BARRIERS TO ACCESSING HEALTH SERVICES AMONG UGANDAN HOUSEHOLDS

ELVIS KISA

M23B34/011

A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR OF SCIENCE IN ECONOMICS AND STATISTICS UGANDA CHRISTIAN UNIVERSITY

April, 2026

UGANDA CHRISTIAN UNIVERSITY

A Centre of Excellence in the Heart of Africa

DECLARATION

I, Kisa Elvis declares that this dissertation with the title *"Barriers to Accessing Health Services among Ugandan Households"* is my own original work and has not been presented to any other university or institution for the award of any academic qualification and All the sources used have been fully acknowledged.

Signature:.....**Date:**14 April 2026

Kisa Elvis

APPROVAL

This dissertation titled "Barriers to Accessing Health Services Among Ugandan Households" has been submitted for examination with the approval of my supervisor.

Signature:..... Date: Tue, 14 Apr 2026

Simon Peter Mukisa

DEDICATION

This dissertation is dedicated to my family who have been of constant support, dedication and encouragement for me to get through this dissertation. I am really thankful to all of the sacrifices, all those words of faith, to all of those moments of patience, which enabled me to continue and complete this piece of work.

AKNOWLEDGEMENT

I would like to express my sincere gratitude to God Almighty for the gift of life, wisdom, and for the Strength throughout my studies. I am deeply grateful to my supervisor Mr. Simon Peter Mukisa for the guidance, constructive motivation, and academic support offered during the entire research process.

I also extend my appreciation to the lecturers of the School of Business at Uganda Christian University for the knowledge and skills imparted to me. Special thanks go to my family , My mum Ayikoru Jane Rachael and friends for their moral, financial, and emotional support. Finally, I acknowledge the Uganda Bureau of Statistics and other institutions whose data and publications made this study possible.

Table of Contents

ABSTRACT

Health services are one of the key aspects of human welfare and socio-economic development. Although the Ugandan government has been agitating to promote free primary care, it appears that many families still find it hard to access the required care. In this paper, the researcher examines economic, geographic, cultural and system level challenges that prevent Ugandan households to resort to formal health services.

The research adheres to a quantitative cross-sectional study design that retrieved secondary data (UNHS,2024) of Uganda. We then proceed to run descriptive statistics and binary logistic regression to understand what actually drives the ability of households to access health services. The findings indicate that the largest factor is whether a household is well at the family level and the location where they reside. As it happens, poor families and those who are in rural locations are most affected.

In brief, the greatest impediments to healthcare in Uganda are still money issues and geographic isolation. The article recommends improving financial protection strategies, bridging the rural-urban gap in healthcare delivery, and increasing the services provided and their quality, particularly to under-served areas. All this provides some helpful ideas that can be advocated by policymakers to advance fairer access to healthcare and to achieve the goals of Universal Health Coverage in Uganda.

CHAPTER ONE
INTRODUCTION

1.0. INTRODUCTION

This study shows the background of the study, the statement of the problem, general objective, specific objectives, scope of the study, significance of the study, justication of the study and conceptual framework.

1.1 **Background to the Study**

Getting good health services is like a human right, and I would consider it an enormous contributor to societal and economic development. Across the globe, equitable access to healthcare has remained a policy thorn in the flesh particularly in the low- and middle-income nations where much of the structural, economic and social barriers slow down the people. Universal Health Coverage (UHC) is the number one priority of the WHO; the concept implies that health care is necessary to everyone and the person should not be concerned with funding (WHO, 2021).

The health sector is divided into a decentralised structure of the health system, with public, private not-for-profit and private-profitable providers working in Uganda. The government has introduced some reforms over the years such as the elimination of user charges at government facilities, more funding towards health facilities and personnel. Nevertheless, I can observe much disparity in the provision of care to people of various regions and groups (UBOS, 2021).

Uganda continues to grapple with numerous communicable diseases, malaria, HIV/AIDS, tuberculosis and an increase in non-communicable diseases. The increasing number of people, poverty, and geographical disparities put additional strain on the system. Household survey reports reveal that the greatest obstacles that rural families, poor, and those with limited school education experience in accessing healthcare are the largest (UBOS, 2020).

Once you reduce it to the household level, it depends on a series of things whether individuals can be able to receive the services they require. The finances of households, distance, poor road and transport infrastructure, culture, gender roles and norms, wait times, shortages of medicines, and an overall ill attitude towards quality of care are some of the factors that influence care-seeking in Ugandan households (UBOS, 2021; MoH, 2022). Although the free provision of facilities is in theory, the poor continue to be unable to use the facilities because

of indirect costs, such as transport, purchasing of the medicine in the private pharmacies or informal contributions (WHO, 2021).

In my case therefore, the real issues of the barriers that are experienced by Ugandan households, in their endeavors to access health services, are important to designing improved policies that can enhance equity, efficiency and the overall performance of the system. This is why this paper is excavating between the household-level and system-level factors that affect healthcare access in Uganda.

1.2 **Problem Statement**

All households in Uganda would have access to the best health services cheaply and readily and acceptably at any time that they require them, regardless of their income or where they reside. This is directly on the Universal Health Coverage (UHC) agenda, we should be able to offer the necessary care without poking holes in the peoples pockets (WHO, 2021). At the national level, the health policy of Uganda is aimed at creating a level playing field by providing free primary care, decentralizing its services, and investing more in the infrastructure and workforce (MoH, 2021). In case it all does, avoidable diseases and deaths would reduce significantly, enhancing productivity, well-being, and general development (World Bank, 2021). In Uganda, even with the discussion about the policy, a good proportion of the households do not receive timely health services during sickness. The survey statistics are always high on the issue of missing formal health facilities by sick people based on cost, distance, low quality, and systemic deficiencies (UBOS, 2021). This is even greater among the rural families, poor, women, children and the elderly. They also tend to postpone treatment and resort to self-treatment or natural remedies, and at other times abandon the idea of seeking treatment altogether. Such obstacles maintain low health outcomes and delay Uganda on its way to UHC (WHO, 2021).The studies inform that barriers to access in Uganda are complex. People continue to pay huge amounts out-of-pocket because of the transport, medicines, diagnostics, and informal payments even after reducing user fees (UBOS, 2020; WHO, 2021). Rural households were the most affected by geographical obstacles such as distance, poor roads, and they deter care-seeking (UBOS, 2019; MoH, 2022). Decisions to seek help or not and when are also influenced by socio-cultural influences including gender norms, education, cultural beliefs and perceptions of quality of service (Nabyonga-Orem et al., 2019; Kabagenyi and Rutaremwa, 2020). The lack of drugs in the stock, understaffing, the long wait and the hostile attitude of the employees only contribute to the lack of trust and the decrease in utilisation (MoH, 2022; WHO, 2022).The government of Uganda has implemented a number of reforms to increase access: it has eliminated user fees,

decentralized services, increased lower-level centres, hired health workers, and increased budgetary allocations to health (MoH, 2021). The community health worker programmes, outreach services, donor-funded infrastructure, and disease-specific maternal health, HIV/AIDS, malaria, and child health disease-specific initiatives have been supported by external partners and NGOs (WHO, 2021). Although these measures have helped in equity in certain places, they have not fully ironed out the inequality differences at the household level.Though numerous studies find specific barriers, there is an actual gap of research that examines how the financial, geographical, socio-cultural, and system barriers interact at the household level to influence the decisions on access. The majority of the literature adheres to usage trends or single factors and not a comprehensive view based on national household data (UBOS, 2021). The lack of this gap implies that policymakers find it challenging to develop costly interventions with full targets; partial evidences may also result in partial or ineffective interventions that do not deal with all the challenges faced by households. In order to address the systematic inequalities, we must have a comprehensive household-based analysis that identifies and prioritizes the key obstacles and explicitly addresses the interaction of economic capacity, physical access, socio-cultural dynamics, and health system characteristics. Andersen Behavioral Model of Health Services Use makes us remember that access is not a one-factor phenomenon but a combination of predisposing, enabling, and system conditions at home (Andersen, 2014). As national and international results affirm, single-factor analyses are not accurate enough in acting as policy. Even household surveys conducted in Uganda demonstrate that financial constraints, distance, and quality concerns are usually interdependent and exacerbate one another, particularly in rural and low-income households (UBOS, 2021; MoH, 2022). WHO emphasizes that the advance towards UHC would depend on the comprehension of how domestic vulnerabilities are incompatible with the failures of the system to form access (WHO, 2021). In my opinion, high-quality, nationally representative household statistics are absolutely required to create policies that are based on equity, increase financial security (insurance and transport subsidies), enhance the provision of services to rural populations, and generally make the work of the system more productive (World Bank, 2021; WHO, 2022). In the absence of such an evidence, I am certain that any interventions would become misguided and would never lead to a reduction of disparities. This paper will help to address that gap in critical knowledge by studying the barriers to health service access among the Ugandan households based on recent, nationally representative survey data. The research provides policy-implications of the synthesis of economic, geographical, socio-cultural, and of health system factors to aid equitable access and Universal Health Coverage to individuals in Uganda, which will further support the push towards equitable access and Universal Health Coverage (UBOS, 2021; WHO, 2021).

1.3 Objectives of the Study

1.3.1 General Objective

The objective of this study is to investigate the obstacles to Ugandan households in the attempt to obtain health services.

1.3.2 Specific Objectives

1. To investigate the barriers to households accessing health care in Uganda related to money.

2. To evaluate the prevention of households accessing health facilities due to barriers that are connected with the location and physical access.

3. To examine socio-cultural and system based constraints that determine the manner in which individuals in Uganda access health care.

1.4 Research Questions

1. Which economic variables reduce access to health by a household in Uganda?

2. What are the impacts of the geography and physical access on the utilization of health services among households in Uganda?

3. Which socio-cultural and health-system influences household health-seeking behavior in Uganda?

1.5 Scope of the Study

The research is well limited to make it understandable, empirically relevant, and valuable in policy making by focusing on household-level obstacles to access to healthcare services in Uganda in a clear context and time context. It is concerned with the limitation that restricts the households to obtain and use formal healthcare especially financial barriers such as low welfare status, out of pocket spending, and transport costs; spatial issues like distance to health facilities and access to transport; socio-cultural and health system barriers such as gender norms, cultural beliefs, perceived quality of care, drug availability and attitudes of healthcare workers. The analysis with the help of Uganda National Household Survey (UNHS,2024) will include differences in access between various population groups and situations, which can mirror disparities related to location, infrastructure, and socio-economic status. The paper also relies on the recent secondary sources and literature of around the last

ten years, and it is made sure that the analysis is based on the current trends of the health sector, such as current changes, decentralization, and the attempt to make health coverage universal. This narrow, but broad-based scope offers the study contextually-based information on the existing barriers to accessing healthcare, but it also does not lose relevance to the current policy priorities in Uganda.

1.6 **Significance of the Study**

The conclusions will guide policymakers and the ministry of health on the need areas to concentrate on enhancing access to health especially among vulnerable families.

The research extends existing literature by putting the Andersen model into the Ugandan context using household-level data, which adds value to the empirical field of health economics and research in health care.

The findings can be used by development partners, NGOs and local governments to develop specific interventions like mobile clinics, transport subsidies, and community sensitisation programmes.

By understanding access barriers better, better access to healthcare can be equitable, preventable morbidity and mortality lowered, and better population health will be achieved.

1.7 Justification of the Study

Although the government has made efforts to offer free primary healthcare in Uganda, there has been an enormous disparity in access of health services especially by rural, poor and marginalised households. UBOS and the Ministry of Health show that there are still difficulties associated with distance, cost, drug stock-outs, and socio-cultural barriers (UBOS, 2022; MoH, 2021).

The present study is warranted due to the following reasons:

i) Current literature is usually directed towards service accessibility instead of domestic-level impediments.

ii) It has a low amount of empirical research, based on nationally representative household data, to examine access barriers.

iii) Household specific constraints should be understood to design effective and fair health policies.

Thus, the paper presents evidence-based knowledge on the multi-dimensional barriers to healthcare access in Uganda.

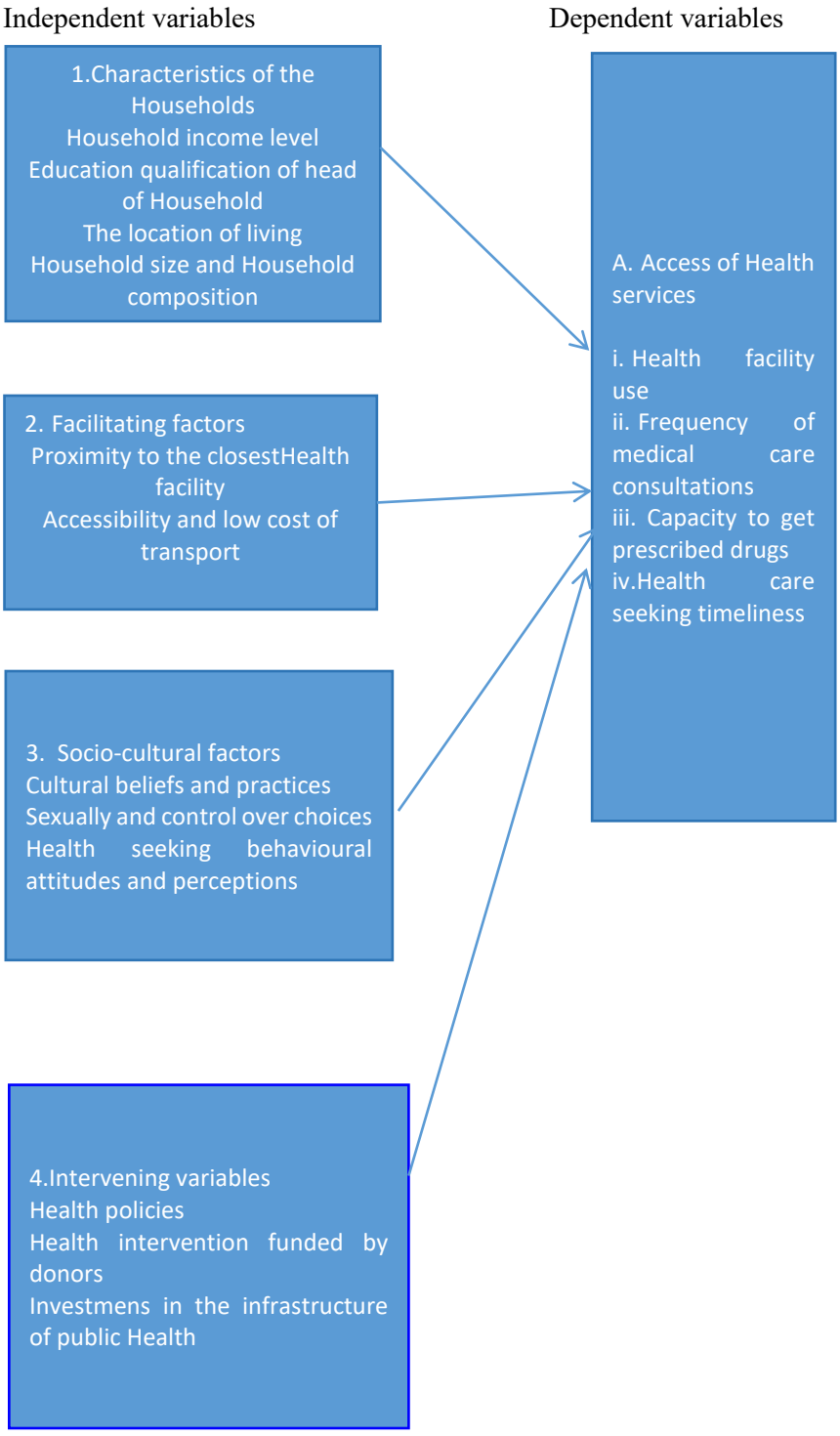
1.8 Conceptual Framework

General Remarks on the Conceptual Framework.

The theoretical basis of this study is the healthcare access and utilization theory, specifically, the Andersen Behavioral Model of Health Services Use that states that predisposing, enabling, and need-related factors affect access to health services. The socio-economic characteristics of households, the health system factors, and the socio-cultural factors interact in the Ugandan context to define household access to health services.

This analysis has considered access to health services as the dependent variable and household characteristics, enabling factors and socio cultural factors as the independent variables. The intervening variables are government policies and health sector interventions which can relieve or even increase the barriers that exist.

Concptual framework diagram



Conceptual Framework and Variables Definition.

This paper examines the fact that the process of obtaining health services is a combination of households, health system, and cultural stuff all combined together in a larger policy and

institutional context. We are borrowing the Andersen Behavioral Model of Health Services Use, according to which the ability of the people to obtain healthcare is determined by their predisposing characteristics, the resources that enable them to act, and the surrounding context that facilitates or inhibits them (Andersen, 2014). This is even more important in Uganda due to the consistent disparities in the economy, geographical and geographical disparities, and the capacity of the health sector (UBOS, 2022; MoH, 2021).

Dependent Variable: Access to Health Services.

In our case, the primary measure of what we are measuring is access to health services, that is, whether households can actually receive timely, affordable, acceptable, and appropriate care when they need it. It does not only concern the physical presence of hospitals, but their efficient utilization, considering affordability, quality and responsiveness (WHO, 2021).

Empirically we are using a number of indicators which reveal various usage aspects. These are the frequency of the visit to health facilities, the frequency of seeing a doctor, the ability to obtain the medications, and the promptness of individuals in seeking care. The presence of a set of indicators indicates that the access is multi-dimensional and one indicator might conceal actual issues households encounter (WHO, 2022). The statistics in Uganda indicate that the access remains extremely unequal, and rural and low-income households in the country continue to experience larger obstacles despite free access to healthcare (UBOS, 2022; MoH, 2021).

Independent Variables

Household Characteristics (Predisposing Factors)

The characteristics of households predetermine the extent to which individuals have the capacity and desire to travel to access healthcare. Household income is the large one in this case, it is the one that will indicate whether they will be able to manage all of the additional expenses, which appear in their lives, such as transport, medicines, fees, informal stuff. Poor families tend to put off or even forgo care due to a lack of time to attend to other primary needs, which only continues to keep economic disparities in care access open (World Bank, 2021).

Access is also dependent on the education level of a household head since it influences health literacy, awareness of services, and their perceptions of the benefits of professional care. The education levels tend to create an increase in the use of formal health services since it is at

higher levels when they are more aware of the symptoms and know how to do it (UBOS, 2023).

The residence is another determinant; a rural or an urban resident. Uganda rural households are more likely to travel more, to have fewer facilities and understaffed centers, and this reduces access in real terms as compared to urban dwellers (UBOS, 2022). The number of people living in a family and family composition also contribute to it, as larger families can use their budgets to the limit, which would imply less money per capita on healthcare and more attention to other pressing issues.

Facilitating Factors (Environmental Factors and Health System Factors)

These factors determine whether receiving care actually proves to be effective once one realizes that he or she needs care. Proximity of health facilities is important the bigger the distance, the greater the cost and the less timeliness the rural population uses them (MoH, 2020). Availability and affordability of transport are also enormous, and bad roads and limited access to transport only increase physical impediments.

The quality of the services themselves is also very important as it predetermines the choice whether to visit a doctor. Being equipped, adequately staffed, with working equipment, and nice employees develops trust. Poor quality of services may cause individuals to use an informal provider or self-medicate (WHO, 2022). Congestion, lengthy queues, and constant out of stock cases of various drugs in facilities drive people off of utilizing the system as frequently as possible.

Socio-Cultural Factors

The culture influences the behavior of households with regard to health. There is also the delay and/or substitution of formal care by traditions and local beliefs such as attending to traditional healers or home remedies, particularly in cases of chronic or reproductive problems.

In Uganda, gender relationships are extremely essential. Some women require a man to grant his permission or money to visit a health facility, which results in delays in treatment and reduced utilization of required services (UNFPA, 2021). The attitude of people towards seeking care, whether they believe the illness to be serious and whether they have confidence in the system also determines whether they feel that formal care is worth taking.

Intervening Variables

These are the larger policy-level forces that may alter influence of household, facilitating and socio-cultural forces on access. This encompasses government health programs such as free primary care, community health worker initiatives, new insurance concepts, donor projects and improvements on infrastructure, and community health.

When they do the job, they have the power to abolish money, location and cultural boundaries by rendering care more affordable, accessible and acceptable. However, in case they do not do it, they may not address the gaps (MoH, 2021; WHO, 2021).

Associations among the Variables.

According to the framework, the household characteristics define the tone to health-seeking, whereas facilitating considerations define whether the care is actually accessible in terms of place and the cost. The cultural influences are reflected on perceptions and standards that either reinforce or contradict those domestic and systemic barriers. Eventually, all this is a combination to determine the quality of care received by Ugandan households. These connections are either enhanced or diluted by intervening variables, which condition the ways that barriers are really enacted.

Definition of Key Terms

Access to Health Services is the degree to which households can receive quality, timely, affordable, acceptable, and appropriate care without being faced with monetary, distance, or cultural barriers.

Health Services include prevention, promotion, treatment and rehabilitation by both the public and private facilities.

Household refers to a collection of individuals that reside together and share common commodities such as food and income.

The barriers are the materials that prevent the use of the health care, they include money, distance, rules in institutions, and cultural boundaries.

Socio-Cultural Factors are the norms, beliefs, values, and social habits, which influence the way people seek health care.

Facilitating (Enabling) Factors Facilitating (Enabling) factors are resources and conditions such as transport, facility availability, and quality of service which in essence make accessing healthcare a breeze or a struggle.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter is a critical review of theoretical and empirical literature on barriers to access of health services; special focus on household-level determinants of access to health services in Uganda and other low- and middle-income countries. The review follows the structure of the study objectives and research questions, which are aimed at economic barriers, geographical and physical barriers, and socio-cultural and health system barriers to healthcare access. The chapter also reveals the main knowledge gaps by synthesising the global and national evidence, thus explaining the need of the current study (UBOS, 2021; WHO, 2021).

2.2 Theoretical Foundation: The Andersen Behavioral Model.

In this paper, health care access is analysed using the Andersen Behavioral Model of Health Services Use, which describes access in terms of predisposing, enabling, and need-related factors (Andersen, 2014). Demographic and socio-economic factors, including education and gender, are predisposing, enabling, transport, and health system availability relates to the household income, and need factors are based on perceived or actual illness (Andersen, 2014).

This framework is relevant in Uganda as it explains the reasons as to why health facilities alone do not translate to utilisation especially in places with high aspects of poverty, spatial inequality and poor health systems (Nabyonga-Orem et al., 2019). In Sub-Saharan Africa,

utilisation is mainly influenced by enabling factors; in particular, income and distance to the facilities, which explains why the Andersen model is very relevant to the household level (Kabagenyi & Rutaremwa, 2020; WHO, 2021).

2.3. Empirical Literature Review

2.3.1 Economic Obstacles to Health Services

2.3.1 Household Income and out of Pocket Expenses.

As a well-known obstacle to healthcare access in Uganda, the economic constraints have been acknowledged, even though the practices of charging users at a health facility have been officially eliminated (UBOS, 2020). Research always indicates that the less affluent households are more inclined to withhold treatment, use informal providers, or even without treatment altogether because they cannot afford direct and indirect medical expenses (WHO, 2021).

Transport expenses, test charges and purchasing of medicine during stock-outs, and informal payments continue to be major out-of-pocket expenses that are disproportionately paid by poor households (World Bank, 2021). The UBOS (2021) shows that the healthcare utilisation grows monotonically with the household wealth, which means that inequality in access exists even after policy changes.

Importantly, the vast majority of the research is individual-level utilisation, but in Uganda, it is also possible to believe that healthcare decisions are primarily made at the household level, and competing needs like food, education, and housing usually have a higher priority over expenditure on health (Nabyonga-Orem et al., 2019). This indicates the significance of household level analysis in the study of the barriers to economics.

2.3.2 Low income and financial risk insurance.

The lack of a universal health insurance plan also exerts an additional toll on the lack of financial access, subjecting households to disastrous health spending (WHO, 2021). According to the World Bank (2021), health-related shocks are a prime cause of household impoverishment in Uganda, especially regarding rural and informal-sector households.

Although certain donor-funded programmes may focus on mitigating financial accessibility, they are not sustainable due to their irregular nature and modeling, exposing a large

population segment to risk (MoH, 2022). This highlights the importance of empirical research to give guidance on equitable financial protection.

2.4 Geographical and Physical Barriers

In Uganda, the geographical accessibility is a key factor of healthcare utilisation especially to rural households which form the majority of the population (UBOS, 2021). Probability of seeking care is significantly lower due to distance to health facilities, particularly in the case of preventive and non-emergency services (UBOS, 2019).

The accessibility is further exacerbated by the lack of proper road infrastructure and the lack of transportation choices, especially when it rains, the accessibility costs and time are doubled (MoH, 2022). The empirical evidence indicates that households that are more than five kilometres away from a health establishment have a much lower chance of using formal healthcare services (Nabyonga-Orem et al., 2019).

Notably, poverty works with the geographical barriers, increasing inequalities in accessibility. The increased distance to health care in rural households is accompanied by relatively high transport costs because of lower income levels, which causes a double burden and discourages timely care-seeking (World Bank, 2021).

2.5 Socio-Cultural impediments to Healthcare Access

The socio-cultural issues are vital in determining the health-seeking behaviour in Ugandan households. The cultural attitudes and dependency on traditional medicine normally postpone or replace formal use of healthcare and especially in chronic and reproductive health (Nabyonga-Orem et al., 2019).

Access is also limited by gender norms whereby in certain families, women have no autonomy or power to decide and even have the financial autonomy to seek care (UNFPA, 2021). Kabagenyi and Rutaremwa (2020) discover that the mediating factors affecting women healthcare utilisation include household wealth and male partner approval, which underscores the combination of socio-cultural and economic impediments.

Access is also an effect of education since it affects health literacy, service awareness, and perceived illness severity. Households led by better-educated individuals have a higher

propensity to get timely and suitable care which supports education as an important predisposing variable in the Andersen framework (UBOS, 2023).

2.6 Barriers in the Health System.

The health system has weaknesses that are a great obstacle to access to healthcare services. Regular drug file-outs, staffing shortages, excessive waiting durations, and a subjective perception of low quality care demoralise the employment of public health facilities (MoH, 2022).

WHO (2022) highlights that inadequate service quality does not only impact on instant use but also influences future care-seeking attitudes and perceptions. In Uganda, households are moving towards private providers that are far away instead of the close-by public facilities, which make them more expensive and further reduce the level of financial accessibility (UBOS, 2021).

These supply-side barriers combined with demand-side barriers at the household level imply that the enhancement of accessibility may necessitate that both the supply and demand are addressed.

2.7 Facts on healthcare access in Uganda.

The evidence suggests that empirical surveys that utilize the Uganda National Household Survey and Demographic and Health Survey constantly record disparities in healthcare access based on affluence, training, geographical area, and home (UBOS, 2020; UBOS, 2021). A lot of this literature however looks at determinants individually and this limits its application in the design of policies.

Very little research incorporates economic, geographical, socio-cultural, and health system variables in one theoretical framework, especially at the family level. This disaggregation limits the comprehension of the interaction of barriers in determining access choices (Nabyonga-Orem et al., 2019).

2.8. Research Gaps

To be totally honest, though there is a plethora of researches on the topic of healthcare access in Uganda, we still lack a number of pieces. Nothing actually bores holes in all the obstacles

at the household level based on the nationally representative data. Not to mention that most of the research does not even attempt to balance which obstacle is more crucial or examine how they can accumulate.

Such a lack cripples the policymakers. When they should seek to make changes to reduce these inequities under the ground, they are kept guessing. Close the gap? It is important should Uganda intend to achieve its Universal Health Coverage (WHO, 2021) targets.

2.9 Theoretical Implication to the Current Research.

My study will be based on the current literature, adopting an integrated household position and maintaining with the Behavioral Model of Andersen. Taking a multi-pronged approach and considering economic, geographic, socio-cultural and health system barriers simultaneously, I will be addressing the research gaps directly and providing the evidence to apply to increasing the equity of access to healthcare in Uganda.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter provides the entire methodological platform under which we are examining the issue of Ugandan households not accessing medical care. It provides description and rationale to the research design, the data source, the area of the study and sample size, the sample plan, the variables and their measurement process, analytical procedures, validity and reliability checks, ethical considerations and the study constraints. All this will be based on the study objectives and questions to bring evidence-based results, which will be valuable to policy and applicable to the whole household level of health access in Uganda (Creswell and Creswell, 2018; WHO, 2021).

3.2 Research Design

Our design was a quantitative cross-sectional design since it is ideal in identifying correlation of household characteristics and the use of health services at a single time. It allows us to observe trends and inaccessibility between various socio-economic and geographic groups without having to follow them over a long period of time (Creswell and Creswell, 2018).

Cross-sectional studies are the new buzzword of health services research where you have to work with nationally representative household surveys to wring out disparities in care utilisation (UBOS, 2021; WHO, 2021). This is also a strong methodological and efficient approach since our primary goal is to enumerate and describe barriers, but not demonstrate cause and effect.

3.3 Data Source

The Uganda Bureau of Statistics conducted the Uganda National Household Survey (UNHS) that provides us with the data. The UNHS provides us with specific data about demographics, socio-economic status, disease, and health-seeking behaviour, and it is an appropriate source to excavate access blockbusters at the household level (UBOS, 2020).

The survey is conducted according to the international statistics requirements and strict data-collection methods, such as trained enumerators, validated measures, which means that its quality of data is of the highest quality and can be compared even between places and time (UBOS, 2020). It is also an authoritative source of health research regarding policy in Uganda due to its nationwide scope and consistency.

3.4 Study Area and Population

The research is conducted nationally, in all the regions of Uganda. We will target all of the households included in the UNHS dataset. The household is taken as a unit of analysis since,

in practice, health-seeking in Uganda is often collectivized and not made by individuals (Nabyonga-Orem et al., 2019).

Our particular attention is given to the members of households, who have reported sickness or injury in the course of the reference period, since they are the people who require health care. Both urban and rural households will allow us to consider spatial disparities and local variation, which are central to our research objectives (UBOS, 2021).

3.5 Sample Size and Procedure of Sampling.

The UNHS has a two-step stratified sampling that is employed in achieving national representativeness. To begin with, the Enumeration Areas are selected on the basis of probability-proportional-to-size sampling, stratified area-wise and urban-rural setting. Second, sampling of households is done randomly in each Enumeration Area (UBOS, 2020).

The sampling plan minimizes the selection bias and ensures good distribution of the socio-economic and geographic groups. A big sample increases the statistical power, which allows us to perform credible descriptive statistics and multivariate modelling of access barriers among categories of households (UBOS, 2020).

3.6 Variables and Measurement

3.6.1 Dependent Variable

The phenomenon we are examining is the attendance of a sick individual at a formal health provider; government or privately owned. We treat it as a binary variable:

1 = accessed formal healthcare

0 = did not use formal care or used informal alternatives.

This aligns with the past research on health care utilisation and puts its emphasis on actual utilisation, and not just on the availability of services (WHO, 2021; Andersen, 2014).

3.6.2 Independent Variables

The independent variables are the obstacles to health access and are selected according to our objectives, questions and the literature.

Finance barriers encompass domestic income or spending, out of pocket expenses, and transportation expenses, i.e. material that demonstrates whether a household can meet both direct and indirect health costs, despite the elimination of user fees (UBOS, 2020; World Bank, 2021).

Geographic barriers include the distance to the closest facility, travel time and urban or rural residence of the household. These indicators demonstrate locational disparities, which impact the physical accessibility, particularly among rural residents (UBOS, 2019; MoH, 2022).

Age, sex, education of the head of the household, marital status, and household size are socio-demographic variables that narrow down predisposing variables to determine the health-seeking behaviour and decision making (Andersen, 2014; UBOS, 2021).

Health system barriers encompass availability of drugs, waiting time, type of facility and perceived quality of care. These affect the level of trust placed in the health system and readiness to turn to the formal care by households (MoH, 2022; WHO, 2022).

3.7 Data Analysis Methods

We do the analysis using Stata and descriptive and inferential methods. Descriptive statistics, frequencies, percentages, cross-tabs summarise the household characteristics and bring to the fore access patterns.

Inference In order to estimate the dichotomous outcome we fit the binary logistic regression. The model approximates the likelihood of access to formal care in predicted domestic level obstacles. The findings are presented in odds ratios and it is simple to understand the strengths and direction of effects (Hosmer, Lemeshow, and Sturdivant, 2013). Significance is evaluated at pre-determined levels of confidence.

3.7.1 Model Specification

The research uses a binary logistic regression model in order to empirically investigate the determinants of access to health services among Ugandan households, as the dependent variable is a dichotomous variable (i.e. whether a household accessed formal healthcare or not).

The functional version of the model is defined as:

$$\text{Logit}(pi)=\text{In}\left(\frac{pi}{1-pi}\right)=\beta 0+\beta 1X1i+\beta 2X2i+\beta 3X3i+\ldots\ldots\ldots+\beta kXki+Ci$$

Where:

Pì=Probability that household ì accessed formal healthcare

β0= Constant term

β1……βk=Coefficients of explanatory variables

X1ì……Xkì=Independent Variables

Єì=Error term

Generalizing the model according to the research variables:

Logit(Accessì)=β0+β1Welfareì+β2Residenceì+β3Educationì+β4HH Sizeì+βn

The rationale of this specification is based on the Andersen Behavioral Model, according to which access depends on predisposing factors (demographics), enabling factors (income, location), and health system characteristics.

3.7.2 Definitions and Measures of Variables

Dependent Variable

Access to Health Services (Access)

This variable will describe the usage of formal healthcare services by a household when one of its members became ill.

This variable indicates actual access as opposed to the possible access. It contains real behavior, which is more policy-relevant. Nonetheless, it might not be sensitive enough to unmet need whereby some households might not seek care as they perceive that illness is not severe or as a result of cultural beliefs.

3.8 Validity and Reliability

The validity is enhanced by employing a nationally representative secondary data that is gathered using standardised instruments and strict procedures. UNHS sample and quality control measures guarantee the internal and external validity (UBOS, 2020).

The large sample size, uniformity in the measurement across the regions and the ability of the survey to be repeated over time provide reliability. The secondary data also reduces the bias of the interviewer and allows us to compare our findings with the previous research (WHO, 2021).

3.9 Ethical Considerations

We are working with secondary anonymised data, no personal identities. The ethical approval and informed consent was provided to us by UBOS at the time when the data was first gathered. I will adhere to the principles of ethical research during the course of the course: maintaining secrecy, handling data responsibly, and acknowledging all of my sources (UBOS, 2020).

3.10 Limitations of the Study

Although there are a lot of strengths in this study, it has several limitations. It is cross-sectional and, therefore, we cannot establish a cause and effect between barriers and healthcare access. Self-reported data may be memory biased particularly with respect to illness and health service utilization. Also, certain qualitative factors of access such as cultural perceptions and patient-doctor relationships may not be well represented in survey data. Nevertheless, the methodology provides a good outline to provide an analysis of household-level obstacles to healthcare in Uganda and generate a piece of evidence that can be used in the policy and academic discourses.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSION OF RESULTS

4.1 Introduction

This chapter provides, discusses, and analyzes the empirical results of the research on the Barriers to accessing health services among Ugandan households. This analysis is based on the information of the Uganda National Household Survey (UNHS,2024), and the final merged data is 1,576 households. This chapter directly addresses the study objectives and

research questions identified in Chapter one and adheres to the steps of analysis identified in Chapter Three.

Descriptive measures and multivariate logistic regression measures are used. The descriptive analysis generalizes characteristics of households and points out important patterns, whereas the logistic regression determines the factors which have an important impact on constrained access to health services. The analysis is informed by Behavioral Model of Health Service Utilisation by Andersen that puts emphasis on the enabling factors of income, location and household resources.

4.2 Socio-Demographic Characteristics of Households

Table 4.1: Socio-Demographic Characteristics of the Sample (n = 1,576)

Variable	Category	Frequency	Percentage (%)
Sex of household head	Male	1,091	69.2
	Female	485	30.8
Place of residence	Rural	1,002	63.6
	Urban	574	36.4
Poverty status	Poor	362	23.0
	Non-poor	1,214	77.0
Mean household size	–	4.63 persons	–

Source: UNHS (UBOS), Author's Computation

The findings show that the majority of households in Uganda are male-headed(69.2%) and are found in the rural regions. Nearly two-thirds of the sample is represented by rural households, therefore it appears that geographical obstacles are likely to be a significant issue when it comes to accessing health services. And 23% of households are poor, an indicator that demonstrates the prevalence of economic vulnerability.

A household size of about 4.63 persons indicates a dependency ratio of relatively high levels that may overburden the household resources and inhibit health seeking behaviour.

4.3 Household Welfare and Economic Capacity

Actually, one of the biggest reasons that drive people to seek health services is that of household welfare, provided that you have the money to meet the direct bill and those hidden indirect costs, which can get you treatment eventually.

Table 4.2: Household Welfare Indicators (UGX)

Indicator	Mean	Median
Household welfare	190,014	143,409

Source: UNHS (UBOS), Author's Computation

In my experience, the large difference between the mean and the median levels of welfare indicates that the disparity between households is rather steep. Few households are receiving that high-end welfare and majority of the households are languishing below average, it is the 80/20 rule at work.

This imbalance also implies that many homes are grappling with severe economic challenges in an attempt to access health services. Particularly considering the indirect costs such as travel, purchasing medicine, and such other out of pocket expenses, the barrier increases significantly, and nearly all people must follow it.

4.4 Poverty Status and Access to Health Services

Table 4.3: Poverty Status of Households

Poverty status	Frequency	Percentage (%)
Poor	362	23.0
Non-poor	1,214	77.0
Total	1,576	100

Source: UNHS (UBOS), Author's Computation

As a matter of fact, nearly a quarter of the households are living in poverty which means that a very good portion of the population is likely to struggle when seeking health services. These families that make low income struggle to meet the expenses of transportation, medicines and other medical expenses, and thus end up attending to them later or not at all. This fact strikes directly on the first objective of the study and demonstrates that money is still a big rock standing in the way to healthcare access in Uganda.

4.5 Geographical Disparities in Access to Health Services

Table 4.4: Poverty Status by Place of Residence

Poverty status	Rural	Urban
Poor	274	88
Non-poor	728	486

Source: UNHS (UBOS), Author's Computation

The results imply that rural households (274 persons) are much poorer than the urban households(with 88 persons). It means that rural families face a two-fold blow of the economic crisis and geographic barriers to accessing health services, which impact the access to health services severely. On the other hand, city families have better employment opportunities and are also nearer to health institutions.

4.6 Gender of Household Head and Access to Health Services

Table 4.5: Poverty Status by Sex of Household Head

Poverty status	Male-headed	Female-headed
Poor	247	115
Non-poor	844	370

Source: UNHS (UBOS), Author's Computation

I have observed that women headed families are poorer as compared to men headed families. This implies that women headed family set-ups tend to have greater economic challenges hence they may have difficulties accessing health services they require. The differences in income and individuals who possess access to resources are major variables that determine how individuals receive healthcare.

4.7 Multivariate Analysis: Logistic Regression Results

In order to estimate what causes people to have a difficult time accessing health services, we established a logistic regression model incorporating an indicator of limited access (poverty Poor =1) and we implemented robust standard errors.

Table 4.6: Logistic Regression Results for Constrained Access to Health Services
(Dependent variable: Poverty status; Poor = 1, Non-poor = 0)

Explanatory Variable	Odds Ratio (OR)	Robust Std. Error	z-statistic	P-value	Significance
Urban residence (1 = Urban)	25.45	12.40	6.64	0.000	Significant
Female household head (1 = Female)	0.84	0.34	-0.42	0.675	Not Significant
Household size (number)	0.99	0.06	-0.09	0.926	Not Significant
Household welfare	0.9997	0.00002	-12.99	0.000	Significant
Constant	—	—	—	—	—

Model statistics:

Number of observations = 1,576

Log pseudolikelihood = —

Source: UNHS (UBOS), Author's Computation

The regression reveals that the household welfare (P-value of 0.000) is a significant factor in regard to obtaining health services. In essence, the higher your family earns, the less likely you are to languish in poverty and that the difference is statistically significant at the 5% level ($p < 0.05$). This essentially proves the fact that money is the largest variable that enables people to seek healthcare.

The location of residence is important. It is found that urban households have rather disparate chances of being poor when compared to rural households urban dwellers are less prone to be poor, and that is where you reside is a significant component of what causes some individuals to fail to receive the care they require since $p<0.05$ and is 0.000. This actually emphasizes the need to address rural to urban disparity in healthcare access.

The **sex of the household head** and **household size** are not statistically significant since $p>0.05$ in the multivariate model, suggesting that their effects are largely mediated through household welfare and place of residence.

Overall, the regression results reinforce the descriptive findings by showing that economic and geographical factors are the dominant determinants of constrained access to health services among Ugandan households.

4.8 Discussion of Key Findings

The findings of this study demonstrate that access to health services in Uganda is strongly shaped by economic capacity and geographical location. Poverty remains the most critical barrier, while rural residence exacerbates access challenges through distance, transport costs, and limited service availability. Although gender and household size influence access at the descriptive level, their effects diminish once welfare and location are controlled for.

These results are consistent with Andersen's Behavioral Model, which emphasises enabling factors such as income and service availability as key determinants of healthcare utilisation. The findings also align with national survey evidence and previous empirical studies conducted in Uganda.

4.9 Conclusion

This chapter has presented and analysed empirical evidence on barriers to accessing health services among Ugandan households using descriptive statistics and logistic regression analysis. The results indicate that financial and geographical barriers remain dominant, with poor and rural households being disproportionately affected. Improving access to health services in Uganda therefore requires policies that enhance household economic capacity and reduce rural–urban inequalities in healthcare provision.

CHAPTER 5

5.1 Introduction

This chapter is where I compile the key findings of my research and direct them directly to the aims and questions that were stipulated in Chapter One. I summarise the findings which are supported by the statistics which we have examined in Chapter Four and propose policy

recommendations which would enable the Ugandan families to access health services better. I also note the contribution of this study towards the existing information and indicate the direction the future research might follow. The discussion demonstrates the role of household-level barriers in collaborating with larger structural and health-system problems to lead to disparities in access to care.

5.2 Summary of the Study

The primary objective of the research was to determine why Ugandan households do not have access to health services with the utilization of nationally representative data of the Uganda National Household Survey. I applied the Behavioral Model of Health Services Utilisation by Andersen to help me in the analysis since he views access to be dependent on interactions between household characteristics, resource that facilitates access, and health-system factors.

In particular, I established the following objectives: (i) to determine the financial barriers to healthcare access; (ii) to examine geographical and physical barriers; and (iii) to examine how socio-cultural and health-system influences health-seeking behaviour. I used a quantitative cross-sectional design, which involved the descriptive statistics and binary logistic regression on a sample of 1,576 households.

According to the descriptive results, the majority of the samples was rural, male-headed, and approximately a quarter of the population lived below the poverty line. The multivariate analysis also revealed that household welfare and place of residence have the largest coefficients in determining the limited access to health services with household size and sex of heads being less significant after considering economic status and location. These results demonstrate the importance of the economy and space in determining healthcare access in Uganda.

5.3 Conclusions of the Study

According to the empirical results and the research questions, the following are the major conclusions.

The greatest barrier to access to healthcare is economic barriers.

The researchers conclude that finances represent the most significant issue of the Ugandan households seeking health services. Although there is a free public healthcare policy, the poor households have to incur some large indirect expenses, such as transport, out of pocket expenses on medicines when the stocks run out, and other un-accounted costs. These economic strains predispose them less to formal care, in particular the poorest families, and perpetuate the access inequalities.

Physical and geographical accessibility has a significant impact on the pattern of utilisation.

The findings also point out that place of residence is an important factor influencing the utilization of health services. The rural households are characterized by increased travel distance, fewer transport alternatives, irregular distribution of health facilities, and postponed or deter prompt care-seeking. Not only does rural residence create physical barriers but it increases poverty which increases the disadvantage of accessing health services.

Economic and spatial indirect access is influenced by the socio-cultural and health-system factors.

Socio-cultural and health-system determinants shape the access to healthcare chiefly by strengthening the economic and geographic barriers. Household decision-making is influenced by gender norms, level of education and perception of quality of services but the impact of these factors is mostly mediated by welfare and location. Issues within the health system, including drug shortages, lengthy queues, and a perceived inferior quality of services, destroy the trust in state institutions and discourage their use disproportionately among the most vulnerable groups.

The study in general finds that structural economic deprivation and spatial inequality are the two primary factors that cause inequitable access to health services in Uganda, and it is a significant challenge to the realization of Universal Health Coverage.

5.4 Study Recommendations.

Basing on the findings and conclusions, the study proposes the following evidence-based recommendations.

5.4.1 Policy Recommendations

Enhance financial security systems.

The government needs to accelerate a nationwide health insurance program to mitigate the use of out-of-pocket payments especially among the poor and informal sector families. Meanwhile, specific subsidies of transport or voucher programmes in rural and low-income households might reduce the indirect cost of access to care.

Lessen rural-urban inequalities in healthcare delivery.

Spatial inequities should be mitigated through targeted investments in the form of upgrading of lower-level health facilities in underserved regions, recruiting and retaining health workers

in rural areas, and the constant availability of the necessary medicines. This type of investments would reduce the necessity of long-haul transportation and the timely availability of services.

Enhance accessibility (physically and transport-wise).

Infrastructure enhancement of rural roads and development of community ambulances and outreach and mobile clinics would help in decreasing physical access barriers particularly within the remote and hard to reach regions.

5.4.2 Recommendations to the Health System and Programs.

Enhance care delivery in government health institutions.

It is recommended to work on the supply chain strength to reduce drug stock-outs, staffing levels to reduce waiting times, and through ongoing professional training to improve the attitude of the providers. Household trust in the public health system is a key aspect to restore through improvement in the quality of the service.

Empower community health programmes.

Village health teams should further be empowered to offer health education, early referral, and follow up services, particularly to the rural communities. Enhanced community-based programmes can be used to fill the distance between households and formal health facilities.

Increase health education and health awareness.

The efforts towards community sensitisation must be increased to enhance health literacy, confront detrimental norms, as well as, enhance the utilisation of formal healthcare services whenever they are needed particularly preventable and treatable diseases.

5.4.3 Development Partner and Non Governmental Organization Recommendations.

This study has identified the most critical barriers, which development partners and nongovernmental organizations should align their interventions. Mobile clinics, maternal and child health outreach and specific support of economically vulnerable families should be a priority to add to the government activities.

5.5.1 Value Addition of the Study to Knowledge.

The study contributes to the current literature by offering household level empirical data on the multi-dimensional barriers to healthcare access in Uganda based on nationally representative data. The study provides a more comprehensive view of access barriers

compared to studies that focus on the barriers separately, since the authors combine economic, geographical, socio-cultural, and health-system issues in the Behavioral Model created by Andersen. The results thus contribute to the field of both scholarly discussion as well as evidence-based policymaking in the field of health economics and health systems studies.

REFERENCES

Andersen, R. M. (2014). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior, 36*(1), 1–10. https://doi.org/10.2307/2137284

Aron, J., & Muellbauer, J. (2021). The economics of mobile money: Harnessing the transformative power of technology to benefit the global poor. *Oxford Review of Economic Policy, 37*(1), 1–20. https://doi.org/10.1093/oxrep/graa034

Bank of Uganda. (2023). *Annual supervision report 2022/2023*. Bank of Uganda.

Beck, T., Pamuk, H., Ramrattan, R., & Uras, B. R. (2021). Payment instruments, finance, and development. *Journal of Development Economics, 148*, 102567. https://doi.org/10.1016/j.jdeveco.2020.102567

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank. https://doi.org/10.1596/978-1-4648-1897-4

Dupas, P., Robinson, J., Ubfal, D., & Young, J. (2021). Banking the unbanked? Evidence from three countries. *American Economic Journal: Applied Economics, 13*(2), 257–297. https://doi.org/10.1257/app.20180554

GSMA. (2024a). *State of the industry report on mobile money 2024*. GSMA.

GSMA. (2024b). *Mobile money regulatory index 2023*. GSMA.

Hosmer, D. W., Lemeshow, S., & Sturdivant, R. X. (2013). *Applied logistic regression* (3rd ed.). John Wiley & Sons.

International Monetary Fund. (2024). *Digital financial inclusion in Sub-Saharan Africa*. IMF.

Jack, W., & Suri, T. (2019). The long-run poverty and gender impacts of mobile money. *Science, 354*(6317), 1288–1292. https://doi.org/10.1126/science.aah5309

Mazer, R., & Rowan, P. (2021). Competition in digital credit markets: Borrower outcomes and regulatory responses. *CGAP Working Paper*. Consultative Group to Assist the Poor.

Ministry of Finance, Planning and Economic Development. (2023). *National financial inclusion strategy II (2023–2028)*. Government of Uganda.

Ministry of Health. (2020). *Health sector development plan II (2020/21–2024/25)*. Government of Uganda.

Ministry of Health. (2021). *Annual health sector performance report*. Government of Uganda.

Ministry of Health. (2022). *Uganda health sector strategic and investment plan*. Government of Uganda.

Nabyonga-Orem, J., Mugisha, F., Kirunga-Tashobya, C., Pariyo, G., & Ssengooba, F. (2019). Equity in health care financing in Uganda. *International Journal for Equity in Health, 18*(1), 1–12. https://doi.org/10.1186/s12939-019-0944-8

Ozili, P. K. (2023). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review, 23*(2), 329–340. https://doi.org/10.1016/j.bir.2022.05.003

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

Sen, A. (1999). *Development as freedom*. Oxford University Press.

Uganda Bureau of Statistics. (2019). *Uganda national household survey 2016/17*. UBOS.

Uganda Bureau of Statistics. (2020). *Uganda national household survey 2019/20*. UBOS.

Uganda Bureau of Statistics. (2021). *Statistical abstract 2021*. UBOS.

Uganda Bureau of Statistics. (2022). *Statistical abstract 2022*. UBOS.

Uganda Bureau of Statistics. (2023). *Statistical abstract 2023*. UBOS.

Uganda Communications Commission. (2023). *Telecommunications market performance report*. UCC.

United Nations Capital Development Fund. (2023). *Digital finance country diagnostics: Uganda*. UNCDF.

United Nations Population Fund. (2021). *State of Uganda population report*. UNFPA.

World Bank. (2022). *Financial consumer protection and digital finance*. World Bank.

World Health Organization. (2021). *Universal health coverage: Global monitoring report*. WHO.

World Health Organization. (2022). *Primary health care measurement framework and indicators*. WHO.