75

4.4 Prevalence of undiagnosed hypertension

Figure 3 below shows that the prevalence of undiagnosed hypertension was at 9.77% (n=307).

Figure 3: Prevalence of undiagnosed prevalence



4.5 Factors associated with hypertension at bivariate analysis

4.5.1 Socio-demographic factors

Table 4 below shows that the participants' gender and age group were significantly associated with undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council at a 95% confidence interval.

Table 4: Socio-demographic factors associated with undiagnosed hypertension at bivariate analysis

Factor	Undiagnosed hypertension				COR at (95%)	P-values
	Normal		Hypertensive			
	Freq	%	Freq	%		
Gender						
Male	80	28.88	15	50.00		
Female	197	71.12	15	50.00	0.41 (0.19-0.87)	**0.020***
Age group						

Factor	Undiagnosed hypertension				COR at (95%)	P-values
	Normal		Hypertensive			
	Freq	%	Freq	%		
25-34	101	36.46	7	23.33		
35-44	88	31.77	6	20.00	0.98 (0.32-3.04)	0.977
>44	88	31.77	17	56.67	2.79 (1.10-7.03)	**0.030***
Marital status						
Unmarried	57	20.58	4	13.33		
Married	173	62.45	21	70.00	1.73 (0.57-5.25)	0.333
Widowed	18	6.50	3	10.00	2.38 (0.49-7.62)	0.286
Separated	29	10.47	2	6.67	0.98 (0.17-5.68)	0.985
Education level						
No formal education						
Primary	102	36.82	10	33.33	0.98 (0.34-2.83)	0.971
Secondary	83	29.96	9	30.00	1.08 (0.37-3.21)	0.884
Tertiary	32	11.55	5	16.67	1.46 (0.44-5.51)	0.488
Occupation						
Unemployed	47	16.97	2	6.67		
Peasant	37	13.36	4	13.33	2.54 (0.44-14.63)	0.297
Business	134	48.38	4	56.67	2.98 (0.66-13.39)	0.261
Labourer	19	6.86	1	3.33	1.24 (0.11-14.46)	0.526
civil servant	40	14.44	6	20.00	3.53 (0.67-18.45)	0.327
Monthly income						
<100000	99	35.74	7	23.33		
100000-200000	92	33.21	10	33.33	1.54 (0.56-4.21)	0.402
>2000000	86	31.05	13	43.34	2.13 (082-5.60)	0.122

4.5.2 **Health-related factors**

Table 5 below shows that BMI was significantly associated with undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council at 95% confidence interval.

Table 5: Health-related factors associated with undiagnosed hypertension

Factor	Undiagnosed hypertension				COR at (95%)	P-values
	Normal		Hypertensive			
	Freq	%	Freq	%		
Family history of hypertension						
No/don't know	157	56.68	19	63.33		
Yes	120	43.32	11	36.67	0.76 (0.35-1.65)	0.486
Having others NCDS						
No	229	82.67	28	93.33		
Yes	48	17.33	2	6.67	0.34 (0.08-1.48)	0.151
Aware that salt increases the risk of hypertension						
No	115	41.52	11	36.67		
Yes	162	58.48	19	63.33	1.22 (0.56-2.68)	0.608
Facility distance						
<2km	209	75.45	22	73.33		
=>2km	68	24.55	8	26.67	1.12 (0.48-2.63)	0.799
Health facility visiting frequency for general checkups						
Never	146	52.71	11	36.67		
Rarely	50	18.05	3	10.00	0.80 (0.21-2.97)	0.735
Occasionally	52	18.77	9	30.00	2.30 (0.90-5.86)	0.282
Regularly	29	10.47	7	23.33	3.02 (1.15-5.96)	0.431
BMI						
Underweight/normal	119	42.96	9	30.00		
Overweight	121	43.68	8	26.67	0.87 (0.34-2.34)	0.789
Obese	37	13.36	13	43.33	4.64 (1.84-6.73)	**0.001***

4.5.3 Lifestyle factors

Table 6 shows that none of the lifestyle related factors were significantly associated with undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council at 95% confidence interval.

Table 6: Lifestyle related factors associated with undiagnosed hypertension

Factor	Undiagnosed hypertension				COR at (95%)	P-values
	Normal		Hypertensive			
	Freq	%	Freq	%		
Physical exercise frequency						
Never	69	24.91	5	16.67		
Rarely	39	14.08	5	16.67	1.77 (0.48-6.49)	0.390
Occasionally	99	35.74	12	40.00	1.67 (0.56-4.96)	0.354
Regularly	70	25.27	8	26.67	1.58 (0.49-5.06)	0.444
Alcohol consumption						
No	225	81.23	26	86.67		
Yes	52	18.77	4	13.33	0.67 (0.22-1.99)	0.466
Experiences stress						
No	127	45.85	15	50.00		
Yes	150	54.15	15	50.00	0.85 (0.40-1.80)	0.665

4.6 Factors associated with the prevalence of undiagnosed hypertension at multivariate analysis

In the multivariate analysis, Gender, age group, and BMI maintained their significant association with undiagnosed hypertension after adjusting the variables using a multiple logistic regression model.

Female adults (OR=0.39(0.16-0.94), CI=95%, P=0.037) were 0.39 times less likely to have undiagnosed hypertension than the male adults at 95% confidence interval. Adults aged more than 44 years were (AOR=2.81 (1.03-7.71), CI=95%, P=0.044) were 2.81 times more likely to have undiagnosed hypertension than adults aged 25-34 years at 95% confidence interval. Lastly,

adults who were obese (AOR 4.64 (1.95-8.27), CI=95%, P=0.001) were 4.64 times more key to have undiagnosed hypertension at 95% confidence interval.

Table 7: Factors associated with the prevalence of undiagnosed hypertension at multivariate analysis

Factor	Undiagnosed hypertension				COR at (95%)	P-values
	Normal		Hypertensive			
	Freq	%	Freq	%		
Gender						
Male	80	28.88	15	50.00		
Female	197	71.12	15	50.00	0.39 (0.16-0.94)	**0.037***
Age group						
25-34	101	36.46	7	23.33		
35-44	88	31.77	6	20.00	0.97 (0.29-3.28)	0.967
>44	88	31.77	17	56.67	2.81 (1.03-7.71)	**0.044***
Monthly income						
<100000	99	35.74	7	23.33		
100000-200000	92	33.21	10	33.33	1.81 (0.58-5.65)	0.305
>2000000	86	31.05	13	43.34	2.82 (0.93-6.31)	0.068
Having others NCDS						
No	229	82.67	28	93.33		
Yes	48	17.33	2	6.67	0.81(0.07-1.59)	0.151
BMI						
Underweight/normal	119	42.96	9	30.00		
Overweight	121	43.68	8	26.67	0.81 (0.29-2.26)	0.789
Obese	37	13.36	13	5.54	4.64 (1.95-8.27)	**0.001***

4.7 Barriers to screening for hypertension among adults (25-64 years) in Lugazi Municipal Council.

We conducted 4 in-depth interviews with community members and three key informant interviews with the district health officer, a nurse, and a medical doctor in Buikwe district. Thematic analysis of the seven transcripts revealed six sub-themes, which included: cultural influence, fear of being diagnosed, high costs, inadequate medical staff, laziness, and unawareness.

Cultural influence

Cultural beliefs limited the health-seeking behavior of the community members in Lugazi Municipal Council. In some cases, affected individuals preferred traditional herbal remedies over modern treatment, even in emergencies. Epilepsy and hypertension were sometimes believed to worsen with modern medicine or to be hereditary, while others associated them with witchcraft. These beliefs delayed timely medical intervention.

"One of the children was convulsing. People said get some herbals and give this child… The parents said… we don't use modern medicines; my daughter-in-law gave birth from home… People believe that with epilepsy when you start treating it with modern medicines, it gets worse, and it's hereditary."(KII 01, female, 7 years of experience)

Fear of being diagnosed

Some adults in Lugazi Municipal Council never screened for hypertension because of Fear of knowing their health status. They perceived hypertension as a nightmare or a death sentence, which discourages people from being screened for hypertension, as the study participants narrated below.

"One time I was asking someone…, what if you have hypertension. She responded… don't talk about it… it's a nightmare to me. That means the person will not go to the health facility to do a check-up." (KII-02, male, 10 years of experience)
"People fear those machines. They hear a rumor that those machines used to test pressure are scary." (Community member, aged 42 years, 10 years of experience)

High costs

Economic barriers, particularly transport costs, limited the access of community members to health facilities. In remote villages, the cost of traveling to and from a facility could be as high as UGX 12,000, which prevents such economically constrained individuals from routinely visiting the health facilities for hypertension screening, as narrated by the study participants

"For one to come to the health facility, one would need shs 12,000 to and from. Costs and distance are barriers, but we have some challenges that come in and we can't underrate it." (KII 01, female, 7 years of experience)

Inadequate medical staff

Shortages of healthcare workers in the health facilities resulted in missed opportunities for hypertension screening during visits to these facilities. In some clinics, the number of health workers was unable to conduct hypertension screenings due to other duties, resulting in patients leaving the facility without being checked, as the study participants reported.

"At the facility, people move out without being screened for hypertension, and yet in some clinics, health workers say they are working alone and can't do all that at once." (Community member, male, 20 years of experience)

Laziness

Some participants attributed the poor health-seeking behavior of adults in Luagazi town Council to laziness, noting that individuals failed to take advantage of free services. The complacency sometimes persisted until the illness caused severe complications, as narrated below by the study participants.

"Government provided us with free health centers and still people refuse to go and test for pressure." (Community member, aged 42 years, 10 years of experience)
"I have a friend, he became blind. They tested him for pressure and discovered that pressure had made him blind." (Community member, aged 60 years, male 15 years of experience)

Unawareness

Lack of knowledge about hypertension was one of the barriers to hypertension screening among individuals in Lugazi Municipal Council. It's not until some individuals experience severe symptoms that they discover that they are hypertensive. Thus, some adults have misconceptions that link hypertension to witchcraft, which they termed as "science", further delaying the seeking of the screening services as narrated below.

"Most cases we don't know diseases we are suffering from until they start feeling unwell. That's the biggest challenge now." (Community member, male, 20 years of experience)

"Some people think that hypertension comes after someone has bewitched you." (KII-02, male, 10 years of experience)

5 CHAPTER FIVE: DISCUSSION

This study assessed the prevalence of undiagnosed hypertension and associated factors among adults aged 25-64 years in Lugazi Municipal Council. It also explored the barriers to screening for hypertension among adults (25-64 years) in Lugazi Municipal Council.

5.1 Prevalence of undiagnosed hypertension

This study revealed that the prevalence of undiagnosed hypertension was 9.77% which is lower than previous reports from studies in Northern Uganda at 16.7% (Kilama *et al*., 2023), Bangladesh (15.8%) (Hossain *et al*., 2022), Central African Republic (69.8%) (Pengpid and Peltzer, 2022), and Northwest Ethiopia (at 12.7%) (Essa *et al*., 2022). Several reasons may explain this lower prevalence. First, unlike the study in Northern Uganda that recruited participants from busy public settings such as markets (Kilama *et al*., 2023), this study was community-based, and participants were systematically sampled from households. This method captured a more general adult population rather than high-risk groups, resulting in a lower estimate. Secondly, the majority of the participants in this study were below 44 years of age (65.8%). The relatively younger age distribution of our participants may have contributed to the lower prevalence, since hypertension risk increases with age (Cheng *et al*., 2022).

Individuals who have undiagnosed hypertension stand a high risk of developing health complications such as heart disease, kidney failure, and stroke, thus increasing their risk of death (WHO, 2023a). With such an advanced health condition, the cost of treatment becomes extremely high, hence increased costs for individuals, families, and the healthcare system.

Therefore, evidence-based interventions should be implemented to minimize all health burdens.

5.2 Factors associated with the prevalence of undiagnosed hypertension

Gender, age group, and BMI were significantly associated with undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council.

This study showed that male adults were more likely to have undiagnosed hypertension compared to their female counterparts (P=0.037). This finding is in line with the previous studies conducted in Northern Uganda (Kilama *et al*., 2023), Ethiopia (Elias and Dadi, 2023, Ambaw Kassie *et al*., 2023), and the Central African Republic (Pengpid and Peltzer, 2022), which reported that men were more likely to have undiagnosed hypertension than females. This

is because males have been noted to have poor health-seeking behaviours, hence underutilising the hypertension screening services (Pengpid and Peltzer, 2022). Failure of males to regularly utilize available health services for screening increases their chances of having undiagnosed hypertension.

In this study, age was also significantly associated with undiagnosed hypertension, with adults aged over 44 years having a higher likelihood of undiagnosed hypertension than those aged 25-34 years (P=0.03). The study on undiagnosed hypertension among market salespersons in Kitgum Central Market, Northern Uganda, also reported that older age was associated with higher prevalence of undiagnosed hypertension (Kilama *et al*., 2023). This finding is also in agreement with findings reported from Nigeria (Anuli *et al*., 2024) and Ethiopia (Anuli *et al*., 2024). This is likely because the risk of hypertension inherently increases with age due to vascular changes that occur with aging (Cheng *et al*., 2022). In addition, older adults tend to focus on socioeconomic activities, which makes them less likely to seek health services consistently.

In this study, obesity was significantly associated with undiagnosed hypertension, with obese adults being more likely to have undiagnosed hypertension compared to those with normal BMI (P<0.001). This is also similar to the findings from the NCD risk factor survey which also found higher BMI as a factor associated with hypertension (Guwatudde *et al.*, 2015). This finding also concurs with studies done in Ethiopia (Suliman *et al*., 2023, Gelassa *et al*., 2022) and India (Sahadevan *et al*., 2023), where individuals with higher BMI had a higher risk of having undiagnosed hypertension. It is evident that being overweight increases blood pressure among individuals due to interconnected mechanisms leading to hypertension and other conditions, such as diabetes (da Silva *et al*., 2009). Therefore, with inconsistent screening of hypertension, overweight individuals are most likely to develop hypertension but remain unaware. Barriers to screening for hypertension among adults (25-64 years) in Lugazi Municipal Council.

Barriers to screening for hypertension

In this study, several barriers have been identified that hinder the screening of hypertension in the Lugazi Municipal Council. These include: cultural influence, fear of being diagnosed, high costs, inadequate medical staff, laziness, and unawareness. Most of these barriers have also been reported in previous studies as major obstacles to hypertension screening uptake. A previous

study in rural Uganda revealed that cultural beliefs and fear of diagnosis were barriers to hypertension screening uptake (Musinguzi *et al*., 2018). Additionally, a study in Nigeria revealed that high screening-associated costs and limited access to healthcare professionals hindered the uptake of hypertension screening services (Adeloye *et al*., 2015). A study in Ethiopia noted inadequate healthcare infrastructure and limited health worker training as barriers to uptake of hypertension screening services (Abaynew and Hussien, 2021).

Although multiple barriers were identified in this study, the overall prevalence of undiagnosed hypertension remained lower than anticipated. This apparent paradox may be explained by several factors. First, the majority of participants in this study resided within 2 km of a health facility, reducing access-related challenges. Secondly, while barriers do exist, they may primarily affect a small subset of individuals, whereas a growing proportion of adults have increasingly adopted preventive health behaviours, including routine check-ups. Thus, despite persistent barriers, the overall undiagnosed hypertension burden in Lugazi Municipal Council appears relatively controlled compared to other settings.

6 CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusions

The prevalence of undiagnosed hypertension among adults aged 25–64 years in Lugazi Municipal Council was lower than previous studies, but 9.77% with hypertension still remain unaware of their condition. This places them at risk of preventable complications such as stroke, heart failure, and kidney disease.

Gender, age group, and BMI were significantly associated with undiagnosed hypertension among adults aged 25-64 years in Lugazi Municipal Council.

The cultural influence, fear of being diagnosed, high costs, inadequate medical staff, laziness, and unawareness hinder the screening of hypertension among adults in the Lugazi Municipal Council.

6.2 Recommendations

The Health Department of Lugazi Municipal Council should implement mass health education programs to address knowledge gaps on the dangers of undetected hypertension in the community.

Sensitization measures on healthy lifestyle behavior should be incorporated by the district health stake holders to curb cases of undiagnosed hypertension in the study area.

Lugazi Municipal Council should address local, religious and cultural leaders to reduce myths, cultural beliefs, and fear surrounding hypertension diagnosis through community dialogue, sensitization, and health-promoting interventions.

The Lugazi Municipal Council Department of Health, with support from the facility in-charges, should implement regular community and facility-based hypertension screening programs and proper utilization of VHTs to actively target men, individuals aged over 40 years, overweight and obese individuals. This will enable early identification and treatment of individuals with hypertension before the disease advances to complicated stages.

Integration of hypertension screening into other health related programs can also help curb cases of undiagnosed hypertension in the community thus reducing its prevalence.

Facility-based barriers such as inadequate staffing require policy interventions to increase the health workforce capacity, while laziness and low motivation for screening could be mitigated by implementing peer-support systems and mobile screening initiatives.

Financial barriers, such as high costs, could be reduced through subsidies or integration of hypertension screening into free community health outreach programmes.

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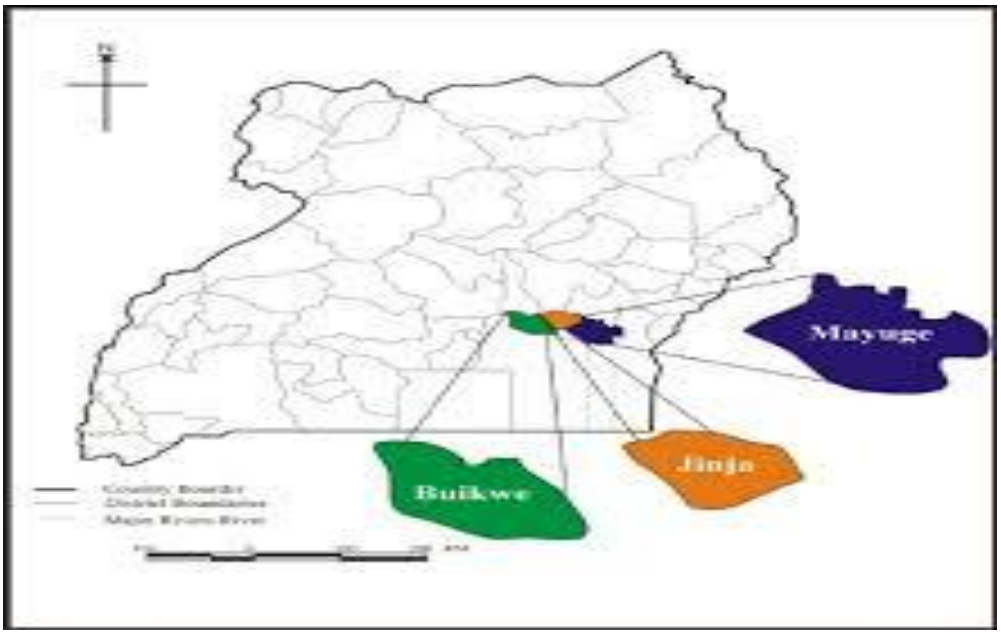
APPENDICES

Appendix I: Map of Buikwe District



Appendix II: REC Approval Letter

UGANDA CHRISTIAN UNIVERSITY
A Centre of Excellence in the Heart of Africa

Office of the Vice Chancellor
Research Ethics Committee UG-026

24th June, 2025

PEARL KYOMUHENDO,
Uganda Christian University
+256 774 608929
Email: pkyomuhendo3@gmail.com

UG-REC-026 APPROVAL NOTICE

To: Pearl Kyomuhendo, Principal Investigator

Re: UCU-REC Application titled: *Prevalence and Associated Factors of Undiagnosed Hypertension in Adults Aged 25-64 Years in Lugazi Town Council, Buikwe District*

Application Number: **UCUREC-2025-1729**
Version: 4.1

UGANDA CHRISTIAN UNIVERSITY APPROVED 24 JUN 2026 RESEARCH ETHICS COMMITTEE

Type: [ ] **INITIAL REVIEW**
[ ] Protocol Amendment
[ ] Letter of Amendment (LOA)
[ ] Continuing Review
[ ] Material Transfer Agreement
[ ] Other, Specify:

I am pleased to inform you that the **UG-REC-026;** UCUREC approved the above referenced application.

Approval of the research is for the period from **24th June, 2025,** to **24th June, 2026**
This research is considered minimal risk category.
As Principal Investigator of the research, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the research.
2. Changes, amendments, and additions to the protocol or the consent form must be submitted to the REC for re-review and approval prior to the activation of the changes. The REC application number assigned to the research should be cited in any correspondence.
3. Reports of unanticipated problems involving risks to participants or other must be submitted to the REC. New information that becomes available which could change the risk: benefit ratio must be submitted promptly for REC review.

P.O. Box 4, Mukono, Uganda, Plot 67-173, Bishop Tucker Road, Mukono Hill
Tel: +256 (0) 312 350 885 Fax: +256 (0) 4142 90 800 Email: rec@ucu.ac.ug Web: www.ucu.ac.ug
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4. Only approved consent forms are to be used in the enrollment of participants. All consent forms signed by subjects and/or witnesses should be retained on file. The REC may conduct audits of all study records, and consent documentation may be part of such audits.
5. Regulations require review of an approved study not less than once per 12-month period. **Therefore, a continuing review application must be submitted to the REC eight weeks prior to the above expiration date of 24th June, 2026 in order to continue the study beyond the approved period.** Failure to submit a continuing review application in a timely fashion may result in suspension or termination of the study, at which point new participants may not be enrolled and currently enrolled participants must be taken off the study.
6. The REC application number assigned to the research should be cited in any correspondence with the REC of record.
7. Your research details have been shared with the Executive secretary of Uganda National Council for Science and Technology (UNCST) and you are **not** required to get clearance since you are a Master's Degree research. Refer to UNCST Research registration and clearance Policy and guidelines (July 2016) in Uganda section 6(e).

The following is the list of all documents approved in this application by **UG-REC _026:**

	Document Title	Language	Version	Version Date
1.	Protocol	English	1.0	2025-05-30
2.	Questionnaire	English	1.0	2025-05-30
3.	Informed consent form	English	1.0	2025-05-30

Signed and Stamped

Prof. Peter Waiswa.
UCUREC Chairperson,
pwaiswa@musph.ac.ug

UGANDA CHRISTIAN UNIVERSITY APPROVED 24 JUN 2026 RESEARCH ETHICS COMMITTEE

Research and Ethics
P.O. Box 4, Mukono, Uganda, Plot 67-173, Bishop Tucker Road, Mukono Hill
Tel: +256 (0) 312 350 885 Fax: +256 (0) 4142 90 800 Email: rec@ucu.ac.ug Web: www.ucu.ac.ug
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Appendix III: Informed Consent Form

Prevalence and associated factors of undiagnosed hypertension in adults (25-64 years) in Lugazi Municipal Council, Buikwe district.

Introduction:

You are being asked to take part in this research study. You have been selected to participate. Research studies are voluntary and include only people who choose to take part. Please read this consent form carefully and take your time making your decision. As your study staff discusses this consent form with you, please ask him/her to explain any words or information that you do not clearly understand.

Why is this study being done?

The purpose of this study is to examine prevalence and associated factors of undiagnosed hypertension in adults (25-64years) in Lugazi Municipal Council, Buikwe district. The findings will help in understanding the disease burden in the study area hence crucial for designing targeted interventions and improving detection and management of hypertension in this age group.

How many people will take part in this study?

Approximately 313 participants will take part in this study throughout the selected study area of Lugazi Municipal Council.

Procedures:

If you agree to participate in this study, you will be asked to sign and date this consent form and then;

- Provide information about your medical history, lifestyle, and current state of hypertension.
- Answer a series of questions related to factors that may contribute to hypertension.
- Allow the researcher to screen you for hypertension.

Duration:

Participation in this study will involve approximately 20minutes for the interview and any follow-up visits or data collection.

What are the risks of this study?

There are minimal risks associated with participating in this study. There is, however, the potential risk of loss of confidentiality. Every effort will be made to keep your information confidential. Some of the questions we will ask you as part of this study may make you feel uncomfortable. You may refuse to answer any of the questions and may take a break at any time during the study. You may stop your participation in this study at any time.

Are there benefits to taking part in this study?

Your participation may contribute to a better understanding of undiagnosed hypertension, which could lead to improved management and care for other undiagnosed adults. For those participants with elevated blood pressure, we will discuss appropriate management and link you to care for proper treatment.

Will my information be kept confidential?

All information collected during the study will be kept confidential and stored securely. Your identity will not be disclosed in any reports or publications resulting from this study.

Voluntary Participation:

Participation in this study is entirely voluntary.

What are the costs to you?

Your participation in this study will not cost you anything.

What about your compensation?

Participation in this research study is completely voluntary and there is no compensation.

Whom do I call if I have questions or problems?

For questions about the study or a research-related injury, or if you have problems, concerns, questions or suggestions about the research, contact the Principal Investigator Pearl Kyomuhendo (+256-774608929) pkyomuhendo3@gmail.com.

Statement of Consent:

"The purpose of this study, procedures to be followed, risks and benefits have been explained to me. I have been allowed to ask questions, and my questions have been answered to my satisfaction. I have been told whom to contact if I have questions, to discuss problems, concerns, or suggestions related to the research, or to obtain information or offer input about the research. I have read this consent form and agree to be in this study, with the understanding that I may withdraw at any time. I have been told that I will be given a signed and dated copy of this consent form."

Participant's Name (Print): _____

Participant's Signature: _____Date: _____

Investigator's Name (Print): _____

Investigator's Signature: _____Date: _____

Appendix IV: Questionnaire

Section A: Participant bio data

Participant ID

Has the respondent consented to participate in the study?

a) Yes
b) No

If no end the interview here.

Section B: Background information

What is your gender?

a) Male
b) Female

What is your age?

What is your marital status?

a) Unmarried
b) Married
c) Widowed
d) Separated

What is your highest level of education?

a) Primary
b) Secondary
c) Tertiary

What is your main occupation?

a) Unemployed
b) Peasant
c) Business

d) Casual labourer
e) Civil servant

What is your monthly earning?

Do you have a family history of hypertension?

---

a) No
b) Yes
c) Don't know

Do you have any other non-communicable disease apart from hypertension?

a) Yes
b) No

***If yes, please specify**

Do you think that consuming a lot of salt increases the risk of being hypertensive?

a) No
b) Yes

How far (in km) is the health facility from your place of residence?

How often do you visit the health facility for general health check ups?

a) Regularly (once in a month)
b) Occasionally (once in two months)
c) Rarely (once a year)
d) Never (0 times a year)

Where can your blood pressure be measured?

a) Don't know

b) Health facility

How often do you visit the health facility when you feel unwell?

a) Never
b) Sometimes
c) Always

Section C: Lifestyle

How often do you go for physical exercise?

a) Regularly (once in a month)
b) Occasionally (once in two months)
c) Rarely (once a year)
d) Never (0 times a year)

Do you smoke cigarettes/ tobacco?

a) No
b) Yes

If yes, how often do you smoke?

a) Daily
b) Once a week
c) Less than once a wee
d) More than two times a week

Do you consume any alcohol?

a) No
b) Yes

If yes, how often do you consume alcohol?

a) Daily
b) Once a week
c) Less than once a week
d) More than two times a week

Are you currently stressed?

a) No
b) Yes

Section D: Prevalence of undiagnosed hypertension.

Have you ever been diagnosed with hypertension by a health professional?

a) No
b) Yes

I would like to measure your blood pressure when are you are quietand relaxed and we shall take it three times, 3 minutes apart.

First reading

Systolic pressure in mm/hg

Diastolic pressure in mm/hg

Pulse rate per minute

Second reading

Systolic pressure in mm/Hg

Diastolic pressure in mm/Hg

Pulse rate in b/m

Third reading

Systolic pressure mm/Hg

Diastolic pressure mm/Hg

Pulse rate b/m

Anthropometric measurements

Weight in Kgs

Height in Meters

Thank you for your time.

Appendix V: KII Guide

Section A: General Background

Participants ID_____eg KII-01

Age: _____

Gender: _____

Occupation: _____

Educational level: _____

How long have you worked in this role or in the Lugazi Town Council area? _____

Section B: Understanding the Burden of Undiagnosed Hypertension (Objective 1)

1. From your experience, how common is high blood pressure among adults in this area?
2. What is your opinion on the number of people who may be living with high blood pressure but are unaware of it?
3. How do you identify or suspect cases of undiagnosed hypertension in the community or facility?

Section C: Barriers to Hypertension Screening (Objective 3)

1. What are some of the main challenges people face in accessing hypertension screening services?
2. Are there logistical or systemic barriers (e.g., cost, distance, equipment availability) that limit blood pressure screening in your setting?
3. How do health-seeking behaviors affect early detection of hypertension?