EXPLORING COMMUNITY KNOWLEDGE, ATTITUDES AND PERCEPTIONS TOWARDS CEREBRAL PALSY FAMILY REHABILITATIVE SERVICES IN KAWEMPE DIVISION, KAMPALA

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ABSTRACT

Background: Cerebral palsy (CP) is a leading cause of childhood disability worldwide, with a disproportionate burden in low-resource settings. In Uganda, research has largely focused on the clinical aspects of CP, with limited attention to community knowledge, perceptions, and barriers to rehabilitation, particularly in urban informal settlements. This study explored community knowledge, attitudes, perceptions, and challenges in accessing family-directed CP rehabilitation services in Kawempe Division, Kampala.

Methods: A cross-sectional mixed-methods study was conducted among 306 community members. Quantitative data were collected using structured questionnaires and analyzed descriptively and through regression modeling to determine predictors of CP knowledge. Qualitative data were generated from eight focus group discussions and five key informant interviews with community residents, caregivers, health workers, and opinion leaders. Thematic analysis was performed, and findings were triangulated to enhance interpretation.

Results: Of the 306 participants, 57% (174/306) had ever heard of CP. While 73% (223/306) recognized mobility challenges as symptoms, only 42% (128/306) correctly identified CP as a neurological condition, and none mentioned physiotherapy as part of management. Knowledge was significantly higher among older participants, those with higher education, and those who personally knew a family with a child with CP (AOR = 6.0, 95% CI: 3.6–10.0, $p < 0.001$). Community attitudes showed limited acceptance: only 44% (134/306) felt comfortable interacting with individuals with CP, and 30% (92/306) would object to their child playing with a child with CP. Stigma was reinforced by misconceptions, with 22% (67/306) perceiving CP as a curse. Despite this, 86% (263/306) recognized rehabilitation as very important, and nearly all (98%, 300/306) emphasized the need for healthcare worker training in CP care. Access to services was constrained by financial costs (73%), lack of awareness (62%), stigma (51%), and transport barriers (41%). Qualitative narratives underscored affordability struggles, reliance on traditional healers, and limited community support.

Conclusion: Awareness of cerebral palsy in Kawempe Division remains limited, with misconceptions and stigma continuing to shape community attitudes. Access to rehabilitation is further constrained by financial, informational, and service-related barriers. Strengthening community education, enhancing healthcare worker training, and expanding affordable, community-based rehabilitation services are critical to promoting inclusion and improving the quality of life for children with CP and their families in urban Uganda.

Keywords: Cerebral palsy; mixed methods; community attitudes; rehabilitation; disability inclusion; Uganda

DECLARATION

I, RUTH NAKALEMBE hereby declare that all the work in this dissertationl is original and has not been submitted for another degree in this or any other university or institution of higher learning.

Signature Date

23th Sept 2025

APPROVAL

This is to certify that this dissertation titled; “Exploring community knowledge, attitudes and perceptions towards cerebral palsy family rehabilitative services in Kawempe division, Kampala” has been done under my supervision and is now ready for submission.

Supervisor’s name:

Prof. Mupere Ezekiel (MBChB, Mmed, MS, PhD)

Signature Date 23rd Sept 2025

Dedication

This research is dedicated with deepest love and gratitude to my mother, Ezereth Kiwalabye, and my brother, Timothy Mabirizi, together with Robinah, Irene, and Dan, whose unwavering support and sacrifice made my education possible. Thank you for believing in me and for walking with me—your love, encouragement, and commitment have been my greatest pillars throughout this journey.

It is also dedicated to all caregivers and children living with cerebral palsy, whose resilience and courage continue to inspire hope and purpose in this work.

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LIST OF ABBREVIATIONS

CP - Cerebral Palsy

CHWs – Community Health Workers

CP-FRP – Cerebral Palsy Family Rehabilitative Training program

KII – Key informant interview

FGD- Focus group discussion.

SS - Social Support

CBA - Caregiver Burden Analysis

LMIC-Low and middle income countries

OPERATIONAL DEFINITIONS

Cerebral Palsy (CP): A non-progressive neurological disorder caused by damage to the developing brain during pregnancy, childbirth, or early infancy, leading to impairments in movement, posture, reflexes, and coordination.

Knowledge (about CP): The ability of respondents to correctly identify causes, symptoms, risk factors, and available rehabilitative services for CP, assessed through a structured questionnaire.

Attitudes (towards CP): Community residents' feelings, beliefs, and predispositions—either positive or negative—towards children with CP and the use of rehabilitative services.

Perceptions (about CP): Community interpretations and cultural beliefs regarding the causes, impact, and management of CP, as well as perceived effectiveness of rehabilitative services.

Family Rehabilitative Services: A package of therapeutic, medical, educational, and social interventions—including physiotherapy, occupational therapy, speech therapy, counseling, and assistive devices—aimed at supporting children with CP and their families.

Rehabilitation Services: General health system interventions designed to restore or improve functioning in individuals with illness, injury, or disability.

Family Support: Formal and informal activities and resources that enhance caregiving and family functioning.

Family Care Group: A peer-support model of 7–20 mothers trained in child health practices, who then disseminate this knowledge to neighbors.

Household: A group of family members living together and sharing meals for at least three months.

Community Residents: Individuals residing in Kawempe Division who may or may not have direct experience with CP.

Healthcare Providers: Doctors, nurses, therapists, and social workers engaged in CP diagnosis, treatment, and support.

Community Health Workers (CHWs)/Village Health Teams (VHTs): Lay health workers selected by communities and accountable to them, who provide health education, linkage, and referral.

CHAPTER ONE

1.0 Introduction

This chapter presents the background of the study, statement of the problem, research objectives, research questions, justification, significance, scope, and operational definitions. It lays the foundation for exploring community knowledge, attitudes, and perceptions (KAP) towards cerebral palsy (CP) and family rehabilitative services in Kawempe Division, Kampala.

1.1 Background to the study

Cerebral Palsy (CP) is the most common cause of childhood disability globally, affecting an estimated 17 million individuals worldwide (Oskoui et al., 2013). Its incidence is approximately 3 per 1,000 live births (Michael-Asalu et al., 2019). CP refers to a group of permanent but non-progressive neurological disorders affecting movement and posture, frequently accompanied by impairments in sensation, perception, cognition, communication, and behavior (Rosenbaum et al., 2007).

In Sub-Saharan Africa, CP prevalence is estimated at 2–3 cases per 1,000 live births (Olusanya et al., 2022). In Uganda, CP prevalence is approximately 2.9 cases per 1,000 children, with rural and peri-urban areas being disproportionately affected (Kakooza-Mwesige et al., 2017). Despite this burden, fewer than 10% of children with disabilities access rehabilitative services (Kakooza-Mwesige, 2016).

Barriers to care include limited infrastructure, inadequate skilled rehabilitation professionals, low awareness, stigma, and misconceptions (Vadivelan et al., 2020; Al Imam et al., 2021). Community-Based Rehabilitation (CBR) has been proposed as a sustainable model for bridging these gaps (WHO, 2017), but its adoption remains limited in Uganda.

Understanding how communities perceive CP, the knowledge they hold, and the attitudes they exhibit is therefore essential to inform effective interventions, reduce stigma, and promote inclusion.

1.2 Statement of the problem

Although CP affects 2.9 children per 1,000 in Uganda (Kakooza-Mwesige et al., 2017), community awareness, attitudes, and perceptions remain poorly documented. Misconceptions about causes—often attributed to curses, witchcraft, or parental wrongdoing—create stigma and discrimination (Vadivelan et al., 2020). This prevents families from seeking available services and worsens outcomes.

While rehabilitation services exist in Kampala, utilization is low due to community ignorance, negative attitudes, and access barriers (Kakooza-Mwesige, 2016). No systematic study has been conducted in Kawempe Division, despite it being one of the most densely populated divisions in Kampala. Without empirical data, policy and service delivery will remain poorly aligned with community realities.

1.3 Overall Objective

To assess the knowledge, attitudes, and perceptions of community residents in Kawempe Division, Kampala, regarding cerebral palsy and their access to family rehabilitative services .

1.3.1 Specific Objectives

1. To determine the level of knowledge about cerebral palsy among community residents in Kawempe Division.

2. To examine the attitudes and perceptions of community residents towards children with cerebral palsy and family rehabilitative services.

3. To identify challenges faced by community residents in accessing and utilizing cerebral palsy rehabilitation services.

1.3.2 Research questions

1. What is the level of knowledge about cerebral palsy among community residents in Kawempe division?
2. What are the attitudes and perceptions of the community towards children with cerebral palsy family rehabilitative services?
3. What challenges do community members face in accessing and utilizing cerebral palsy family rehabilitative services?

1.4 Justification of the study

CP is a significant public health problem in Uganda, yet community knowledge and perceptions remain poorly understood. This gap hampers early diagnosis, rehabilitation, and inclusion of children with CP. Assessing community perspectives will provide evidence to design awareness campaigns, strengthen rehabilitation services, and reduce stigma.

The findings align with Uganda’s National Development Plan III (health and social protection), Vision 2040 (inclusive growth), and the Sustainable Development Goals—particularly SDG 3 (Health), SDG 4 (Quality Education), and SDG 10 (Reduced Inequalities).

1.5 Significance of the study

Policy relevance: Provides evidence to inform national strategies on childhood disability and rehabilitation.

Programmatic value: Identifies gaps in awareness and barriers to service uptake, guiding interventions.

Community benefit: Promotes positive attitudes and inclusion of children with CP in schools and communities.

Academic contribution: Adds to limited literature on CP in LMICs and informs future research.

1.6 . Scope of the study

1.6 .1 Content scope

The study explored knowledge, attitudes, and perceptions (KAP) of community residents towards CP and family rehabilitative services, and identified challenges in accessing such services

1.6.2 Geographical scope

The study was conducted in Kawempe Division, Kampala, Uganda—an urban/peri-urban area with diverse socio-economic dynamics.

1.6.3 Time scope

Data collection was conducted between January 2025, with analysis in February 2025.

1.7 Theoretical Framework

This study employed the Health Belief Model (HBM), a theoretical framework created in the 1950s by social psychologists Hochbaum, Rosenstock, and Kegels, who were working in the U.S. Public Health Service. It is utilized to comprehend the health behaviors of individuals. The Health Belief Model (HBM) suggests that individuals' health-related behaviors are impacted by their own beliefs and perceptions of an illness, as well as the treatments that are available to reduce its recurrence. The paradigm consists of many essential elements: perceived vulnerability, perceived severity, perceived advantages, perceived obstacles, cues to action, and self-efficacy

(Rosenstock, 1974).

Perceived susceptibility

The term "perceived susceptibility" describes the community's level of awareness and belief about the likelihood of CP affecting children in their neighborhood. The perspective has a vital role in determining whether families acknowledge cerebral palsy as a pertinent health concern that requires attention. Perceiving a high sensitivity to CP might increase the community's motivation to actively seek knowledge and assistance for managing or preventing the illness (Kim & Kim, 2020). On the other hand, if they see cerebral palsy (CP) as uncommon or improbable to impact their children, they may not value learning about or obtaining rehabilitative therapies. Understanding the perception of vulnerability assists in identifying areas of insufficient information and determining the necessity for awareness efforts to emphasize the prevalence and dangers associated with CP.

Perceived severity: Perceived severity refers to the community's understanding of CP's gravity, including its physical, emotional, and social ramifications. This component evaluates the level of community awareness regarding the influence of cerebral palsy on the well-being of afflicted children and their families. If the community views cerebral palsy as a disorder that greatly impedes a child's growth and overall welfare, they may be more willing to provide assistance and actively seek rehabilitative therapies (Patel et al., 2017). This vision also encompasses comprehending the probable enduring consequences of CP, such as physical impairments, psychological anguish, and societal discrimination. Highlighting the grave repercussions of untreated cerebral palsy in educational campaigns might motivate the community to actively seek and utilize rehabilitative therapies.

Perceived Benefits: The perceived advantages refer to the community's opinions regarding the efficacy of rehabilitative therapies in enhancing the quality of life for children with cerebral palsy. The perception of these services is critical, as it directly influences the community's desire to participate in and endorse them. Families that have confidence in the ability of rehabilitative treatments to greatly improve their children's functional abilities and general quality of life are more inclined to make use of these programs (Muderedzi et al., 2017). Emphasizing successful cases and positive outcomes from rehabilitative programs may strengthen this view and motivate more families to seek assistance.

Perceived Barriers: Perceived barriers refer to the recognition of hindrances that impede families from accessing rehabilitative assistance. These obstacles may encompass financial limitations, insufficient awareness of accessible services, cultural convictions, and physical accessibility challenges. Gaining a comprehensive understanding of these obstacles is crucial in order to develop solutions that effectively tackle and reduce their impact. If cost is a significant obstacle, subsidized services or financial aid programs may be necessary. Community-based education initiatives that honor and integrate local traditions can be more effective in cases where cultural beliefs hinder families from seeking assistance.

Cues for Action: The stimuli that prompt families to actively pursue rehabilitative assistance. These cues can be either internal, such as identifying symptoms of CP in a child, or external, such as suggestions from healthcare professionals or community awareness initiatives. It is essential to identify effective prompts that encourage families to take action when planning interventions (Kim & Kim, 2020). Healthcare professional recommendations can serve as a potent stimulus if clinicians are knowledgeable and aggressive in explaining CP and the options that are accessible to families. Community awareness efforts that emphasize the significance of early intervention can also function as effective prompts for action.

Self-efficacy: Self-efficacy refers to the level of confidence that families have in their ability to obtain and benefit from rehabilitative treatments. This component assesses families perceived self-efficacy in seeking assistance, as well as their confidence in the effectiveness of their activities. By equipping families with knowledge and assistance in navigating the healthcare system, providing comfort in the success of therapies, and fostering a supportive community climate that promotes seeking help, we can improve self-efficacy (Zhou et al., 2021). Training programs and support groups can enhance self-efficacy by equipping families with the necessary information and skills to properly manage cerebral palsy.

While the HBM provides a structured approach to analysing health behaviours, it has limitations. It may overlook the influence of broader social and environmental factors, such as poverty and systemic healthcare challenges, which are significant in Kawempe Division. Additionally, the model's emphasis on individual decision-making may not fully capture collective dynamics in community settings.

The HBM is well-suited to this study as it aligns with the goal of identifying barriers and enablers of health-seeking behaviors for CP services. By understanding community beliefs and perceptions, this framework supports the development of targeted interventions to improve service uptake and outcomes for children with CP.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews existing literature on cerebral palsy (CP), focusing on community knowledge, attitudes, and perceptions regarding CP and family rehabilitative services. The review is structured thematically to align with the study objectives. It draws on global, regional, and Ugandan evidence to contextualize the study, identify gaps, and highlight the relevance of community perspectives in improving CP care.

2.1 Cerebral Palsy: Definition and Burden

Cerebral palsy (CP) is a group of permanent disorders of movement and posture caused by non-progressive disturbances in the developing fetal or infant brain (Rosenbaum et al., 2007). Globally, CP affects about 17 million people, with an incidence of 2–3 per 1,000 live births (Michael-Asalu et al., 2019).

The burden is higher in low- and middle-income countries (LMICs) due to perinatal complications, limited neonatal care, and poor survival of preterm infants (Olusanya et al., 2022).

In Uganda, CP prevalence is estimated at 2.9 per 1,000 births (Kakooza-Mwesige et al., 2017). Children with CP frequently present with motor dysfunction, epilepsy, communication difficulties, and cognitive impairments (Paneth et al., 2006), which compromise independence and social participation, necessitating long-term rehabilitative support.

Despite its burden, CP remains under-researched in Uganda, where stigma, misconceptions, and weak rehabilitation systems contribute to delayed diagnosis and poor quality of life (Donald et al., 2014; Kakooza-Mwesige, 2016).

2.2 Knowledge about Cerebral Palsy

Knowledge about CP remains low among the general population. In LMICs, many communities attribute CP to supernatural factors such as witchcraft, curses, or divine punishment (Al Imam et al., 2021; Adegbite et al., 2020). This contributes to delayed health-seeking and reliance on traditional healers (Gladstone et al., 2010).

In Sub-Saharan Africa, misconceptions are widespread. In Nigeria and Tanzania, CP is often linked to maternal wrongdoing or ancestral punishment (Adejumo et al., 2016; Mwaniki et al., 2012). Studies report that less than 30% of respondents correctly identify biomedical risk factors for CP (Adebayo et al., 2017).

In Uganda, community awareness of CP is very limited. Parents often fail to recognize early symptoms, with delays of 2–3 years before diagnosis (Kakooza-Mwesige et al., 2015). Misconceptions include beliefs that CP is contagious or a punishment for parental sin (Kakooza-Mwesige, 2016).

Few studies have examined general community residents' knowledge, but existing reports suggest difficulty in distinguishing CP from other disabilities, which undermines social support and access to services.

2.3 Attitudes toward Children with CP

Attitudes toward children with CP influence inclusion and rehabilitation-seeking. Globally, stigma and discrimination are widespread (Vadivelan et al., 2020). Children with CP are often excluded from schools and social spaces, while families face shame and isolation (Zuurmond et al., 2018).

Yet, where awareness campaigns and community-based rehabilitation (CBR) are implemented, attitudes improve. For example, structured sensitization in Ethiopia and Tanzania increased community acceptance of children with disabilities (Dambi & Jelsma, 2014).

In Uganda, negative attitudes are pervasive. Families report being ridiculed, blamed, and socially excluded (Hartley et al., 2015). Stigma sometimes extends to health workers, who may perceive rehabilitation as futile (Kakooza-Mwesige, 2016).

Attitudes towards rehabilitation are mixed: some recognize its benefits, but many view therapy as ineffective or too slow, leading to dropout (Al Imam et al., 2021).

2.4 Perceptions of Family Rehabilitative Services

Perceptions strongly determine service utilization. In HICs, family-centered rehabilitation (physiotherapy, occupational therapy, speech therapy) is recognized as effective in improving outcomes (Novak et al., 2017).

In LMICs, perceptions are mixed. Some families question whether rehabilitation can "cure" CP, while others abandon therapy due to costs or slow progress (Dambi & Jelsma, 2014).

In Uganda, rehabilitative services are concentrated in urban centers, yet many perceive them as inaccessible, unaffordable, or irrelevant (Kakooza-Mwesige, 2016). Misconceptions that therapy is futile discourage uptake.

2.5 Barriers and Challenges to Accessing Rehabilitation Services

2.5.1 Health System Barriers

WHO estimates that less than 10% of people with disabilities in low-income countries access the rehabilitation they need (WHO, 2017). Barriers include: Shortage of trained professionals (physiotherapists, occupational therapists, speech therapists), Inadequate infrastructure and assistive devices and Long waiting times and high costs (Kakooza-Mwesige, 2016).

2.5.2 Socioeconomic and Cultural Barriers

Poverty, transport costs, and competing household priorities often deter families from attending therapy (Donald et al., 2014). Care burdens fall disproportionately on mothers (Zuurmond et al., 2018). Cultural reliance on traditional healers and persistent stigma also restrict service use (Gladstone et al., 2010).

In Uganda, services are concentrated in urban hospitals, leaving peri-urban and rural areas underserved. In Kampala, transport costs and long waiting times are major deterrents (Kakooza-Mwesige, 2016). CBR programs exist but are fragmented and poorly funded. While barriers are documented nationally, community-specific experiences in Kawempe Division remain underexplored.

2.6 Theoretical Framework: Health Belief Model (HBM)

This study was guided by the Health Belief Model (HBM), which explains health behaviors based on perceptions of illness and interventions (Rosenstock, 1974). The constructs include: The paradigm consists of many essential elements: perceived vulnerability, perceived severity, perceived advantages, perceived obstacles, cues to action, and self-efficacy.

Perceived susceptibility

The term "perceived susceptibility" describes the community's level of awareness and belief about the likelihood of CP affecting children in their neighborhood. The perspective has a vital role in determining whether families acknowledge cerebral palsy as a pertinent health concern that requires attention. Perceiving a high sensitivity to CP might increase the community's motivation to actively seek knowledge and assistance for managing or preventing the illness (Kim & Kim, 2020). On the other hand, if they see cerebral palsy (CP) as uncommon or improbable to impact their children, they may not value learning about or obtaining rehabilitative therapies. Understanding the perception of vulnerability assists in identifying areas of insufficient information and determining the necessity for awareness efforts to emphasize the prevalence and dangers associated with CP.

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Perceived Benefits: The perceived advantages refer to the community's opinions regarding the efficacy of rehabilitative therapies in enhancing the quality of life for children with cerebral palsy. The perception of these services is critical, as it directly influences the community's desire to participate in and endorse them. Families that have confidence in the ability of rehabilitative treatments to greatly improve their children's functional abilities and general quality of life are more inclined to make use of these programs (Muderedzi et al., 2017). Emphasizing successful cases and positive outcomes from rehabilitative programs may strengthen this view and motivate more families to seek assistance.

Perceived Barriers: Perceived barriers refer to the recognition of hindrances that impede families from accessing rehabilitative assistance. These obstacles may encompass financial limitations, insufficient awareness of accessible services, cultural convictions, and physical accessibility challenges. Gaining a comprehensive understanding of these obstacles is crucial in order to develop solutions that effectively tackle and reduce their impact. If cost is a significant obstacle, subsidized services or financial aid programs may be necessary. Community-based education initiatives that honor and integrate local traditions can be more effective in cases where cultural beliefs hinder families from seeking assistance.

Cues for Action: The stimuli that prompt families to actively pursue rehabilitative assistance. These cues can be either internal, such as identifying symptoms of CP in a child, or external, such as suggestions from healthcare professionals or community awareness initiatives. It is essential to identify effective prompts that encourage families to take action when planning interventions (Kim & Kim, 2020). Healthcare professional recommendations can serve as a potent stimulus if clinicians are knowledgeable and aggressive in explaining CP and the options that are accessible to families. Community awareness efforts that emphasize the significance of early intervention can also function as effective prompts for action.

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2.7 Summary of Gaps in Literature

The reviewed literature highlights that most studies on cerebral palsy (CP) knowledge and perceptions have primarily focused on caregivers, parents, or healthcare providers, with little attention given to the wider community context. This narrow focus overlooks the important role of community members in shaping perceptions, influencing stigma, and supporting or hindering access to rehabilitative services. In Uganda, existing studies have mainly emphasized clinical risk factors, prevalence, and challenges of caregiving, with far fewer addressing the social and cultural dimensions of CP within communities. While some evidence points to negative attitudes and stigma surrounding disability, there remains a paucity of research exploring community-level beliefs and perceptions of rehabilitation services.

Furthermore, most of the studies that have examined disability-related knowledge and attitudes in Uganda have been conducted in rural or generalized settings, with limited urban-specific data. Notably, there is a lack of Kampala-specific research examining how residents of urban divisions such as Kawempe perceive cerebral palsy and rehabilitation. This is critical, given that urban populations often have different social dynamics, healthcare access challenges, and cultural influences compared to rural populations.

Another significant gap in the literature is the absence of theoretical application. Few studies have employed behavioral models to systematically explain health-seeking behavior in relation to CP rehabilitation. The Health Belief Model (HBM) offers a useful framework for understanding how perceived susceptibility, severity, benefits, and barriers shape community members' decisions to support or seek rehabilitation services. However, its application in CP-related research in Uganda remains limited.

In light of these gaps, the current study seeks to contribute new evidence by assessing the knowledge, attitudes, and perceptions of community residents in Kawempe Division, Kampala, regarding cerebral palsy and access to family rehabilitative services. By focusing on the general community rather than caregivers alone, and by applying the HBM as an analytical lens, this study addresses a critical gap in both empirical and theoretical understanding of CP in Uganda's urban context.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter outlined the methods and materials used in the study, including the study design, study population and setting, sampling methods, data collection methods, recruitment and data collection procedures, data analysis, and ethical considerations.

3.1 Study Design

The study adopted a cross-sectional mixed-methods approach, integrating quantitative and qualitative components to comprehensively explore community knowledge, attitudes, and perceptions towards cerebral palsy (CP) and family rehabilitative services in Kawempe Division, Kampala. The quantitative component employed a cross-sectional analytical design, which allowed the collection of numerical data at a single point in time to determine knowledge levels and their associations with demographic and contextual factors. The qualitative component employed an exploratory phenomenological design, which enabled in-depth exploration of lived experiences, community perceptions, and social attitudes related to CP and rehabilitation services. This design was guided by the Health Belief Model

(HBM), which informed the development of research tools and the interpretation of findings.

3.2 Study Area

The study was conducted in Kawempe Division, one of the five divisions of Kampala City, Uganda. Kawempe is densely populated, with an estimated population of over 388,665 residents (UBOS, 2016). The Division has 18 parishes, of which 15 were purposively selected for this study. Three parishes were excluded due to logistical challenges. Kawempe is characterized by high poverty levels, limited access to specialized rehabilitation services, and a mix of formal and informal settlements, making it a relevant context for this study.

3.3 Study Population

The target population included all community residents aged 18 years and above, irrespective of whether they had children with CP or not. This inclusivity was important since community members may have prior exposure, awareness, or experiences influencing knowledge and perceptions about CP. For the quantitative component, the study units were individual household respondents. For the qualitative component, the study units included caregivers of children with CP, health workers, rehabilitation staff, and community leaders.

3.4 Inclusion and Exclusion Criteria

3.4.1 Inclusion Criteria

- Residents of Kawempe Division aged ≥18 years.
- Community members who had lived in the area for at least 6 months.
- For qualitative: caregivers of children with CP, local leaders, and service providers involved in rehabilitative services.

3.4.2 Exclusion Criteria

- Individuals below 18 years.
- Residents with cognitive or communication impairments that hindered effective participation.
- Temporary visitors or non-residents.

3.5 Sample Size Determination

For the quantitative component, the sample size was calculated using Cochran's formula for cross-sectional studies, assuming a prevalence of CP awareness at 35% (due to lack of local estimates), a 95% confidence interval, and a 5% margin of error. After adjusting for design effect and non-response, a final sample of 306 respondents was obtained.

For the qualitative component, purposive sampling targeted key stakeholders until data saturation was achieved. This yielded eight Focus Group Discussions (FGDs) with community residents, each consisting of 8–10 participants; ten in-depth interviews

(IDIs) with caregivers of children with CP; and five key informant interviews (KIIs) with health workers, rehabilitation staff, and local leaders.

3.6 Sampling Procedure

A multistage sampling approach was used for the quantitative component. Kawempe Division was purposively selected due to its large population and limited specialized rehabilitation services. From the 18 parishes, 15 were randomly selected. Within each parish, Village Health Teams (VHTs) introduced the research team to local leaders and guided them to the first household respondent. Subsequent households were selected using systematic random sampling with an interval of five households until the desired number of respondents per parish was reached. Only one eligible adult per household was interviewed.

For the qualitative component, purposive and snowball techniques were employed. VHTs, local leaders, and health workers helped identify caregivers of children with CP and other key informants. Respondents were enrolled until no new themes emerged, indicating data saturation.

3.7 Data Collection Methods and Tools

Quantitative data were collected using a structured questionnaire programmed into REDCap mobile software for secure, real-time data entry. The questionnaire was translated into Luganda and pretested in a neighboring parish to ensure clarity and cultural appropriateness.

Knowledge of CP was assessed using a binary awareness question, “Have you ever heard about cerebral palsy?” with Yes/No response options. This variable served as the main outcome for bivariate and multivariate analysis. Additional multiple-response questions explored knowledge of causes, symptoms, treatment, and rehabilitation services, which were analyzed descriptively but not scored.

Qualitative data were collected through FGDs, IDIs, and KIIs. FGDs explored community-level perceptions, beliefs, and attitudes towards CP. IDIs captured caregivers’ lived experiences, challenges, and coping strategies, while KIIs provided expert insights into existing services, gaps, and policy implications. All interviews were audio-recorded with consent, lasted between 45 and 90 minutes, and were moderated by trained facilitators experienced in qualitative methods.

3.8 Data Management

Quantitative data were collected electronically in REDCap, uploaded daily to a secure server, and routinely checked for completeness and consistency by the principal investigator. Data were later exported into SPSS for cleaning and analysis. Qualitative data were audio-recorded, transcribed verbatim, translated into English where necessary, and cross-checked against the recordings. Transcripts were stored in encrypted, password-protected folders. Signed consent forms were stored separately in locked cabinets accessible only to the principal investigator.

3.9 Validity and Reliability

The study tools were reviewed by experts in child health and rehabilitation to ensure content validity. Pretesting was conducted in a neighboring parish not included in the study to refine the questionnaire. Reliability was assessed using Cronbach's Alpha on the knowledge and attitude sections, with a coefficient greater than 0.70 considered acceptable. Triangulation of quantitative and qualitative findings enhanced credibility.

3.10 Data Analysis

Quantitative data were analyzed using SPSS. Descriptive statistics, including frequencies, percentages, means, and standard deviations, summarized socio-demographic characteristics, knowledge, attitudes, and perceptions. Bivariate analysis using chi-square tests and t-tests assessed associations between knowledge or attitudes and independent variables. Logistic regression models were used in multivariate analysis to identify predictors of knowledge and attitudes, adjusting for potential confounders.

Qualitative data were analyzed thematically using NVivo software. Transcripts were coded inductively and deductively, guided by the Health Belief Model. Codes were merged into categories and overarching themes. Data saturation was confirmed when no new themes appeared after the completion of eight FGDs, ten IDIs, and five KIIs.

3.11 Ethical Considerations

Ethical approval was obtained from the Uganda Christian University Research Ethics Committee. Permission was granted by Kawempe Division authorities. Written informed consent was obtained from all respondents. Privacy, confidentiality, and voluntary participation were ensured throughout the study.

3.12 Study Limitations

This study included community residents without direct caregiving experience, which may have diluted caregiver-specific insights. Social desirability bias may also have influenced self-reported attitudes. Additionally, resource limitations restricted the scope to 15 parishes instead of all 18.

3.11 Work Plan/timeline

The study was expected to be completed within a period of three months. This timeline included the phases of preparation, data collection, analysis, and dissemination.

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter presents the findings of the study based on the analysis of both quantitative and qualitative data. It covers the socio-demographic characteristics of study respondents, their knowledge, attitudes, and perceptions towards cerebral palsy and rehabilitation services, as well as the barriers affecting access to these services. The results are organized into thematic sections corresponding to the study

4.1 Socio-Demographic Characteristics of Respondents

A total of 306 respondents participated in the study. The median age was 32 years (IQR: 26–40). Over two-thirds were female 71% (217/306) and community residents 90%(276/306. About half were married or cohabiting 51%(155/306), while one-third were single 31%(96/306). Most respondents had attained at least secondary education 47%(144/306). Sources of income varied, with casual labor 32% (97/306) and small business/trade 31%(94/306) being most common, while 19% were in formal employment and 16% reported no independent income. Although only 9%(27/306) of respondents had a child with cerebral palsy (CP), more than half 54%(165/306) knew a family with a child with CP, indicating community-level exposure to the condition. These socio-demographic characteristics provide an important context for interpreting knowledge, attitudes, and perceptions of CP within Kawempe Division.

Table 1. Socio-demographic characteristics of respondents

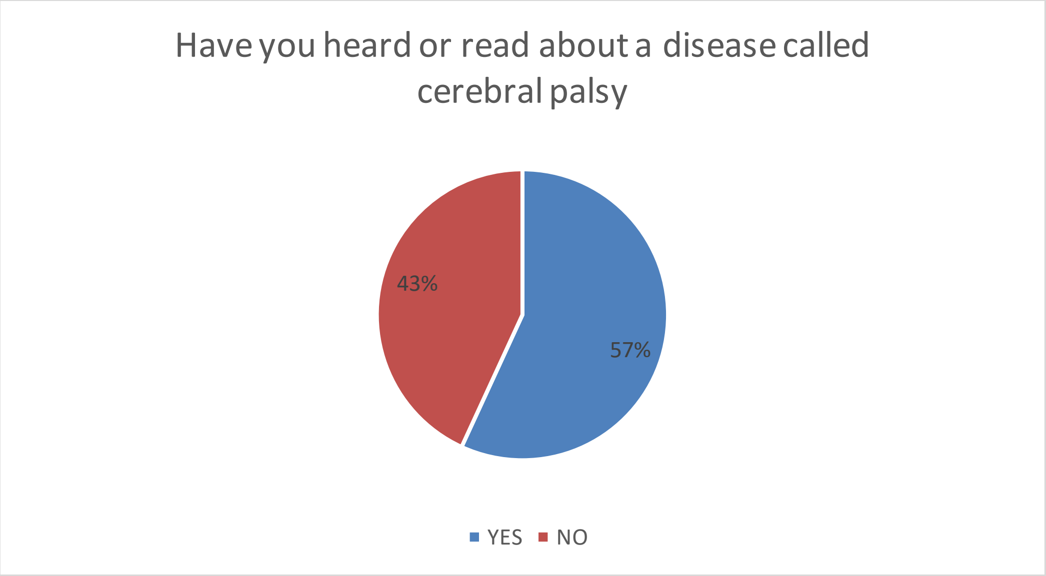
Characteristic	Summary statistic
Median Age (years), (Interquartile range)	32(26-40)
Gender	
Males	89 (29%)
Females	217(71%)
Community Roles	
Community Resident	276 (90%)
Community Health Worker	10 (03%)
Opinion Leader	14 (05%)
Healthcare Facility Staff	6 (02%)
Marital status	
1.Single – Never married	96 (31%)
2.Married/cohabiting	155 (51%)

3.Single – Separated/ Divorced/Widowed	55(18%)
Level of Education	
1. No formal education	16 (05%)
2. Only primary	70 (23%)
3. Secondary	144 (47%)
4. Tertiary certificate	39 (13%)
5. Tertiary Diploma	17 (06%)
6. University Degree	20 (07%)
Source of income	
1. Farming	5 (02%)
2. Formal employment	58 (19%)
3. Business/trade	94 (31%)
4. Casual labor	97 (32%)
5. No Income/depend on other household members	52 (16%)
Have Child with CP	
1.No	279 (91%)
2.Yes	27 (9%)
Know family with CP child	
1.No	141 (46%)

2. Yes	165 (54%)

4.2 Objective one Awareness and Knowledge of Cerebral Palsy

Of the 306 respondents , 57%(174/306) (95% Confidence Interval (CI):) had ever heard of cerebral palsy.



Among the 174 respondents who were aware of CP, the proportion 57% (98/174) was significantly significantly higher among respondents who were 32 years in age compared to 43% (75/174) among young respondents who were less or equal to 32 years in age (p=0.001) (Table 2)., married or cohabiting (53% vs 23%, p<0.001), and those who were separated/divorced/widowed (24%, p<0.001). Awareness was also greater among health facility staff/CHWs (8%, p=0.028) and those engaged in formal employment or business (p=0.01).

Notably, respondents who personally knew a family with a child with CP (72% vs 28%, p<0.001) or who had a child with CP themselves (15%, p<0.001) were significantly more likely to have heard about the condition.

Qualitative narratives confirmed these misconceptions:

> *"Some people in our community say a child with CP was cursed because the parents did something wrong."* (FGD participant, community resident)
>
> *"Even when I told people my child got CP after birth, they told me it was witchcraft and advised me to go to a traditional healer."* (Caregiver, IDI)

A few participants demonstrated more accurate knowledge:

> *"I think CP happens when a baby lacks oxygen during birth or when there are problems in the brain."* (Male respondent, FGD

Table 2: Bivariate analysis of factors associated with awareness of CP

	Ever heard of cerebral palsy n (%)		**p-value**
Characteristic	No=132(43%)	Yes=174(57%)	
Age (years)			

≤32	83(62%)	75(43%)	
>32	50(38%)	98(57%)	0.001^b
Gender			
1.Males	36(27%)	53(30%)	
2.Females	96(73%)	121(70%)	0.543
Community Roles			
1.Community Resident	125(95%)	151(87%)	
2.Health facility staff/CHW	02(2%)	14(8%)	
3.Opinion Leader	05(3) %	09(5%)	0.028^a
Marital status			
1.Single – Never married	56(42%)	40(23%)	
2.Married/cohabiting	63(48%)	92(53%)	
3.Separated/ Divorced/Widowed	13(10%)	42(24%)	0.0001^b
Level of Education			
1.No education/Primary	40(30%)	46(26%)	
2.Secondary	68(52%)	76(44%)	
3.Higher (certificate, Diploma, University)	24(18%)	52(30%)	0.063
Source of income			
1.Farming/casual labor	51(38%)	51(29%)	
2.Formal employment	18(14%)	40(23%)	

3.Business/trade	34(26%)	60(35%)	
4.No income/dependent on other households	30(22%)	22(13%)	0.01[a]
Have child with CP			
No	132(99%)	147(85%)	
Yes	1(01%)	26(15%)	0.0001[a]
Know family with CP child			
1.No	117(88%)	48(28%)	
2.Yes	16(12%)	125(72%)	0.0001[b]

[a]p-value obtained with Fishers exact test, [b]p-value obtained using chi-square statistic

Univariate and Multivariable Analyses

First report on the crude/or univariate results.

In univariate analysis using poisson regression analysis, the prevalence of being aware of CP was 40% more among respondents who were over 32 years of age compared to respondents who were younger or equal to 32 years in age and this prevalence ratio was statistically significant PR 1.40 (95% CI: 1.00, 1.90) (Table 3).

When multivariable analysis was performed and after adjusting for age, gender, marital status, education, and income source, only knowing a family having a CP child was the variable that remained independently associated with awareness of CP (Table 3). Respondents who were in knowledge of a family having a CP child were three times more likely to have heard of CP (aPR 3.0, 95% CI: 2.0–4.0, p<0.001). Other variables, including age, gender, marital status, education, and income source, were not statistically significant predictors in the multivariate model.

Table 3: Crude and adjusted prevalence ratios for awareness of CP

	Crude analysis			**Multivariate analysis**		
Characteristic	PR	95%CI	P-value	PR	95%CI	P-value
Age (years)						
≤32	1			1		
>32	1.40	1.00-1.90	0.03	1.20	0.80-1.70	0.35
Gender						
Males	1					
Females	0.93	0.7-1.3	0.65			
Community Roles						
1.Community Resident	1			1		
2. Health facility staff/CHW	2.0	1.0-2.8	0.001	1.1	0.6-2.0	0.73
3.Opinion Leader	1.2	0.6-2.3	0.63	1.0	0.4-2.0	0.80
Marital status						

1.Single – Never married	1			1		
2.Married/cohabiting	1.4	1.0-2.0	0.07	1.2	0.8-1.8	0.39
3.Separated/ Divorced/Widowed	2.0	1.2-2.8	0.01	1.3	0.8-2.0	0.31
Level of Education						
1.No education/Primary	1			1		
2.Secondary	1.0	0.7-1.5	0.95	1.0	0.7-1.6	0.82
3.Higher (certificate, diploma, University)	1.3	1.0-2.0	0.19	1.2	0.7-1.9	0.58
Source of income						
1.Farming/casual labor	1			1		
2.Formal employment	1.4	1.0-2.1	0.13	1.4	1.0-2.4	0.32
3.Business/trade	1.3	1.0-2.0	0.20	1.2	1.0-2.0	0.60
4. No income/Dependent	0.8	1.0-1.4	0.51	1.2	1.0-2.0	0.52
Have child with CP						
No	1			1		
Yes	2.0	1.2-2.8	0.01	1.0	1.0-2.0	0.90
Know family with CP child						
1.No	1			1		

2.Yes	3.0	2.2-4.3	0.0001	3.0	2.0-4.0	0.0001

4.3 Community Attitudes and Perceptions Towards Cerebral Palsy and Rehabilitation Services

Nearly half 42% (128/306) of the respondents reported feeling uncomfortable or indifferent interacting with people or children having CP (Table 4). Over half 52% (162/306) disagreed or were indifferent to letting their children play with affected peers, while nearly one-third expressed stigma, including objections to their children playing with affected peers. Support for social inclusion was modest, with only 41% agreeing that people with CP should be employed and one-third opposing the idea of them marrying or maintaining families. Broader community perceptions highlighted stigma and misconceptions: 43% believed individuals with CP are discriminated against, 28% associated CP with social isolation, and 22% perceived the condition as a curse. Although misconceptions such as CP being contagious or requiring traditional healing were rare, they underscored persistent cultural beliefs. Positively, the majority (86%) recognized rehabilitation services as very important, and more than half believed that children with CP can live fulfilling lives, suggesting some openness to inclusion under supportive conditions.

Qualitative findings enriched these results. Several caregivers narrated experiences of exclusion, reflecting deep-seated stigma:

"They tend not to want their children to interact with our own. They make it seem like the condition our children are living with is contagious to theirs." (R5, FGD4 – caregiver)

"When I take my child outside, neighbours whisper that it is a curse. I feel ashamed sometimes." (R6, FGD 3-Caregiver)

Employment and marriage opportunities were also noted as major barriers:

"In our community, people believe that children with CP cannot contribute, so they are left at home. Even as adults, no one wants to employ them." (R2, FGD2 – community resident)

People say these children cannot work; they just sit at home and depend on others." (R3, FGD 2- caregiver)

However, some community members offered encouragement and practical support. As one caregiver shared:

"Sometimes my neighbour calls to check on the child." (R8, FGD3 – caregiver)

"Some people are kind, others are not. You find a neighbour who greets the child, but others refuse even to talk to him." (R2, FGD 5-Caregiver)

"Children with CP are like any other children. If given love and care, they can have a good life." (Local leader, KII)

This coexistence of stigma and support highlights the dual reality of CP perceptions in Kawempe Division, and points to awareness-raising as a key entry point for improving inclusion.

Table 4. Shows community attitudes and perceptions towards CP and cerebral palsy family rehabilitative services

Characteristic (Overall N=306)	N(%)
How comfortable do you feel interacting with individuals or children with Cerebral Palsy	
Very comfortable	133(44%)
Somewhat comfortable	42(14%)
Neutral	43(14%)
Somewhat uncomfortable	50(17%)
Very uncomfortable	35(12%)
Would object letting your children play with another child having cerebral palsy?	
1.Strongly disagree	54 (18%)
2.Disagree	46 (15%)
3.Neither disagree nor agree	62 (20%
4.Agree	51 (17%)
5.Strongly agree	93 (30%)

Do you think people with cerebral palsy should be employed to jobs like other people?	
Strongly disagree	19(6%)
Disagree	54(18%)
Neither disagree nor agree	106(35%)
Agree	100(33%)
Strongly agree	24(8%)
Do you think people with cerebral palsy should or should not make and maintain a family of their own?	
1.Strongly disagree	31(10%)
2.Disagree	75(25%)
3.Neither disagree nor agree	98(32%)
4.Agree	77(25%)
5.Strongly agree	22(7%)
In your opinion, how does the community generally view individuals with CP	
1.CP is seen as a curse	68(22%)
2.Individuals are often stigmatized and discriminated	131(43%)
3.Families with CP children face social isolation	85(28%)
4.CP is believed to be contagious	6(2%)
5.CP children are seen as objects of charity	19(6%)

6.Individuals with CP are helpless	49(16%)
7.CP is often misunderstood as a condition that cannot be managed	3(1%)
8.Community members are unaware of the causes	2(1%)
9.Traditional healers are often consulted	2(1%)
10.Cultural rituals or practices are used in attempts to cure	6(2%)
11.Some communities rely on cultural beliefs	12(4%)
12.CP is seen as a financial and emotion burden	31(10%)
In your opinion, how well are children with CP treated in your community?	
1.Very well	23(8%)
2.Somewhat well	53(18%)
3.Neutral	85(28%)
4.Somewhat poorly	86(29%)
5.Very poorly	54(18%)
Do you believe that children with CP can live fulfilling lives?	
1.Strongly agree	24(8%)
2.Agree	76(25%)
3.Neutral	93(31%)
4.Disagree	80(26%)

5.Strongly disagree	31(10%)
How important do you think it is for children with CP to receive rehabilitation services?	
1.Very important	263(86%)
2.Somewhat important	18(6%)
3.Neutral	19(6%)
4.Somewhat unimportant	5(2%)

Further analysis (**Table 4a**) demonstrated That Respondents who had heard of CP were significantly more comfortable interacting with affected individuals (*p=0.001*), more supportive of employment (*p=0.01*), and more accepting of family life (*p=0.02*), compared to those who had never heard of CP.

(Table 4a). They also placed greater importance on rehabilitation (*p=0.001*)

Table 4a. Association between CP awareness and attitudes/perceptions

Attitude and respondents' perceptions	**Ever heard of CP Mean ± SD (%)**	**Never heard of CP Mean ± SD (%)**	**P-value**	**Interpretation (for respondents who have heard of CP)**
How comfortable do you feel interacting with individuals or children with CP?	29 ± 36	44 ± 37	0.001	Negative attitude (low comfort)
Do you think people with CP should or should not be employed like other people?	42 ± 28	49 ± 22	0.01	Negative attitude (less support for employment)

Do you think people with CP should or should not make and maintain a family of their own?	47 ± 31	55 ± 23	0.02	Negative attitude (less support for family life)
In your opinion, how well are children with CP treated in your community?	45 ± 35	46 ± 26	0.82	Neutral attitude (no significant difference, moderate perception)
Do you believe that children with CP can live fulfilling lives?	51 ± 21	53 ± 26	0.57	Positive attitude (belief in fulfilling lives)
How important do you think it is for children with CP to receive rehabilitation services?	94 ± 20	86 ± 29	0.001	Positive attitude (high importance attached to rehabilitation)

p-value obtained using Wilcoxon man-whitney,

4.4 Community Challenges in Accessing and Using Cerebral Palsy Rehabilitation Services

The study also identified barriers to accessing rehabilitation services. As shown in **Table 5**, the most frequently cited community-wide barriers were financial constraints (73%), lack of awareness of available services (62%), stigma (51%), and transportation challenges (41%). Among respondents who had not personally sought rehabilitation services, lack of awareness (53%) and limited understanding of benefits (44%) were leading reasons. Cultural beliefs or practices (16%) and lack of nearby services (13%) were also reported.

Qualitative findings echoed these barriers. Caregivers highlighted financial hardships and transport difficulties as major obstacles:

"You will have to meet a physiotherapy appointment for your child but you have been in and out of hospital for a week and have no money at this point." (R6, FGD1 – caregiver)

"Sometimes I miss appointments because the child is heavy to carry, and the taxis do not want to take us." (Caregiver, IDI)

"Here in Kikaya, there are no nearby services. We have to go to Mulago, and transport is a big problem." (Community leader, KII)

"If the government could bring services closer, like at our health center, many families would go." (R3, FGD4– caregiver)

"We need more information. Most people don't know what therapy does, so they don't bother." (R1, FGD3 – caregiver)

Despite these challenges, respondents identified feasible solutions. The majority recommended increasing community awareness (79%) and providing financial assistance (53%), while others suggested improving transport options (39%). Almost all respondents (98%) agreed that healthcare providers need further training on CP, particularly in areas of handling and care, causes and prevention, and rehabilitation strategies.

Table 5: Shows the barriers and challenges to access and use of cerebral palsy family rehabilitative services

Characteristics	N(%)

What are the main barriers preventing individuals with cerebral palsy from accessing rehabilitation services?	
Financial constraints	223(73%)
Lack of transportation means	124(41%)
Lack of awareness about available services	189(62%)
Stigma associated with disabilities	155(51%)
If you have not sought rehabilitation services, what are the reasons	
1.Don't know about available services	115(53%)
2.The cost is too high	12(6%)
3.Services are not available in my community	28(13%)
4.Transportation difficulties	14(7%)
5.Lack of awareness of the benefits	94(44%)
6.Cultural beliefs or practices	34(16%)
7. Idont have achild with CP	15(7%)
What factors do you think would improve access to cerebral palsy rehabilitation services?	
1.Increasing awareness in the community	239(79%)
2.Providing financial assistance for treatment	162(53%)
3.Enhancing transportation options	119(39%)
4.Training healthcare providers on CP management	80(26%)

Do you think there is a need for more training or education on cerebral palsy among healthcare providers in Kawempe Division	
1.Yes	298(98%)
2.No	7(2%)
What topics related to cerebral palsy would you like to see included in training programs	
1.Causes and Prevention	14(23%)
2.Handling and Care	17(28 %)
3.Stigma and Awareness	10(17%)
4. Management and Treatment	14(23%)
5.Nutrition and Feeding	5(8%)
Early Detection and Signs	8(13%)

CHAPTER 5

DISCUSSION

5.0 Introduction

This chapter discusses the study findings in light of existing literature on cerebral palsy (CP), focusing on community knowledge, attitudes, perceptions, and barriers to family rehabilitative services in Kawempe Division. The discussion is organized according to the study's specific objectives, integrating quantitative and qualitative findings, and interpreting them within the Ugandan and regional context.

5.1 Objective One: Level of Knowledge about Cerebral Palsy

The study found that 57% of respondents had heard of CP, yet less than half could accurately identify biomedical causes. Misconceptions such as attributing CP to witchcraft, curses, or parental sin were common, particularly among participants with lower education. This highlights a difference between awareness (having heard of CP) and knowledge (accurate understanding of causes, symptoms, and management).

This finding mirrors recent Ugandan research, where only a minority of caregivers correctly identified biomedical causes of CP despite relatively high awareness (Nampijja et al., 2019). Regional studies from Kenya and Tanzania have also documented similar misconceptions (Mwaniki et al., 2020; Adejumo et al., 2021).

Similar misconceptions have been documented in Uganda and Nigeria, where CP is often attributed to supernatural causes, delaying health-seeking and reinforcing stigma (Gladstone et al., 2010; Adejumo et al., 2016). The findings highlight the need for community education programs to address misconceptions and improve recognition of CP as a medical condition requiring rehabilitative care.

Within the HBM, awareness corresponds to cues to action, while knowledge maps onto perceived susceptibility and severity. Where misconceptions persist, caregivers may underestimate the benefits of biomedical rehabilitation or delay seeking care. For example, one caregiver in this study remarked:

> *"People in my community believe this child was bewitched; they tell me going to hospital will not help."* (R5, FGD4– caregiver)

"I thought it comes when a child is bewitched or if the mother annoyed someone during pregnancy." (R1, FGD2– caregiver)

5.2 Objective Two: Attitudes and Perceptions towards Children with CP and Family Rehabilitative Services

The study revealed mixed attitudes in the community. While 43.8% were very comfortable interacting with children with CP, 28% reported being somewhat or very uncomfortable, and 30.3% would object to their child playing with a child with CP. Qualitative data emphasized stigma and social exclusion, often due to misconceptions about contagion or curses:

"They tend not to want their children to interact with our own. They make it seem like the condition our children are living with is contagious to theirs." (R5, FGD4- caregivers)

Despite negative attitudes, some respondents provided support and encouragement, demonstrating heterogeneity in community responses:

“Sometimes my neighbour calls to check on the child.” (R4, FGD1– caregiver)

These findings align with evidence from Uganda, where families report ridicule, social isolation, and mixed perceptions of rehabilitation effectiveness (Hartley et al., 2005; Kakooza-Mwesige, 2016). Quantitative results indicated that respondents with prior knowledge of CP exhibited more positive attitudes, supporting literature showing that awareness interventions can improve social acceptance and inclusion (Dambi & Jelsma, 2014; Vadivelan et al., 2020).

Community perceptions were largely negative: 43.2% reported stigma, 28% social isolation, and 22.4% perceived CP as a curse. However, 86.2% acknowledged the importance of rehabilitation services, suggesting that despite stigma, recognition of the value of rehabilitative care exists, which can be leveraged in community-based rehabilitation (CBR) programs (Novak et al., 2017; Kakooza-Mwesige, 2016).

In the HBM framework, these negative perceptions are perceived barriers, discouraging caregivers from accessing services. Conversely, positive views align with perceived benefits, offering opportunities for community sensitization campaigns.

5.3 Objective Three: Challenges in Accessing and Utilizing CP Rehabilitation Services

The study identified financial constraints (73.4%), lack of awareness (62.2%), transportation difficulties (40.8%), and stigma (51%) as major barriers. Respondents who had not sought rehabilitation cited high costs, service unavailability, and lack of understanding of benefits. Qualitative findings highlighted additional challenges:

"You will have to meet a physiotherapy appointment for your child but you have been in and out of hospital for a week and have no money at this point." R6, FGD2– caregiver)

"Sometimes people prefer traditional healers because they trust them more than hospital physiotherapists." (R2, FGD3– caregiver)

These findings echo prior research in Uganda and LMICs, which identifies poverty, transport costs, long waiting times, and cultural beliefs as significant barriers to rehabilitation service utilization (Donald et al., 2014; Kakooza-Mwesige, 2016; Zuurmond et al., 2018).

Nearly all respondents (97.7%) emphasized the need for training healthcare providers in CP management, particularly in handling and care, causes and prevention, management and treatment, and addressing stigma. This reflects documented gaps in Uganda's health system, where rehabilitation services are limited, concentrated in urban hospitals, and human resource capacity is low (WHO, 2017; Kakooza-Mwesige,2016).

Within the HBM, these constraints represent perceived barriers. Importantly, even when perceived benefits are high, structural obstacles prevent service uptake. Weak cues to action (limited information on available services) and low self-efficacy (caregivers' belief they can overcome barriers) further compound the problem.

5.4 Integration of Findings

The study demonstrates a clear link between knowledge, attitudes, and barriers to rehabilitation services. Higher knowledge levels were associated with positive attitudes and recognition of the importance of rehabilitation, while low awareness, stigma, and financial constraints hindered service utilization. Qualitative insights provided contextual understanding, showing that cultural beliefs, mistrust in medical interventions, and limited spousal support further restrict access.

These findings are consistent with the Health Belief Model, highlighting how perceived severity, perceived barriers, and cues to action influence health-seeking behaviors (Rosenstock, 1974). In this study, awareness and personal experience with CP served as cues to action, while stigma and financial challenges acted as barriers.

Chapter Six

Recommendation and Conclusion

5.5 Recommendations

1. **Community Awareness Campaigns:** Targeting misconceptions about CP causation and transmission can improve knowledge and reduce stigma.
2. **Capacity Building for Healthcare Providers:** Training on CP management, handling, and rehabilitation is critical for improving service quality.
3. **Accessibility Measures:** Addressing financial and transport barriers, possibly through subsidies, outreach programs, or decentralized rehabilitation services, can enhance uptake.
4. **Policy and Program Integration:** Inclusive policies supporting CBR and urban rehabilitation services are essential for improving outcomes for children with CP in low-resource settings.

5.6 Conclusion

Objective One: Knowledge and Awareness of Cerebral Palsy

More than half of respondents had heard of CP, but biomedical knowledge was limited and often overshadowed by misconceptions linking CP to witchcraft, curses, or parental wrongdoing. This gap between awareness and accurate knowledge highlights the persistence of cultural beliefs and inadequate public education. It can be concluded that while CP is recognized by name, meaningful understanding of its causes, management, and potential for rehabilitation remains low in the community.

Objective Two: Attitudes and Perceptions Toward CP

Community attitudes toward CP were mixed. Quantitative results showed that respondents familiar with CP were less comfortable interacting with affected individuals, less supportive of employment opportunities, and less accepting of family life for people with CP. Qualitative narratives confirmed widespread stigma, social isolation, and negative stereotypes. At the same time, many respondents expressed belief that children with CP could live fulfilling lives and overwhelmingly valued the importance of rehabilitation. This suggests that awareness does not automatically improve perceptions, and stigma continues to limit inclusion despite recognition of CP's rehabilitative potential.

Objective Three: Challenges and Barriers to Rehabilitation Services

Despite strong acknowledgment of the importance of rehabilitation, multiple barriers hinder access. Financial constraints, transport challenges, negative health worker attitudes, and limited availability of services were consistently reported. Caregivers also highlighted stigma and inadequate information about available services. These findings conclude that while demand for rehabilitation exists, structural, social, and systemic barriers prevent consistent utilization of services for children with CP in Kawempe.

Conclusion

This study set out to examine community knowledge, attitudes and perceptions, and barriers to accessing rehabilitation services for children with cerebral palsy (CP) in Kawempe Division, Kampala. Findings revealed that while just over half of respondents were aware of CP, their knowledge was often incomplete or inaccurate, with many unable to identify it as a neurological condition or recognize appropriate management such as physiotherapy. This demonstrates that awareness does not necessarily translate into meaningful understanding, and that misconceptions—such as attributing CP to curses or witchcraft—continue to persist in the community.

Community attitudes and perceptions were found to be mixed, reflecting both acceptance and stigma. Although many respondents believed that children with CP could live fulfilling lives and valued the importance of rehabilitation, a substantial proportion expressed discomfort with social interaction, doubted employability, or opposed family life for individuals with CP. Such ambivalence highlights the ongoing burden of stigma and exclusion in urban informal settings. Barriers to accessing rehabilitation services further compound these challenges. Financial constraints, lack of information, limited service availability, and stigma were consistently reported, with caregivers in particular underscoring the strain of costs and long travel distances. Taken together, these findings underscore the need for integrated responses: community education to address misconceptions and reduce stigma, healthcare worker training to improve early recognition and quality of care, and the expansion of affordable, community-based rehabilitation services. Addressing these gaps is essential to promote inclusion and improve the quality of life for children with CP and their families in Uganda.

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APPENDICES

APPENDIX I: INFORMED CONSENT FORM

Informed Consent

Dear Respondent,My name is Ruth Nakalembe, a student at Uganda Christian University Mukono, pursuing a Master's degree in Public Health under the supervision of Prof. Ezekiel Mupere from Makerere University. I am conducting a study titled: *Exploring Community Knowledge, Attitudes, and Perceptions towards Cerebral Palsy Family Rehabilitative Services in Kawempe Division, Kampala.*

The specific objectives of the study are:

1. To explore the coNmmunity level of knowledge of cerebral palsy family rehabilitative services
2. To assess the community attitudes and perceptions towards cerebral palsy family rehabilitative services
3. To assess the community challenges of access and use of cerebral palsy family rehabilitative services

You have been randomly selected as an experienced member of this community. Your participation in this study is voluntary you are free to participate or not in this study. I trust that you will participate in this study and your responses will be helpful to inform my research questions. The interview will take at least 40 minutes Your responses will be treated with utmost confidentiality.

Potential Risks and Discomfort

There are no foreseeable risks associated with answering the interview questions. The information you provide will not be used to judge your community's health facilities or community health workers regarding their capacity to provide CP family rehabilitative services.

Voluntary Participation

Your participation is entirely voluntary and will not affect you or your community members in any way, including eligibility for future interventions. If you choose not to participate, you are free to excuse yourself. Even during the interview, you can decline to answer any questions you feel uncomfortable with or stop the interview at any time without penalty.

Confidentiality

Your responses will be treated as strictly confidential. While we may collect your name to link your responses to follow-up assessments or interventions, all data will be anonymized. You or your community will be assigned a unique code known only to the study team. All data collected will be stored securely in password-protected files and locked cabinets, accessible only to the researchers and collaborators. The data will be used solely for analysis to inform programming and innovations in CP family rehabilitative services.

Compensation

We appreciate your time and effort in this interview. You will receive UGX 20,000 as a token of appreciation for your participation.

Dissemination of Results

The findings of this study will be shared during stakeholder meetings involving representatives from the Ministry of Health, Makerere University, division authorities, implementing partners, and donors. Initial findings will be discussed in these engagements to guide program improvements.

Questions

If you have questions about this study or the procedures, please feel free to ask.

Contact Information

For further inquiries or concerns regarding this study, you may contact:

Ms. Ruth Nakalembe, Principal Investigator: **on 0782145507**

Statement of Informed Consent

I would now like to seek your consent before proceeding. Do you agree to participate in this study?

Respondent Response: Yes / No

I have read (or had read to me) the procedures described above. My questions have been answered to my satisfaction, and I voluntarily agree to participate in this study. I will provide my consent by signing below or marking my response on the mobile device used for this interview.

Date: ....

Participant Signature: ....

Interviewer Signature: ....

APPENDIX II: HOUSEHOLD SURVEY/QUESTIONNAIRE

Introduction:

Dear Respondent, My name is Ruth Nakalembe, a student at Uganda Christian University Mukono, pursuing a Master's degree in Public Health under the supervision of Prof. Ezekiel Mupere from Makerere University. I am conducting a study on **UNDERSTANDING COMMUNITY KNOWLEDGE, ATTITUDES AND PERCEPTIONS TOWARDS CEREBRAL PALSY FAMILY REHABILITATIVE SERVICES IN KAWEMPE DIVISION, KAMPALA .** The specific objectives of the study are:

1. To explore the community level of knowledge of cerebral palsy family rehabilitative services
2. To assess the community attitudes and perceptions towards cerebral palsy family rehabilitative services
3. To assess the community challenges of access and use of cerebral palsy family rehabilitative services

You have been randomly selected as an experienced member of this community. Your participation in this study is voluntary you are free to participate or not in this study. I trust that you will participate in this study and your responses will be helpful to inform my research questions. The interview will take at least 25 minutes Your responses will be treated with utmost confidentiality.

In case you have any questions related to this survey ask before we have our conversation or contact at 0782145507. Do you affirmatively agree to participate in this study? 1. Yes   2. No

Section 1: Socio demographics			
	Questions	Answers	Code
1	Division	Kawempe	1
2	Parish		
3	Zone/Village		
4	What is the sex of the respondent?	1.Male 2.Female	1 2
5	What is your role in the community?	1.Community Resident 2.Community Health Worker 3.Opinion Leader 4.Healthcare Facility Staff	1 2 3 4 5
6	How old are you in complete years?		2
7	Marital status of respondent	1.Single	1

		2.Married/cohabiting 3.Separated/ Divorced 4.Widowed 5.Other (specify)……………..	2 3 4 5
8	What is the highest level of education attained?	1.No formal education 2.Only primary 3.Secondary 4.Tertiary certificate 5.Tertiary Diploma 6.University Degree Others Specify…..	1 2 3 4 5 6 7
9	What is your main source of income?	1.Farming 2.Formal employment 3.Business/trade 4.Casual labor 5.No Income/depend on other household members 6.Others/ Specify	1 2 3 4 5 6
10	How many children do you have?		

11	Do you have a child with Cerebral Palsy?	1.Yes 2.No	1 2
12	Do you know any family having a child with cerebral palsy	1.Yes 2.No	1 2
Section 2: **Knowledge about Cerebral Palsy**			
13	Have you heard of cerebral palsy (CP) before?	1.Yes 2.No	1 2
14	If yes, what do you know about CP? (Open-ended)		
15	What are some of the causes of CP (select all that apply)?	1.During pregnancy 2.During childbirth 3.After birth 4.Genetic factors 5.Childhood illness or injury 6.Don't know 7.Others specify	1 2 3 4 5 6 7
16	What are some of the signs and symptoms of CP (select all that apply)?	1.Difficulty walking 2.Difficulty talking	1 2 3

		3.Muscle stiffness or weakness 4.Seizures 5.Developmental delays 6.Vision or hearing problems 7.Don't know 8.Other (please specify)	4 5 6 7 8
Cerebral palsy Rehabilitation			
17	Have you heard of any rehabilitation services available for individuals with CP in Kawempe Division?	1.Yes 2.No	1 2
18	If yes, where have you heard about these services (select all that apply)? Healthcare facility	1.Healthcare facility 2.Community health worker (CHW) 3.Radio/television 4.Family/friends 5.Don't know 6.Other (please specify)	1 2 3 4 5 6
19	Have you ever sought rehabilitation services for a child with CP?	1.Yes 2.No	1 2

20	If yes, where did you seek the services from (select all that apply)?	1.Healthcare facility	1
		2.Community health worker (CHW)	2
		3.Radio/television	3
		4.Family/friends	4
		5.Religious leader	5
		6.Traditional healers	6
		7.Family care groups	7
		8. Others specify	8
21	If yes, what type of services did you seek (select all that apply)?	1.Physiotherapy	1
		2.Occupational therapy	2
		3.Speech therapy	3
		4.Special education	4
		5.Don't know	5
		6.Other (please specify)	6
22	If you have not sought rehabilitation services, what are the reasons (select all that apply)?	1.Don't know about available services	1
		2.The cost is too high	2
		3.Services are not available in my community	3
			4

		4.Transportation difficulties 5.Lack of awareness of the benefits 6.Cultural beliefs or practices 7.Other (please specify)	5 6 7
23	Do you think it's important to have rehabilitation services for individuals with cerebral palsy?	1.Yes 2.No	1 2
	If yes, what are the perceived importances of rehabilitation services for individuals with CP?		
24	How would you rate the quality of existing cerebral palsy rehabilitation services? (1-5 scale)	1.Very poor 2.Poor 3.Fair 4.Good 5.Excellent	1 2 3 4 5
Section 4: Attitudes and Perceptions			

25	How comfortable are you interacting with individual or children with CP?	1.Very comfortable 2.Somewhat comfortable 3.Neutral 4.Somewhat uncomfortable 5.Very uncomfortable	1 2 3 4 5
26	In your opinion, how well are children with CP treated in your community?	1.Very well 2.Somewhat well 3.Neutral 4.Somewhat poorly 5.Very poorly	1 2 3 4 5
27	Do you believe that children with CP can live fulfilling lives?	1.Strongly agree 2.Agree 3.Neutral 4.Disagree 5.Strongly disagree	1 2 3 4 5
28	How important do you think it is for children with CP to receive rehabilitation services?	Very important Somewhat important Neutral Somewhat unimportant Not important at all	1 2 3 4 5

29	Would object letting your children play with another child having cerebral palsy?	Strongly disagree Disagree Neutral Agree Strongly agree	1 2 3 4 5
30	Do you think people with cerebral palsy should not be employed to jobs like other people?	Strongly disagree Disagree Neutral Agree 5.Strongly agree	1 2 3 4 5
31	Do you think people with cerebral palsy should not make and maintain a family of their own?	1.Strongly disagree 2. Disagree 3. Neutral 4.Agree 5.Strongly agree	1 2 3 4 5
32	In your opinion, how does the community generally view individuals with CP? (Open-ended)		
33	In your opinion, how well are children with CP treated in your community?	Very well Somewhat well Neutral Somewhat poorly	1 2 3 4

		Very poorly	5
34	Do you believe that children with CP can live fulfilling lives?	Strongly agree Agree Neutral Disagree Strongly disagree	1 2 3 4 5
35	How important do you think it is for children with CP to receive rehabilitation services?	Very important Somewhat important Neutral Somewhat unimportant Not important at all	1 2 3 4 5
	Barriers and Facilitators		
36	What are the main barriers preventing individuals with cerebral palsy from accessing rehabilitation services? (Select all that apply)	1.Financial constraints 2.Lack of transportation means 3.Lack of awareness about available services 4.Stigma associated with disabilities 5.Other (please specify)	1 2 3 4 5
37	What are the things that motivate you/other people or make it easy for you/others to	1.Family support 2.Therapist support	1 2

	access and use the rehabilitation services for the child with cerebral palsy?	3.Nearby rehabilitation services 4.Financial assistance	3 4
38	What factors do you think would improve access to cerebral palsy rehabilitation services? (Select all that apply)	1.Increasing awareness in the community 2.Providing financial assistance for treatment 3.Enhancing transportation options 4.Training healthcare providers on CP management 5.Other (please specify)	1 2 3 4 5
39	Do you think there is a need for more training or education on cerebral palsy among healthcare providers in Kawempe Division?	Yes No	1 2
40	What topics related to cerebral palsy would you like to see included in training programs? (Open-ended)		

APPENDIX III: KEY INFORMANT GUIDE

Introduction:

Dear Respondent, My name is Ruth Nakalembe, a student at Uganda Christian University Mukono, pursuing a Master's degree in Public Health under the supervision of Prof. Ezekiel Mupere from Makerere University. I am conducting a study on **UNDERSTANDING COMMUNITY KNOWLEDGE, ATTITUDES AND PERCEPTIONS TOWARDS CEREBRAL PALSY FAMILY REHABILITATIVE SERVICES IN KAWEMPE DIVISION, KAMPALA .** The specific objectives of the study are:

1. To explore the community level of knowledge of cerebral palsy family rehabilitative services
2. To assess the community attitudes and perceptions towards cerebral palsy family rehabilitative services
3. To assess the community challenges of access and use of cerebral palsy family rehabilitative services

You have been randomly selected as an experienced member of this community. Your participation in this study is voluntary you are free to participate or not in this study. I trust that you will participate in this study and your responses will be helpful to inform my research questions. The interview will take at least 25 minutes Your responses will be treated with utmost confidentiality.

In case you have any questions related to this survey ask before we have our conversation or contact at 0782145507. Do you affirmatively agree to participate in this study? 1. Yes 2. No

Section 1: Demographics

1. What is your age?

2. Gender: Male/Female

3. Occupation/Role: Community resident member/Community health worker/Opinion leader/Healthcare facility staff/Kawempe Division health team member

4. Education level: Primary/Secondary/Tertiary/Other (specify)

Section 2: Knowledge and Attitudes

1. What do you know about cerebral palsy?

2. Have you ever encountered a person with cerebral palsy? If yes, how did you interact with them?

3. What are your attitudes towards people with cerebral palsy?

4. Do you think cerebral palsy can be managed or treated? Why/Why not?

5. Have you heard about cerebral palsy rehabilitation services? If yes, what do you know about them?

Section 3: Access and Utilization

1. Do you know where to access cerebral palsy rehabilitation services in Kawempe Division?

2. Have you ever referred someone with cerebral palsy to a rehabilitation service? If yes, what was the outcome?

3. What challenges do you think people with cerebral palsy face in accessing rehabilitation services?

4. How do you think rehabilitation services can be improved for people with cerebral palsy?

Section 4: Perceived Facilitators and Barriers

1. What do you think facilitates access to cerebral palsy rehabilitation services? (e.g., awareness, transportation, support)

2. What barriers do you think prevent people from accessing cerebral palsy rehabilitation services? (e.g., stigma, cost, distance)

3. How can we address these barriers and improve access to rehabilitation services?

APPENDIX IV: FGD GUIDE FOR COMMUNITY RESIDENTS

Introduction (5 minutes):

Dear Respondent, My name is Ruth Nakalembe, a student at Uganda Christian University Mukono, pursuing a Master's degree in Public Health under the supervision of Prof. Ezekiel Mupere from Makerere University. I am conducting a study on **UNDERSTANDING COMMUNITY KNOWLEDGE, ATTITUDES AND PERCEPTIONS TOWARDS CEREBRAL PALSY FAMILY REHABILITATIVE SERVICES IN KAWEMPE DIVISION, KAMPALA .** The specific objectives of the study are:

1. To explore the community level of knowledge of cerebral palsy family rehabilitative services

2. To assess the community attitudes and perceptions towards cerebral palsy family rehabilitative services

3. To assess the community challenges of access and use of cerebral palsy family rehabilitative services

You have been randomly selected as an experienced member of this community. Your participation in this study is voluntary you are free to participate or not in this study. I trust that you will participate in this study and your responses will be helpful to inform my research questions. The interview will take at least 25 minutes Your responses will be treated with utmost confidentiality.

In case you have any questions related to this survey ask before we have our conversation or contact at 0782145507. Do you affirmatively agree to participate in this study? 1. Yes 2. No

Section 1: Knowledge and Attitudes (20 minutes):

1. What comes to mind when you hear "cerebral palsy"?
2. What do you know about cerebral palsy causes, symptoms, and management?
3. How do you think people with cerebral palsy are viewed in your community?
4. Share any personal experiences or encounters with individuals with cerebral palsy.

Section 2: Access and Utilization (20 minutes):

1. Are you aware of any cerebral palsy rehabilitation services in Kawempe Division?
2. How accessible are these services to community members?
3. What challenges do you think people with cerebral palsy face in accessing rehabilitation services?
4. Have you referred anyone to these services? What was the outcome?

Section 3: Perceived Facilitators and Barriers (20 minutes):

1. What factors facilitate access to cerebral palsy rehabilitation services?
2. What barriers prevent people from accessing these services?

3. How can we address these barriers and improve access?

4. What role can community members, healthcare workers, and health teams play in promoting access?

Section 4: Open Discussion (15 minutes):

1. Is there anything else you'd like to share about cerebral palsy or rehabilitation services?

2. Any suggestions for improving awareness, access, or services?

APPENDIX V: WORKPLAN

No.	Activity	March 2023 To April 2024		May to August 2024		September 2024	October 2024	November 2024	December 2024 To March 2025	
01	Proposal Development	■	■							
02	Ethical Approval							■		
03	Study Site Clearance							■		
04	Data Collection								■	

05	**Data Analysis**									■
06	**Dissertation Writing and submission**									■
07	**Dissemination of study findings**									■

APPENDIX VI: BUDGET ESTIMATE FOR THE RESEARCH PROPOSAL

NUMBERING	ITEMS	QUANTITY	UNIT COST(/=)	TOTAL COST(/=)
1.	Stationary	1	100,000/=	100,000/=
2.	4 Research Assistants	5 working days	100,000	2,000,000/=
3.	Quantitative Respondents	300	20,000	6,000,000/=
4.	11 FGD	66	20,000	1,320,000/=

5.	Key informants	4	20,000	80,000/=
6.	Binding	3 copies	2,000	6,000/=
7.	Printing	150 pages	100	15,000/=
8.	Photocopying	300pages	100	30,000/=
9.	Data analysis	1	500,000	500,000
		TOTAL	**427,200**	**10,051,000/=**

APPENDIX VII: TRANSLATED TOOLS

Questionnaire for Community Residents on Cerebral Palsy Rehabilitation Services in Kawempe Division, Kampala

Enyanjula:

Nkulamusiza nyabo/sebo, Amannya gange nze Ruth Nakalembe, omuyizi mu Uganda Christian University Mukono, asoma diguli eyookubiri mu by'obulamu bw'abantu nga alabirirwa Prof. Ezekiel Mupere okuva mu Makerere University. Nkola okunoonyereza ku UNDERSTANDING COMMUNITY KNOWLEDGE, ATTITUDES AND PERCEPTIONS TOWARDS CEREBRAL PALSY FAMILY REHABILITATIVE SERVICES IN KAWEMPE DIVISION, KAMPALA .

Ebigendererwa ebitongole eby’okunoonyereza kuno bye bino:

1. Okunoonyereza ku mutendera gw‟okumanya kw‟abantu b‟omukitundu ku mpeereza y‟okuddaabiriza amaka g‟abalwadde b‟obwongo

2. Okukebera endowooza n‟endowooza z‟abantu b‟omukitundu ku mpeereza y‟okuddaabiriza amaka g‟obulwadde bw‟obwongo

3. Okukebera okusoomoozebwa kw‟ekitundu mu kufuna n‟okukozesa empeereza y‟okuddaabiriza amaka g‟obulwadde bw‟obwongo

Olondeddwa mu ngeri ey'ekifuulannenge ng'omuntu alina obumanyirivu mu kitundu kino. Okwetaba kwo mu kunoonyereza kuno kwa kyeyagalire oli wa ddembe okwetaba mu kunoonyereza kuno oba nedda. Nneesiga nti ojja kwetaba mu kunoonyereza kuno era eby'okuddamu byo bijja kuyamba okumanyisa ebibuuzo byange eby'okunoonyereza. Yintaviyu ejja kutwala waakiri eddakiika 25 Eby'okuddamu byo bijja kukwatibwa mu kyama ekisukkiridde. Mu mbeera nga olina ekibuuzo kyonna ekikwata ku kunoonyereza kuno buuza nga tetunnaba kuba na mboozi yaffe oba tuukirira ku 0782145507. Okkiriza bulungi okwetaba mu kunoonyereza kuno?1. Yee 2. Nedda

Section 1: Socio demographics (RE-AIM - Reach)			
	Questions	Answers	Code
1	Gombolola	Kawempe	1
2	Omuluka		

3	Ekyaalo		
4	Kikula ki ky’oyo abuuziddwa?	Omusajja Omukazi	1 2
5	Omulimu gwo mu kitundu	Omutuuze w'omukitundu Omukozi w'ebyobulamu mu kitundu Omukulembeze w'endowooza Abakozi mu kifo ky'ebyobulamu Abalala balambika	1 2 3 4 5
6	Olina emyaka emeka mu myaka emijjuvu?		2
7	Oli mufumbo?	Simufumbo Mufumbo/abeera wamu Ayawukana/ Yanoba Nnamwandu Ebirala (lambika).................	1 2 3 4 5
8	Omutendera ki ogw’obuyigirize ogw’oku ntikko ogutuukiddwaako?	Tewali buyigirize butongole Playimale yokka Secondire	1 2 3 4

		Tertiary certificate Tertiary Diploma University Degree Ebirala Lambiika.....	5 6 7
9	Ensibuko y'ensimbi yo enkulu y'eruwa?	Okulima Emirimu emitongole Business/busuubuzi Abakozi aba bulijjo Tewali Nyingiza/kisinziira ku bantu abalala mu maka Abalala/ Laga	1 2 3 4 5
10	Olina abaana bameka?		
11	Olina omwana alina obulwadde bwa bw'okusannyalala kw'obwongo?	Yee Nedda	1 2
Section 2: **Knowledge about Cerebral Palsy (CFIR - Intervention Characteristics)**			
12	Wali owuliddeko ku bulwadde bwa bw'okusannyalala kw'obwongo emabegako?	Yee Nedda	1 2
13	Bwe kiba nti yee,Mu ndowooza yo, kiki ky'omanyi ku CP?? (Open-ended)	CP bulwadde bwa busimu obukosa entambula,	1

		okutonnya kw’ebinywa, n’okuyimirira, ebiseera ebisinga buva ku kwonooneka kw’obwongo nga tebannazaalibwa oba nga bazaalibwa.	
		Abantu abalina CP bayinza okuba n’obuzibu mu kukola emirimu gy’omubiri, okukaluba oba obunafu bw’ebinywa, era bayinza okuba n’ensonga ne balance and coordination.'	2
		Nkimanyi nti waliwo ebika bya CP eby'enjawulo, nga spastic, dyskinetic, ne ataxic, nga buli kimu	3

		kikosa omubiri mu ngeri ez'enjawulo.	4
		CP buyinza okuva ku bintu nga okuzaala nga tannatuuka, obutaba na mukka gwo’kusa, ng’azaala, yinfekisoni ng’oli lubuto, oba okulumwa obwongo oluvannyuma lw’okuzaalibwa.'	5
		CP esobola okukosa obusobozi bw’omuntu okukola emirimu gya bulijjo, gamba ng’okutambula, okwogera, oba okulya, okusinziira ku ku buzibu bw'embeera.	6
			7

		Tewali ddagala lya CP, naye obujjanjabi bw'omubiri, obujjanjabi bw'emirimu, n'oluusi okulongoosa bisobola okuyamba okuddukanya obubonero n'okutumbula omutindo gw'obulamu. Abaana abalina CP batera okwetaaga obuweereza obw’enjawulo obw’okusomesa ne tekinologiya ayamba okuwagira okuyiga kwabwe n’empuliziganya. Wakyaliwo obutategeeragana bungi n’okuvumwavumwa okwetoolodde CP,	8 9 10

		ekiyinza okufuula okusoomoozebwa eri abantu abalina embeera okukkirizibwa n’okuyingizibwa mu bantu. Okubeera n‟omwana alina CP kiyinza okuba ekizibu eri amaka, nga kyetaagisa obuyambi obw‟amaanyi mu nneewulira, mu mubiri, ne mu by‟ensimbi. Waliwo ebibiina bingi n‟ebibiina ebiwagira ebiriwo okuyamba amaka n‟abantu ssekinnoomu abalina CP okukwatagana n‟eby‟obugagga ne buli omu ku bannaabwe.'·	

14	Biki ebimu ku bivaako CP (londa byonna ebikwatagana)?	Mu kiseera ky'olubuto Mu kiseera ky'okuzaala Oluvannyuma lw'okuzaala Ensonga z'obuzaale Obulwadde oba obuvune mu buto Tomanyi	1 2 3 4 5 6
15	Bubonero ki obumu ku bubonero bwa CP (londa byonna ebikwatagana)?	Obuzibu Okutambula Difficulty Okwogera Ekinywa Obugumu oba Obunafu Ebikolwa Okulwawo Enkulaakulana Okulaba oba Ebizibu by'Okuwulira Tomanyi Ebirala (nsaba olage)	1 2 3 4 5 6 7
16	Owulira bulungi otya okukolagana n’abantu ssekinnoomu abalina CP?	Kinyuma nnyo Ekinyuma Kiriwakati Ekinyuma Ekitali nnyo	1 2 3 4 5

17	Mu ndowooza yo, okutwalira awamu abantu b‟omukitundu batunuulira batya abantu ssekinnoomu abalina CP? (Eggule)	CP etunuulirwa ng'ekikolimo oba ekiva mu bulogo	1
		Abantu ssekinnoomu abalina CP batera okuvumwavumwa n'okusosolwa	2
		Amaka agalina abaana abalina CP goolekagana n'okwekutula ku bantu	3
		CP kirowoozebwa nti yasiigibwa oba ekibonerezo okuva eri bakatonda	4
		Abantu ssekinnoomu abalina CP basaasirwa era balabibwa ng’ebintu eby’obuzirakisa	5
			6

		Waliwo enzikiriza nti abantu ssekinnoomu abalina CP tebalina kye basobola kukola era tebasobola kutuuka ku bingi	
		CP etera okutegeerwa obubi ng’embeera etasobola kuba yaddukanyizibwa	7
		Abantu b‟omukitundu abamu tebamanyi bivaako n‟enzirukanya ya CP	8
		Abasawo ab‟ekinnansi batera okwebuuzibwako mu kifo ky‟abakugu mu by‟obujjanjabi	9
		Emikolo oba enkola z‟obuwangwa	10

		zikozesebwa mu kugezaako ‘okuwonya’ CP Ebitundu ebimu byesigamye ku nzikiriza z‟obuwangwa okunnyonnyola n‟okuddukanya CP CP kitunuulirwa ng'omugugu gw'ensimbi n'ebirowoozo ku maka Abalala balambika	 11 12 13
Cerebral palsy Rehabilitation			
18	Owulidde ku buweereza bwonna obw’okuddaabiriza abantu ssekinnoomu abalina CP mu Division y’e Kawempe?	Yee Nedda	1 2
19	Bwe kiba nti yee, owulidde wa ku mpeereza zino (londa byonna ebikwata ku nsonga eno)?	Ekifo eky'ebyobulamu Omukozi w'ebyobulamu mu kitundu (CHW) Leediyo/ttivvi	1 2 3

		Amaka/emikwano Mukulembeze w'eddiini Abasawo b'ekinnansi Ebibiina by'amaka Abalala balambika	4 5 6
20	Wali onoonyezzaako empeereza y"okuddaabiriza omwana alina CP?	Yee Nedda	1 2
	If yes, where did you seek the services from (select all that apply)?Bwe kiba nti yee, empeereza wazinoonya wa (londa byonna ebikwata ku nsonga eno)?	Ekifo eky'ebyobulamu Omukozi w'ebyobulamu mu kitundu (CHW) Leediyo/ttivvi Amaka/emikwano Mukulembeze w'eddiini Abasawo b'ekinnansi Ebibiina by'amaka Abalala balambika	1 2 3 4 5 6 7 8
21	Bwe kiba nti yee, mpeereza ya kika ki gye wanoonya (londa zonna ezikwata)?	Obujjanjabi bw'omubiri Obujjanjabi bw'emirimu Obujjanjabi bw'okwogera Okusomesebwa okw'enjawulo Endya	1 2 3 4 5 6

		Ebyuma ebiyamba Simanyi Ebirala (nsaba olage)	7 8
22	Bw’oba tonoonyezza buweereza bwa kuddaabiriza, nsonga ki (londa byonna ebikwatagana)?	Tomanyi ku mpeereza eriwo Ensimbi nnyingi nnyo Empeereza teziri mu kitundu kyange Ebizibu by'entambula Obutamanya migaso Enzikiriza oba enkola z'obuwangwa Ebirala (nsaba olambike)	1 2 3 4 5 6 7
23	Olowooza kikulu okuba n‟obuweereza bw‟okuddaabiriza abantu ssekinnoomu abalina obulwadde bw‟okusannyalala kw‟obwongo?	Yee Nedda	1 2
24	Bwe kiba nti yee, bukulu ki obulowoozebwa nti obuweereza bw‟okuddaabiriza abantu ssekinnoomu abalina CP?	Okuddaabiriza kuyamba okulongoosa entambula n‟enkola y‟omubiri.	1 2

		Okuddaabiriza kusobozesa abantu ssekinnoomu abalina CP okukola emirimu gya buli lunaku nga beetongodde.	3
		Okuddaabiriza kuyinza okukendeeza ku bulumi mu mubiri n‟obutabeera bulungi.	4
		Okuddaabiriza kulongoosa omutindo gw‟obulamu okutwalira awamu eri abantu ssekinnoomu abalina CP.	5
		Okuddaabiriza kyongera okwetwala n‟okwesiga.	6
		Okuddaabiriza kuyamba okutumbula obulamu bw‟omutwe n‟obulamu obulungi mu nneewulira.	7

		Okuddaabiriza kwanguyiza okwegatta mu kitundu.	
		Okuddaabiriza kukubiriza okwetaba mu byenjigiriza n‟emirimu gy‟embeera z‟abantu.	8
		Okuddaabiriza kukendeeza ku kuvumwavumwa n‟okutumbula okukkirizibwa mu kitundu.	9
		Okuddaabiriza kusobozesa abantu ssekinnoomu abalina CP okufuna obuyigirize n‟okutendekebwa mu by‟emikono.	10
			11

		Okuddaabiriza kwongera ku busobozi bw‟okwefuga mu by‟enfuna.	
		· Okuddaabiriza kuwagira amaka mu kuddukanya embeera n‟okukendeeza ku buzito bw‟ensimbi.	
		Okuddaabiriza kuyamba okuziyiza ebizibu ebyokubiri nga obulema.	12
		Okuddaabiriza kukendeeza ku bulabe bw‟obulamu obwonoonebwa.	13
		Okuddaabiriza amangu kuyinza okulongoosa ebivaamu eby‟ekiseera ekiwanvu.	14
		Okuddaabiriza kuwa abalabirira obukugu	15

		n‟okumanya okuwagira obulungi abantu ssekinnoomu abalina CP. Okuddaabiriza kwanguyiza omugugu gw‟okulabirira n‟okukendeeza ku situleesi. Okuddaabiriza kuwa abalabirira obuyambi mu nneewulira nga bayita mu kubudaabudibwa n‟okusomesebwa.	 16 17
25	Omutindo gw’obuweereza obuliwo obw’okuddaabiriza obulwadde bw’okusannyalala kw’obwongo wandipimye otya? (1-5 minzaani)	Mbii nnyo Mbii Obwenkanya Kirungi Kirungi nnyo	1 2 3 4 5

Section 4: Attitudes and Perceptions (RE-AIM - Effectiveness, Adoption)			
26	Obeera mwetegefu otya okukolagana n‟abantu abalina CP?	Kinyuma nnyo	1
		Ekinyuma	2
		Neutral	3
		Ekinyuma	4
		Ekitali nnyo	5
27	Mu ndowooza yo, abaana abalina CP bayisibwa bulungi batya mu kitundu kyo?	Kirungi nnyo	1
		Kirungi nnyo	2
		Talina ludda	3
		Ekibi nnyo	4
		Ekibi nnyo	5
28	Okkiririza nti abaana abalina CP basobola okubeera obulamu obumatiza?	Nzikiriziganya nnyo	1
		Nzikiriziganya	2
		Talina ludda	3
		Sikkiriziganya	4
		Sikkiriziganya nnyo	5
29	Olowooza kikulu kitya abaana abalina CP okufuna obuweereza bw‟okuddaabiriza?	Kikulu nnyo	1
		Ekikulu ekitonotono	2
		Talina ludda	3
		Ekitali kikulu	4
		Si kikulu n'akatono	5

Barriers and Facilitators			
30	Biki ebikulu ebiziyiza abantu ssekinnoomu abalina obulwadde bw‟okusannyalala kw‟obwongo okufuna obuweereza bw‟okuddaabiriza? (Londa byonna ebikwatagana)	Ebizibu by'ensimbi Ebbula ly'entambula Obutamanya ku mpeereza eriwo Okuvumwavumwa okukwatagana n'obulemu Ebirala (nsaba olage)	1 2 3 4 5
31	Bintu ki ebikukubiriza oba ebikwanguyira okufuna n‟okukozesa empeereza y‟okuddaabiriza omwana alina obulwadde bw‟okusannyalala kw‟obwongo?	Obuyambi bw'amaka Obuyambi bw'omusawo Empeereza y'okuddaabiriza okumpi Obuyambi bw'ensimbi Abalala balambika	1 2 3 4 5
32	Olowooza nsonga ki ezandirongoosezza okufuna obuweereza bw’okuddaabiriza obulwadde bw’okusannyalala kw’obwongo? (Londa byonna ebikwatagana)	Okwongera okumanyisa abantu mu kitundu Okuwa obuyambi bw'ensimbi mu bujjanjabi Okwongera ku ngeri y'entambula	1 2 3 4

		Okutendeka abakola ku by'obulamu ku nzirukanya ya CP Ebirala (nsaba olage)	5
33	Olowooza waliwo obwetaavu okwongera okutendeka oba okusomesebwa ku bulwadde bw'okusannyalala kw'obwongo mu bakola ku by'obulamu mu Divizoni y'e Kawempe?	Yee Nedda	1 2
34	Biki ebikwata ku bulwadde bw'okusannyalala kw'obwongo by'oyagala okumanya? (Eggule)		

Focused Group Discussion Guide for Community residents

Enyanjula (eddakiika 5):

Enyanjula:

Mbalamusiza, Amannya gange nze Ruth Nakalembe, omuyizi mu Uganda Christian University Mukono, asoma diguli eyookubiri mu by'obulamu bw'abantu nga alabirirwa Prof. Ezekiel Mupere okuva mu Makerere University. Nkola okunoonyereza ku UNDERSTANDING COMMUNITY KNOWLEDGE, ATTITUDES AND PERCEPTIONS TOWARDS CEREBRAL PALSY FAMILY REHABILITATIVE SERVICES IN KAWEMPE DIVISION, KAMPALA .

Ebigendererwa ebitongole eby'okunoonyereza kuno bye bino:

1. Okunoonyereza ku mutendera gw‟okumanya kw‟abantu b‟omukitundu ku mpeereza y‟okuddaabiriza amaka g‟abalwadde b‟obwongo

2. Okukebera endowooza n‟endowooza z‟abantu b‟omukitundu ku mpeereza y‟okuddaabiriza amaka g‟obulwadde bw‟obwongo

3. Okukebera okusoomoozebwa kw‟ekitundu mu kufuna n‟okukozesa empeereza y‟okuddaabiriza amaka g‟obulwadde bw‟obwongo

Olondeddwa mu ngeri ey’ekifuulannenge ng’omuntu alina obumanyirivu mu kitundu kino. Okwetaba kwo mu kunoonyereza kuno kwa kyeyagalire oli wa ddembe okwetaba mu kunoonyereza kuno oba nedda. Nneesiga nti ojja kwetaba mu kunoonyereza kuno era eby’okuddamu byo bijja kuyamba okumanyisa ebibuuzo byange eby’okunoonyereza. Yintaviyu ejja kutwala waakiri eddakiika 25 Eby’okuddamu byo bijja kukwatibwa mu kyama ekisukkiridde. Mu mbeera nga olina ekibuuzo kyonna ekikwata ku kunoonyereza kuno buuza nga tetunnaba kuba na mboozi yaffe oba tuukirira ku 0782145507. Okkiriza bulungi okwetaba mu kunoonyereza kuno?1. Yeee
2. Nedda

Ekitundu 1: Okumanya n’Endowooza (eddakiika 20):

1. Kiki ekijja mu birowoozo byo ng'owulira 'cerebral palsy'?

2. Kiki ky’omanyi ku bivaako obulwadde bw’okusannyalala kw’obwongo, obubonero, n’okubuddukanya?

3. Olowooza abantu abalina obulwadde bwa cerebral palsy batunuulirwa batya mu kitundu kyo?

4. Gabana byonna by‟oyitamu oba okusisinkana n‟abantu ssekinnoomu abalina obulwadde bw‟okusannyalala kw‟obwongo.

Ekitundu 2: Okutuuka n‟Okukozesa (eddakiika 20):

1. Omanyi waliwo empeereza yonna ey'okuddaabiriza obulwadde bwa cerebral palsy mu Kawempe Division?

2. Empeereza zino zituukirirwa zitya eri abantu b‟omukitundu?

3. Olowooza kusoomoozebwa ki abantu abalina obulwadde bw‟okusannyalala kw‟obwongo bwe bayitamu mu kufuna obuweereza bw‟okuddaabiriza?

4. Waliwo omuntu yenna gw’ojuliza mu mpeereza zino? Kiki ekyavaamu?

Ekitundu 3: Abalungamya n‟ebiziyiza ebiteeberezebwa (eddakiika 20):

1. Ensonga ki eziyamba okufuna obuweereza bw‟okuddaabiriza obulwadde bw‟okusannyalala kw‟obwongo?

2. Biziyiza ki ebiremesa abantu okufuna empeereza zino?

3. Tuyinza tutya okukola ku biziyiza bino n’okulongoosa okutuuka ku bantu?

4. Omulimu ki abantu b‟omukitundu, abakozi b‟ebyobulamu, ne ttiimu z‟ebyobulamu gwe bayinza okukola mu kutumbula okufuna?

Ekitundu 4: Okukubaganya ebirowoozo mu lwatu (eddakiika 15):

1. Waliwo ekirala kyonna ky'oyagala okugabana ku cerebral palsy oba obuweereza bw'okuddaabiriza?

2. Waliwo ekiteeso kyonna ku kulongoosa okumanyisa abantu, okufuna, oba empeereza?

Webale !!!!!

KEY INFORMANT GUIDE

Enyanjula:

Nkulamusiza nyabo/sebo, Amannya gange nze Ruth Nakalembe, omuyizi mu Uganda Christian University Mukono, asoma diguli eyookubiri mu by'obulamu bw'abantu nga alabirirwa Prof. Ezekiel Mupere okuva mu Makerere University. Nkola okunoonyereza ku UNDERSTANDING COMMUNITY KNOWLEDGE, ATTITUDES AND PERCEPTIONS TOWARDS CEREBRAL PALSY FAMILY REHABILITATIVE SERVICES IN KAWEMPE DIVISION, KAMPALA .

Ebigendererwa ebitongole eby'okunoonyereza kuno bye bino:

1. Okunoonyereza ku mutendera gw‟okumanya kw‟abantu b‟omukitundu ku mpeereza y‟okuddaabiriza amaka g‟abalwadde b‟obwongo

2. Okukebera endowooza n‟endowooza z‟abantu b‟omukitundu ku mpeereza y‟okuddaabiriza amaka g‟obulwadde bw‟obwongo

3. Okukebera okusoomoozebwa kw‟ekitundu mu kufuna n‟okukozesa empeereza y‟okuddaabiriza amaka g‟obulwadde bw‟obwongo

Olondeddwa mu ngeri ey'ekifuulannenge ng'omuntu alina obumanyirivu mu kitundu kino. Okwetaba kwo mu kunoonyereza kuno kwa kyeyagalire oli wa ddembe okwetaba mu kunoonyereza kuno oba nedda. Nneesiga nti ojja kwetaba mu kunoonyereza kuno era eby’okuddamu byo bijja kuyamba okumanyisa ebibuuzo byange eby’okunoonyereza. Yintaviyu ejja kutwala waakiri eddakiika 25 Eby’okuddamu byo bijja kukwatibwa mu kyama ekisukkiridde. Mu mbeera nga olina ekibuuzo kyonna ekikwata ku kunoonyereza kuno buuza nga tetunnaba kuba na mboozi yaffe oba tuukirira ku 0782145507. Okkiriza bulungi okwetaba mu kunoonyereza kuno?1. Yee 2. Nedda

Ekitundu 1: Ebikwata ku bungi bw’abantu

1. Emyaka gyo giri emeka?

2. Ekikula ky’omuntu: Omusajja/Omukazi

3. Omulimu/Omulimu: Omutuuze w’omukitundu/Omukozi w’ebyobulamu mu kitundu/Omukulembeze w’endowooza/Abakozi mu kifo ky’ebyobulamu/Kawempe Division health team member

4. Omutendera gw’ebyenjigiriza: Pulayimale/Siniya/Eby’enjigiriza/Ebirala (lambika)

Ekitundu 2: Okumanya n'Endowooza

1. Kiki ky'omanyi ku cerebral palsy?

2. Wali osisinkanye omuntu alina obulwadde bw’okusannyalala kw’obwongo? Bwe kiba nti yee, wakolagana otya nabo?

3. Endowooza zo eri etya ku bantu abalina obulwadde bw'okusannyalala kw'obwongo?

4. Olowooza obulwadde bw’okusannyalala kw’obwongo busobola okuddukanyizibwa oba okujjanjabibwa? Lwaki/Lwaki nedda?

5. Owulidde ku mpeereza y’okuddaabiriza obulwadde bw’okusannyalala kw’obwongo? Bwe kiba nti yee, kiki ky'omanyi ku bo?

Ekitundu 3: Okutuuka n’Okukozesa

1. Omanyi w'oyinza okufuna obuweereza bw'okuddaabiriza obulwadde bw'obwongo mu Kawempe Division?

2. Wali osindikidde omuntu alina obulwadde bw’okusannyalala kw’obwongo mu kitongole ekiddaabiriza abantu? Bwe kiba nti yee, kiki ekyavaamu?

3. Olowooza kusoomoozebwa ki abantu abalina obulwadde bw‟okusannyalala kw‟obwongo bwe bayitamu mu kufuna obuweereza bw‟okuddaabiriza?

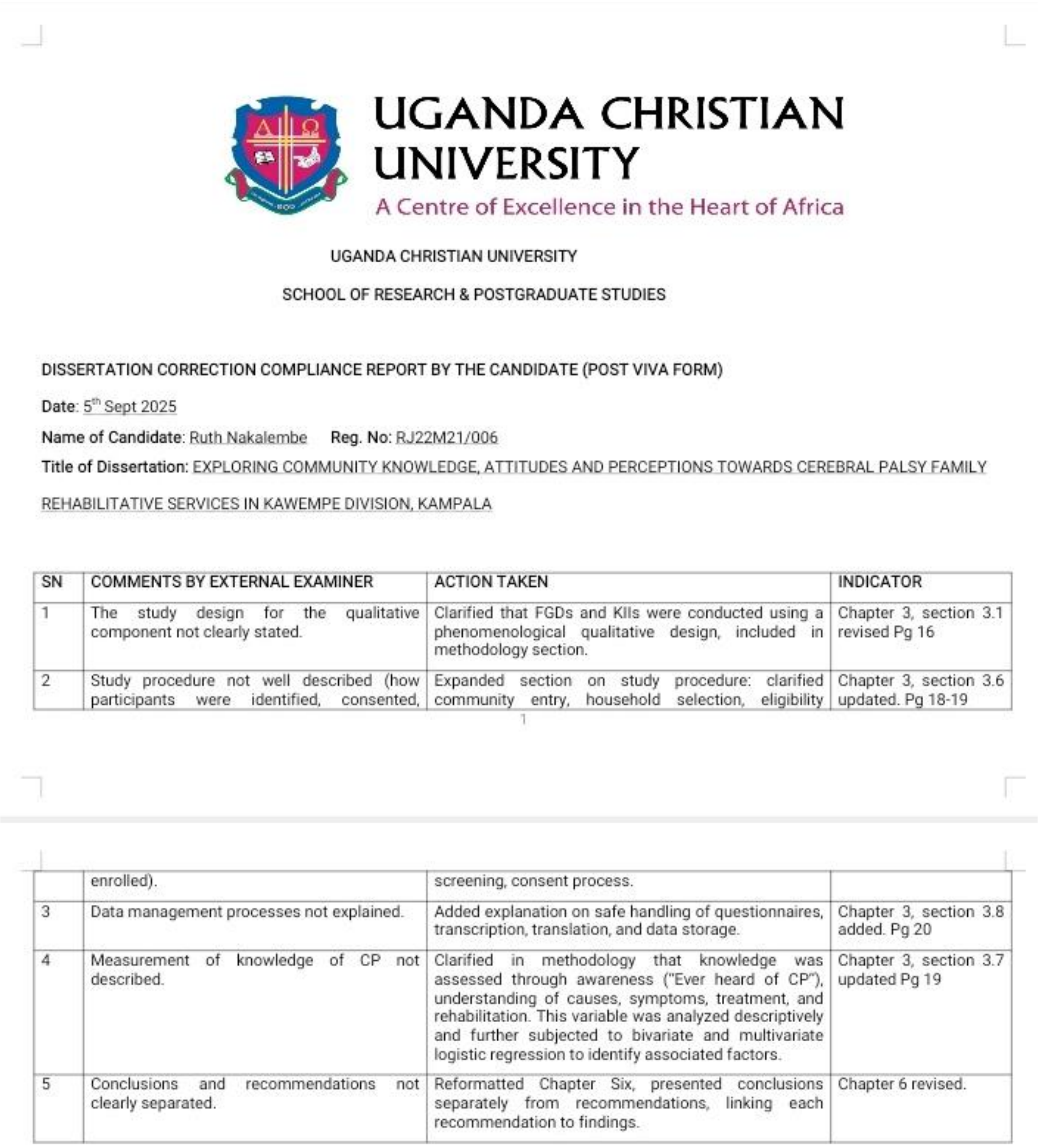
4. Olowooza empeereza y‟okuddaabiriza esobola etya okulongoosebwa eri abantu abalina obulwadde bw‟okusannyalala kw‟obwongo?

Ekitundu 4: Abalungamya n‟ebiziyiza ebiteeberezebwa

1. Olowooza kiki ekiyamba okufuna obuweereza bw’okuddaabiriza obulwadde bw’okusannyalala kw’obwongo? (okugeza, okumanyisa, entambula, obuwagizi)

2. Olowooza biziyiza ki ebiremesa abantu okufuna obuweereza bw’okuddaabiriza obulwadde bw’okusannyalala kw’obwongo? (okugeza, okuvumwavumwa, omuwendo, ebanga)

3. Tuyinza tutya okukola ku biziyiza bino n‟okutumbula okufuna empeereza y‟okuddaabiriza?



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SCHOOL OF RESEARCH & POSTGRADUATE STUDIES

DISSERTATION CORRECTION COMPLIANCE REPORT BY THE CANDIDATE (POST VIVA FORM)

Date: 5th Sept 2025

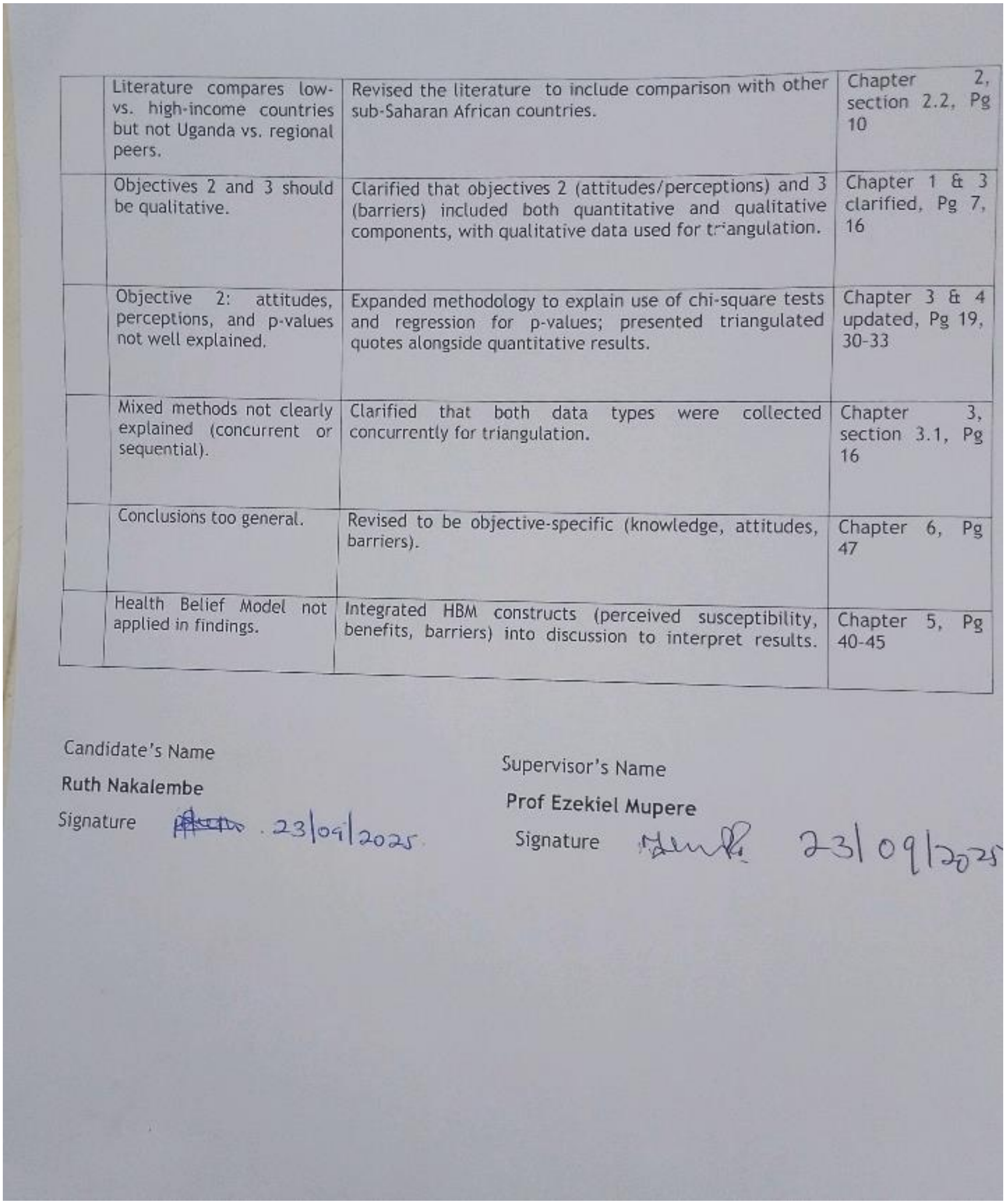
Name of Candidate: Ruth Nakalembe **Reg. No**: RJ22M21/006

Title of Dissertation: EXPLORING COMMUNITY KNOWLEDGE, ATTITUDES AND PERCEPTIONS TOWARDS CEREBRAL PALSY FAMILY REHABILITATIVE SERVICES IN KAWEMPE DIVISION, KAMPALA

SN	COMMENTS BY EXTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	The study design for the qualitative component not clearly stated.	Clarified that FGDs and KIIs were conducted using a phenomenological qualitative design, included in methodology section.	Chapter 3, section 3.1 revised Pg 16
2	Study procedure not well described (how participants were identified, consented, enrolled).	Expanded section on study procedure: clarified community entry, household selection, eligibility screening, consent process.	Chapter 3, section 3.6 updated. Pg 18-19
3	Data management processes not explained.	Added explanation on safe handling of questionnaires, transcription, translation, and data storage.	Chapter 3, section 3.8 added. Pg 20
4	Measurement of knowledge of CP not described.	Clarified in methodology that knowledge was assessed through awareness ("Ever heard of CP"), understanding of causes, symptoms, treatment, and rehabilitation. This variable was analyzed descriptively and further subjected to bivariate and multivariate logistic regression to identify associated factors.	Chapter 3, section 3.7 updated Pg 19
5	Conclusions and recommendations not clearly separated.	Reformatted Chapter Six, presented conclusions separately from recommendations, linking each recommendation to findings.	Chapter 6 revised.

SN	COMMENTS BY INTERNAL EXAMINER	ACTION TAKEN	INDICATOR
1	Literature review not logically structured; some citations outdated.	Reorganized review by themes (knowledge, attitudes, perceptions, barriers); replaced older citations with recent (2018-2023).	Chapter 2 revised.
2	No literature presented on Health Belief Model.	Added a subsection on HBM, showing how constructs informed study variables.	Chapter 2, section 2.6 added. Pg 13-14
3	Questionnaire structure and variables not described.	Expanded description of data collection tools, showing domains on knowledge, attitudes, and perceptions.	Chapter 3, section 3.7 Pg 19
4	Percentages in some tables >100%; irrelevant responses included.	Re-checked dataset, corrected percentages, removed irrelevant responses.	Chapter 4 tables corrected. Pg 25-35
5	Attitudes and perceptions analysis weak (percentages only).	Re-analyzed using mean ± SD, presented graph of mean attitude scores by CP awareness.	Chapter 4 revised. Pg35

SN	COMMENTS BY VIVA VOCE PANNEL	ACTION TAKEN	INDICATOR
1	Definition of CP missing.	Clarified that CP was already defined in Chapter 1, section 1.1. Drew examiner's attention to that section.	Chapter 1 unchanged; reference Pg x
2	Population and sample size of Kawempe not clearly defined.	Already presented in Chapter 3, section 3.3. Re-highlighted with more details on population statistics and sample derivation.	Chapter 3, section 3.3 updated for clarity. Pg 17 and 18
3	Sampling not well defined.	Sampling procedure was already described in Chapter 3, section	Chapter 3 refined Pg 17-18
4	Indicators for knowledge, attitudes, and perceptions not shown.	Inserted operational definitions and scoring criteria in methodology.	Chapter 3, Pg 19
5	Analysis shallow (descriptive only).	Added bivariate and multivariate logistic regression; integrated quantitative and qualitative results under each objective.	Chapter 4 strengthened. Pg 25-35
	Awareness vs. knowledge not well differentiated.	Revised introduction and methodology to distinguish awareness ("heard of CP") from knowledge (causes, symptoms, treatment); clarified throughout results and discussion.	Chapter 1 & 3 updated, Pg 6, 19
	Literature compares low- vs. high-income countries but not Uganda vs. regional peers.	Revised the literature to include comparison with other sub-Saharan African countries.	Chapter 2, section 2.2, Pg 10



	Literature compares low- vs. high-income countries but not Uganda vs. regional peers.	Revised the literature to include comparison with other sub-Saharan African countries.	Chapter 2, section 2.2, Pg 10
	Objectives 2 and 3 should be qualitative.	Clarified that objectives 2 (attitudes/perceptions) and 3 (barriers) included both quantitative and qualitative components, with qualitative data used for triangulation.	Chapter 1 & 3 clarified, Pg 7, 16
	Objective 2: attitudes, perceptions, and p-values not well explained.	Expanded methodology to explain use of chi-square tests and regression for p-values; presented triangulated quotes alongside quantitative results.	Chapter 3 & 4 updated, Pg 19, 30-33
	Mixed methods not clearly explained (concurrent or sequential).	Clarified that both data types were collected concurrently for triangulation.	Chapter 3, section 3.1, Pg 16
	Conclusions too general.	Revised to be objective-specific (knowledge, attitudes, barriers).	Chapter 6, Pg 47
	Health Belief Model not applied in findings.	Integrated HBM constructs (perceived susceptibility, benefits, barriers) into discussion to interpret results.	Chapter 5, Pg 40-45

Candidate's Name

Ruth Nakalembe

Signature 23/09/2025.

Supervisor's Name

Prof Ezekiel Mupere

Signature 23/09/2025

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Office of the Vice Chancellor
Research Ethics Committee UG-026

13th January, 2025

RUTH NAKALEMBE
Uganda Christian University
0782145507
Email: **ruthienakalembe01@gmail.com**

UG-REC-026 APPROVAL NOTICE

To: Ruth Nakalembe, Principal Investigator

Re: UCU-REC Application titled: *Exploring Community Knowledge, Attitudes and Perceptions towards Cerebral Palsy Family Rehabilitative Services in Kawempe Division, Kampala*

Application Number: **UCUREC-2024-1150**

Version: 4.1

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

UGANDA CHRISTIAN UNIVERSITY
APPROVED
UNTIL
13 JAN 2026
RESEARCH ETHICS
COMMITTEE

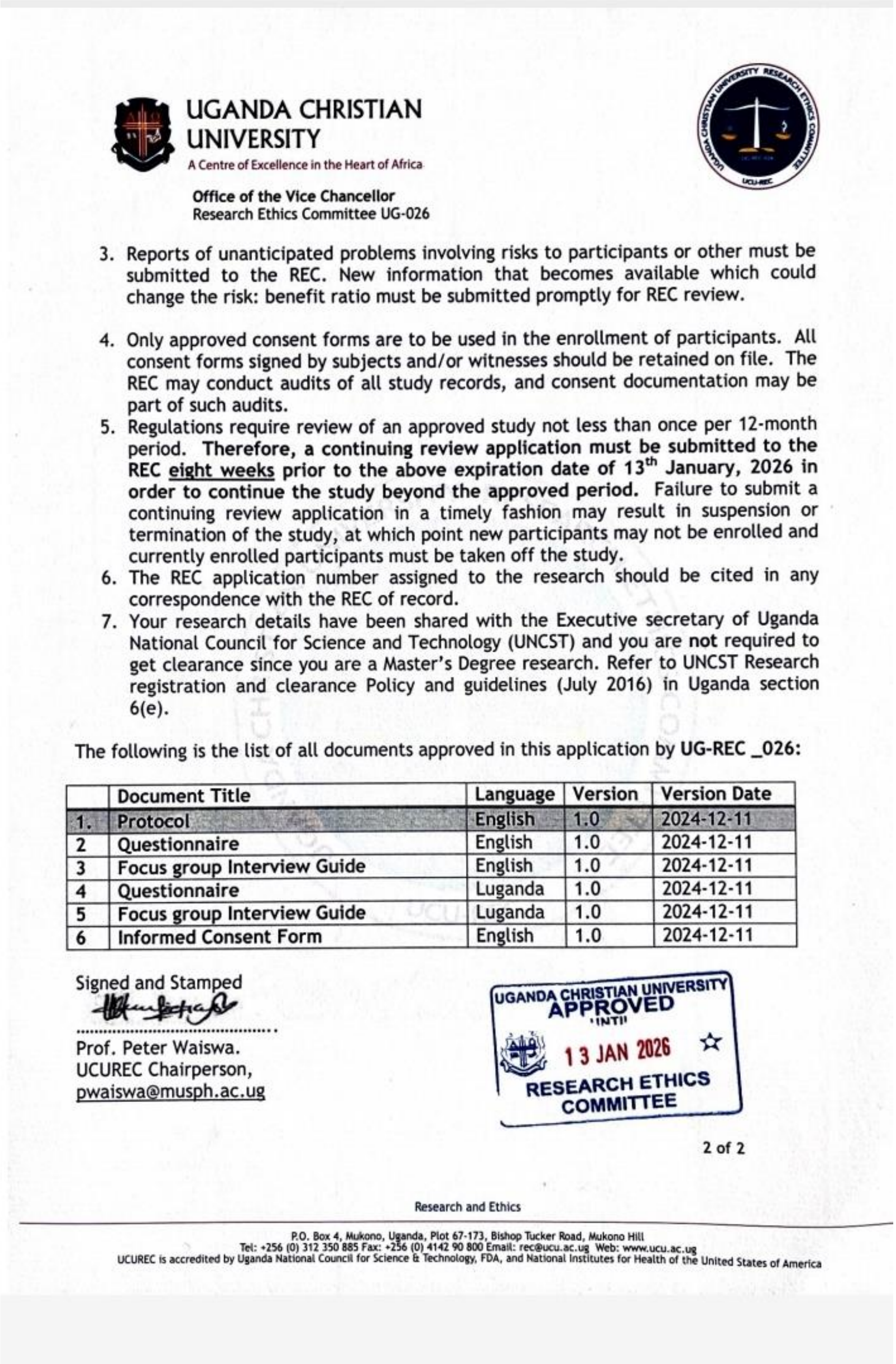
I am pleased to inform you that the **UG-REC-026**; UCUREC approved the above referenced application.

Approval of the research is for the period from **13th January, 2025**, to **13th January, 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.



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Office of the Vice Chancellor
Research Ethics Committee UG-026

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.

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 <u>eight weeks</u> prior to the above expiration date of 13th January, 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	2024-12-11
2	Questionnaire	English	1.0	2024-12-11
3	Focus group Interview Guide	English	1.0	2024-12-11
4	Questionnaire	Luganda	1.0	2024-12-11
5	Focus group Interview Guide	Luganda	1.0	2024-12-11
6	Informed Consent Form	English	1.0	2024-12-11

Signed and Stamped

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

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13 JAN 2026
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