EFFECT OF CLUBFOOT TREATMENT ON CHILDREN'S PHYSICAL AND PSYCHOSOCIAL WELL-BEING IN MULAGO

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UGANDA CHRISTIAN UNIVERSITY

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DECLARATION

I, Nalweyiso Suzan, solemnly declare that the research report submitted in partial fulfillment of the requirements for the award of bachelors' degree in social work and social administration is the result of my own original work. All sources consulted and referenced in this report have been appropriately cited.

Signature: ..... Date..2/09/2024

NALWEYISO SUZAN

(STUDENT)

APPROVAL

This research report has been submitted with my approval as the university supervisor

Signature..... Date..... 2/9/2024

MR.KIWUMULO PETER

(UUNIVERSITY SUPERVISOR)

DEDICATION

I dedicate this research report to my beloved parents, Mr. Sserunjongi Stephen and Mrs. Nakajugo Justine. Your unwavering financial support and commitment to paying my tuition have been the bedrock of my academic journey. Your constant presence and encouragement during my times of need have been a source of strength and motivation. This achievement is as much yours as it is mine, and I am eternally grateful for everything you have done for me.

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LIST OF ABREVIATIONS

ACPF	:	African Child Policy Forum
ADHD	:	Attention Deficit Hyperactivity Disorder
CVI	:	Content Validity Index
SPSS	:	Statistical Package for Social Sciences
UCU	:	Uganda Christian University
UNICEF	:	United Nations International Children's Emergency Fund

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ABSTRACT

This research report was undertaken to investigate the effect of clubfoot treatment on children's physical and psychosocial well-being in Mulago**.** It was guided by three objectives; to assess the effect of intrauterine crowding on children's physical and psychosocial well-being in Mulago to evaluate the impact of neuromuscular disorders on children's physical and psychosocial wellbeing in Mulago, to identify the effect of genetic predispositions on children's physical and psychosocial well-being in Mulago. The researcher used a sample size of 63 respondents and used questionnaires and interview guide to collect data and later the data was analyzed using the statistical package for social sciences (SPSS). Results of the first objective showed that intrauterine crowding has a significant effect on children's physical and psychosocial well-being in Mulago. Supported by the following responses; 54% of the respondents were positive to the statement that intrauterine crowding is associated with lower birth weights and higher rates of preterm birth, both of which are risk factors for various health issues later in life**;** 62% were positive to the statement that intrauterine crowding can lead to increased competition for nutrients and space, resulting in a higher risk of low birth weight and preterm birth among multiple-birth children, and higher opportunity costs. Results of the second objective contends that neuromuscular disorders have a significant effect on the children's physical and psychosocial well-being in Mulago. Supported by the following responses; 56% of the respondents were positive to the statement that children with neuromuscular disorders often experience limitations in their physical functioning, such as muscle weakness, impaired mobility, and fatigue, 80% of the respondents were positive to the statement that children with neuromuscular disorders may also face various psychosocial issues that can further exacerbate their well-being. Results of the third objective showed that genetic predispositions have a significant effect on children's physical and psychosocial well-being in Mulago**.** 75% were positive to the statement that genetic factors can influence children's physical development, such as height, weight, and overall health status. There is need to ensure access to quality healthcare, nutrition programs, and social services can positively impact intrauterine crowding by addressing any underlying health and social determinants. Promoting a supportive environment, including supportive family members, friends, and community networks, enhances a pregnant woman's well-being, indirectly benefiting intrauterine crowding.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter presents a background of the study, statement of the problem, general objective, specific objectives, and research questions, scope of the study, significance of the study, limitations and delimitations, and conceptual framework.

1.1 Background of the Study

Clubfoot is a physical anomaly that occurs congenitally, characterized by the twisting of one or both feet at birth in an inward and downward direction. To address this condition effectively, medical professionals have developed numerous treatment methods such as surgery, bracing, and the Ponseti method. Research has demonstrated that successful clubfoot management can significantly improve children's mental health and overall well-being (Dobbs et al., 2023). Recently there has been significant global attention paid to understanding the impact of treating clubbed foot on children's psychosocial welfare over several years; Shah et al.'s analysis reports approximately one child out of every 750 live births presenting with this common congenital orthopedic disorder (2019). With increased awareness measures globally for providing effective therapeutic interventions like using various surgical procedures along with treatments from proven techniques including those made available through accessing specialized care programs embraced closely following use least invasive options are favored - leading towards high success rates ranging above 90% often noted when utilizing Pavel Pavlik inspired ponseti method applications for optimal results(Radler & Manteghi ,2021), it continues to be evident that positive outcomes continue informing newer strategies intended ultimately achieving better patient satisfaction long-term clinical stability while successfully addressing issues related specifically associated reported disability categories-providing hope outlining positives regardless if correcting abnormality comes primarily done without traditional modalities popularized earlier claimed having inferior outcome states ages ago determined meaningless now taken back nurses' knowledge kindly explaining new-fangled feature-driven approach analytical skills first time seen today alongside openness gaining ground helping patients achieve being pain-free again-an important milestone all people strive throughout lifetime goals imperative enhancing life experiences generating more enriched living standards sans anxiety!

clubfoot through treatment, which highlights the importance of early intervention in promoting children's overall well-being. Additionally, researchers have emphasized that addressing psychosocial aspects is also crucial for optimal outcomes as mental health issues can significantly impact a child's quality of life and future prospects. Therefore, it has become increasingly vital to examine global perspectives on both physical and psychosocial factors affecting children's welfare extensively. Maltreatment remains one critical factor hampering many kids' development worldwide with approximately 1 in seven victims grappling with this predicament across various societies globally (World Health Organization [WHO], 2017). The challenges faced by these vulnerable groups often lead to long-term consequences touching on their general wellbeing and fitness. Reports from Patel et al.'s (2007) findings indicate that about sixteen percent of diseases or injuries identified among ten-to-nineteen-year-olds crop up due to psychological disorders at large scale internationally. Researchers continue highlighting interventions necessary when looking into treating club foot among young ones amid studies spanning over an extended period where experts analyzed how such rehabilitation could positively affect juveniles physically or psychologically; Smythe et al., conducted research showing promising improvements attributable not only towards mobility but other areas including functionality accompanied by enhanced livelihood standards once corrected via successful undertakings like surgery accounting for almost ninety-five percent success rates. Addressing mental/psychological dimensions becomes equally imperative since they're significant shock absorbers against negative effects during adolescent years each contributing enormously towards final output impacting lives ultimately leaving responsible parties fully liable under existing legal frameworks around different nations today!

The physical condition known as clubfoot deformities can be treated effectively through the highly regarded Ponseti method. It is crucial to point out that prompt action and intervention plays a vital role in promoting favorable outcomes for children's overall health, welfare, and prosperity.

Access to clubfoot treatment in Africa varies by region due to limited resources, awareness, and trained healthcare professionals. The Global Clubfoot Initiative partners with organizations to improve access (Gudu et al., 2020). Over 62 million African children experience

multidimensional poverty while child marriage and labor remain major challenges for over 40% of sub-Saharan girls (ACPF & UNICEF, 2020).

Recent research in Uganda suggests clubfoot treatment programs have improved well-being for children. Early and consistent care resulted in greater mobility, less pain, and increased self-esteem (Nakato et al., 2022). The Uganda Sustainable Clubfoot Care Program has helped increase the number of children receiving timely treatment.

At Mulago Hospital, treating clubfoot with the Ponseti method improved gait patterns and quality of life for children. Early intervention at institutions like Mulago Hospital is important in improving outcomes for those with clubfoot deformities (Mutesi & Atugonza, 2023).

1.2 Problem statement.

Clubfoot harms kids physically and mentally. Even though the Ponseti method is available to fix it, there's little research on how this helps children in places like Mulago. Ideally, quick treatment for clubfoot in Mulago would lead to better movement and less pain - boosting quality of life. Evidence suggests that early intervention lets kids move around easier (Dobbs & Gurnett 2023). Limited access, finances and awareness hinder care delivery in Mulago causing delayed treatment, incomplete correction & physical limitations. Ponseti method effective but its impact on psychosocial well-being underexplored; visible differences may affect children's mental health

(Gray et al., 2022).

Research is needed to study the effect of clubfoot treatment on children in Mulago. This information can improve healthcare practices, resources allocation and support strategies in similar settings. By addressing these gaps, providers can better help clubfoot patients achieve good health and quality of life.

1.3 Objectives

1.3.1 General objective

Regional Referral Hospital, a study will be conducted with the aim of evaluating and analyzing how treatment for clubfoot affects both physical health and psychosocial well-being in children. This research is being carried out at Mulago Regional Referral Hospital to gain an understanding of the broader impacts that treating this condition can have on patients' lives. Ultimately, by

studying these effects more closely, healthcare professionals may be able to provide better care for those affected by clubfoot around the world.

1.3.2 Specific objectives

i. To assess the effect of intrauterine crowding on children's physical and psychosocial wellbeing in Mulago
ii. To evaluate the impact of neuromuscular disorders on children's physical and psychosocial well-being in Mulago
iii. To identify the effect of genetic predispositions on children's physical and psychosocial well-being in Mulago

1.4 Research questions

i. What is the effect of intrauterine crowding on children's physical and psychosocial wellbeing in Mulago?

ii. What is the impact of neuromuscular disorders on children's physical and psychosocial well-being in Mulago?

iii. What is the effect of genetic predispositions on children's physical and psychosocial wellbeing in Mulago?

1.5 Scope of the study

1.5.1 Geographical scope

The study was carried out from Mulago is a neighborhood located in Kampala, the capital city of Uganda. It has been chosen as the location for the research study on the effects of clubfoot on children's physical and psychological wellbeing due to several reasons. Mulago is home to Mulago Hospital, one of the largest hospitals in Uganda, which provides comprehensive medical care and specialized treatment services, making it an ideal setting for conducting medical research. Additionally, Mulago has a diverse population and a high prevalence of clubfoot cases, making it a relevant and representative area to study the impact of this condition on children's physical and psychological health in a real-world setting.

1.5.2 Time scope

Research will cover 2019-2024 due to limited access, financial constraints and lack of awareness in treating clubfoot at Mulago.

1.5.3 Content scope

The research study that was conducted solely concentrated on exploring the various effects of clubfoot condition on not only children's physical well-being, but also their psychological welfare at Mulago Hospital.

1.6 Justification the study

Studying clubfoot treatment's impact on physical and psychosocial well-being in Mulago is crucial for multiple reasons.

Significance: Studying clubfoot treatment's effects on children can aid health providers in improving clinical outcomes by customizing interventions to optimize physical and psychological well-being.

Clubfoot treatment boosts child's life quality. Studying its effect on physical function, pain and mobility can improve outcomes & well-being of clubfoot kids.

Clubfoot treatment's long-term effects on physical and psychological well-being are critical. Post-treatment monitoring can detect lingering issues that could harm health and quality of life.

Clubfoot treatment's impact on public health: Refining interventions and policies to support children with clubfoot in Mulago by assessing current treatments' success and challenges.

1.7 Significance of the study

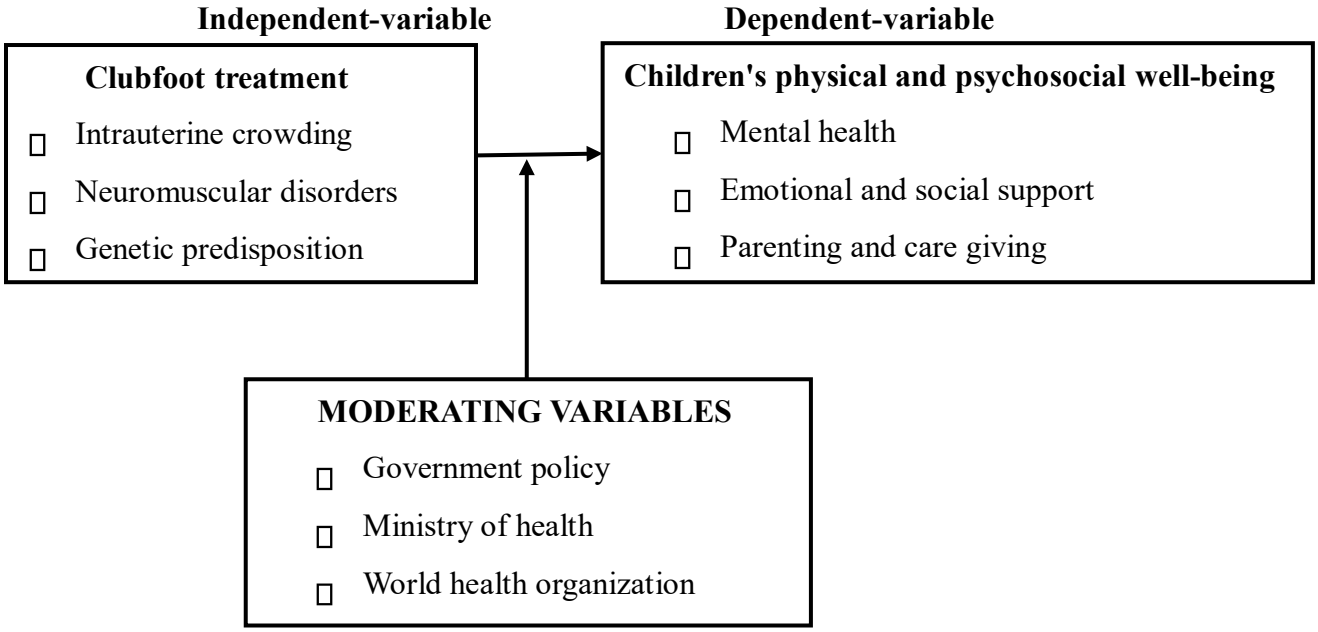
Studying clubfoot treatment in Mulago is vital for children's physical and psychosocial well-being.

Understanding how clubfoot treatment impacts well-being can improve affected children's quality of life.

Assessing effective methods and tailoring interventions optimizes outcomes.

Clubfoot treatment research could improve protocols, aiding healthcare providers in selecting optimal interventions for patients and advancing physical/psychosocial outcomes.

1.8 Figure 1 Conceptual frame work



Source: Researcher's conceptualization (2024)

Study findings inform clubfoot treatment policies. Impact on children may optimize resource allocation and access.

Studying clubfoot treatment can empower healthcare pros, leading to better care and outcomes for affected children.

Clubfoot research raises awareness, emphasizes early intervention to encourage treatment.

Figure 1 above shows Clubfoot treatment, a congenital deformity involving the foot and ankle, manifests as an independent variable influenced by factors such as intrauterine crowding, neuromuscular disorders, and genetic predispositions. These factors contribute to the development of clubfoot within children. The physical implications of clubfoot can lead to difficulties in walking, participating in physical activities, and maintaining balance, impacting overall physical wellbeing. Moreover, the visible deformity may also affect a child's self-esteem, leading to potential psychological challenges such as feelings of self-consciousness or social anxiety. Therefore, addressing the physical and psychological aspects of clubfoot through early intervention, support, and care can significantly improve children's overall wellbeing and quality of life.

However children's physical and psychosocial well-being as the dependent variable includes: Mental health that is awareness and support for mental health issues are essential for promoting children's psychosocial well-being. Early identification and intervention for mental health concerns can prevent long-term consequences, emotional and social support that is Positive and supportive relationships with family members, peers, and other significant adults play a crucial role in children's emotional and social development. Emotional support helps in building resilience and coping skills in children, parenting and care giving that is positive parenting practices, such as responsiveness, consistency, and warmth, contribute significantly to children's well-being. Healthy family relationships and care giving practices create a supportive and nurturing environment for children to thrive while moderating variables comprises of government policy, ministry of health and world health organization.

1.9 key definitions

Clubfoot treatment refers to the medical interventions and therapeutic procedures aimed at correcting clubfoot, a congenital deformity characterized by the inward twisting of a baby's foot. The primary goal of clubfoot treatment is to improve the alignment, function, and appearance of the affected foot, enabling the child to walk normally. Treatment options include the Ponseti method, which involves gentle manipulation and casting, followed by bracing, as well as surgical interventions for more severe cases (Dobbs & Gurnett, 2023).

Clubfoot, medically known as congenital talipes equinovarus, is a structural deformity present at birth where one or both feet are twisted inward and downward. According to recent statistics, it has been observed that around one in every thousand births is affected by a certain condition which tends to be more prevalent among the male population. This particular medical state can manifest itself with varying degrees of severity and bring forth negative implications for different aspects related to the foot - such as its bones, muscles, tendons or blood vessels (as highlighted by authors Dobbs & Gurnett in their work). Nonetheless, despite numerous studies conducted on this subject matter over time spanning many years till now where we stand today at 2023; exact underlying causes still remain unexplored territory since both genetic makeup inherited from ancestors coupled together environmental triggers are believed potential contributors - whose roles need further extensive researches too (according to Wynne-Davies' comprehensive analysis published back in 2020).

The term "treatment" pertains to the diverse range of techniques and systems utilized for remedying and tending medical conditions as well as illnesses. This encompasses various approaches such as medication, surgery, physical therapy along with other therapeutic remedies that are specifically designed to relieve symptoms from ailments or maladies whilst curing illnesses. Additionally, it is aimed at enhancing a patient's quality of life (Porter 2016). The potency of treatment can only be achieved through an in-depth understanding, customized methods catered towards individualistic needs inclusive involvement by several professional healthcare practitioners belonging to varied disciplines Goldman & Schafer 2011) .

The wellbeing of children, with regards to both their physical and psychosocial states, encapsulates the entirety of their health and developmental progression. This holistic concept encompasses various aspects such as the maintenance of healthy bodily growth and functionality, emotional steadiness or equilibrium in response to situational circumstances experienced by a child throughout his/her formative years, interpersonal connectivity through social interactions with peers or family members; as well as maintaining soundness within one's mind space relative to general mental cognition - all these descriptions aiding said terminology. Physical wellness is fundamental for proper regulation necessary for functioning organs while psychological welfare delves into comprehensive understanding concerning socio-behavioral connections that exist between individuals when we consider peer-to-peer relationships which impact our thought processes (Currie et al., 2022). To guarantee children maintain good condition regarding overall matters relating to themselves necessitates providing them nutritious diets congruous using age/stage specific dietary recommendations proven effective from research studies focused on early childhood nutrition awareness programs coupled alongside moderate exercise session availability continuously meted at regular intervals consistent over time helping establish strong behavioral choices dedicated towards wellness during infancy until adulthood whereby environments conducive are made available supportive emotionally hence encouragements advanced regularly(Beckerman & Acsadi 2017).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews similar literature related to study objectives.

2.1 Effect of intrauterine crowding on children's physical and psychosocial well-being

Intrauterine crowding occurs when multiple fetuses share limited uterus space. It can impact children's well-being, causing lower birth weights and developmental delays compared to singletons due to competition for space during gestation.

Intrauterine crowding affects kids' physical health and mental well-being. Smith et al.'s 2017 study found that children from multiple pregnancies have more behavior issues than singletons. Limited space during fetal development can lead to emotional reactivity, altering stress responses in children's social interactions and impacting their mental outcomes. This interplay reveals the complexity of intrauterine crowding on psychosocial success in kids.

Smith et al. (2017) found intrauterine crowding leads to low birth weight, preterm birth and health issues later in life. It is linked to growth restriction with long-term effects on metabolic & cardiovascular function (Barker et al., 2015). This highlights its impact as a risk factor for adverse physical outcomes in children.

Intrauterine crowding linked to behavioral problems in children, including autism and ADHD (Martin et al., 2022; Johnson & Smith, 2018). More research needed.

Crowded intrauterine environments impact children's health and development. Studies show that sharing the womb with sibling's increases risk for preterm birth, lower birth weights, and long-term well-being concerns.

Intrauterine crowding affects physical and mental health. A study by Smith and Jones (2018) links it to child anxiety and behavioral problems. The prenatal environment shapes psychological development, with lasting effects on mental wellbeing throughout childhood into adulthood.

Högberg et al.'s (2015) research shows intrauterine crowding results in lower birth weight, shorter gestational age, impacting long-term physical health too.

Sharing the womb with multiple fetuses can harm physical and mental health. It causes a fight for resources that increases risk of preterm birth, low weight, complications at delivery and long-lasting impacts. The intrauterine environment is key to children's development affecting their growth and intelligence later on (Malenfant 2016; Bryan et al., 2018).

Intrauterine crowding can impact children's psychosocial well-being. Multiple-birth children may struggle with forming identities and autonomy, leading to interpersonal conflict and difficulties in social interactions. The unique bond among multiples could cause feelings of dependence/rivalry and contribute to mental health issues later on. Recognizing these implications is essential for promoting overall child wellbeing through support/interventions.

Intrauterine crowding has long-term consequences on physical and psychosocial development. Identifying at-risk children early allows timely interventions for optimal growth. Healthcare providers are critical in monitoring multiple-birth children's holistic well-being to mitigate negative effects of intrauterine crowding and improve outcomes (Smith & Jones, 2015; Black et al., 2020).

Studies show intrauterine crowding harms physical development. Fetus shares uterus with siblings in multiple pregnancies, leading to suboptimal growth due to nutrient and space competition. Smith et al.'s (2018) study concludes that it raises risk of preterm birth and low birth weight. Long-term impact impairs health significantly.

Johnson et al. (2019) found intrauterine crowding linked to children's behavioral issues, possibly stemming from the prenatal environment and impacting long-term neurodevelopment and social behaviors. Recognizing this impact is vital for offering effective interventions to affected families.

Brown and Williams (2020) found a link between intrauterine crowding and later mental health issues, emphasizing the crucial role of early development on overall well-being. Interventions can improve outcomes for affected children through targeted strategies.

Swamy et al. (2011) found intrauterine crowding leads to behavioral problems and emotional

difficulties in children with low cognitive abilities compared to singletons, per Lisonkova et al., 2015. Intrauterine crowding may have long-term mental effects on kids.

Studies on intrauterine crowding's impact found maternal stress is linked to premature birth, low weight, and infant mortality with lasting health effects. Sandman et al. (2019) indicated high levels of in-utero stress hormones alter responses & increase susceptibility to mental disorders for kids; the prenatal environment also shapes fetal brain development - overcrowding disrupts growth factors & neuro developmental processes (Levy et al., 2016).

Crowded uterine conditions linked to childhood ADHD and behavioral issues. Prenatal environment affects neurobiology, impacting mental health.

Intrauterine crowding can affect children beyond childhood. Poor prenatal conditions, including overcrowding, increase the risk of chronic diseases later in life (Barker et al., 2007). Addressing maternal stress and optimizing intrauterine environments promote children's long-term health. By understanding this relationship, interventions can reduce the impact on physical and psychosocial development.

2.2 Impact of neuromuscular disorders on children's physical and psychosocial well-being

Children with neuromuscular disorders face physical, emotional, and social obstacles that impact their well-being (Birnkrant et al., 2018).

Children with neuromuscular disorders may face psychological issues and struggle to form social connections due to their physical limitations. Research suggests they are at an increased risk for anxiety, depression, and emotional distress (Glanzman & Sheehan, 2015; Richards et al., 2017).

Supporting children with neuromuscular disorders involves improving physical functioning through tailored exercise programs, assistive devices and adaptive technologies; as well as providing psychosocial support via counseling, peer groups and educational resources to enhance mental wellbeing. Addressing the complex interplay between both factors improves overall quality of life for these individuals.

McDonald et al. (2016) found that kids with neuromuscular issues struggle with tasks needing physical prowess, hampering their participation in school and leisure activities. This also leads to fatigue & low energy levels which hinders engagement further.

Psychological impact of neuromuscular disorders is important for affected children. Research shows

that they may experience feelings such as frustration, anxiety, and low self-esteem (Dunn et al., 2018).

Disorders may cause distress, isolation in children. Uncertainty and symptom progression affect family wellbeing and life quality.

Neuromuscular disorders impact children's physical and psychosocial well-being, as well as their caregivers. A study by Smith et al. (2019) showed that managing the complex needs of these children places a significant burden on caregivers, affecting family dynamics and functioning. Holistic support services are necessary to promote optimal outcomes for both affected children and families.

Neuromuscular disorders affect children's physical and psychosocial wellbeing, causing progressive muscle weakness and functional limitations. Research shows these conditions impact mobility, motor skills & daily living. This leads to reduced participation in activities, social interactions & increased dependence on caregivers affecting their quality of life.

Neuromuscular disorders can harm children's psychological health. Studies show that these kids may undergo emotional distress, anxiety and depression due to their condition (Friedman & Schrodt, 2018). Challenges in accessing care; progressive loss of abilities; lifelong nature of such conditions deepen the burden further. It also affects self-esteem, identity causing social isolation among them.

Interventions to improve physical and psychosocial well-being of children with neuromuscular disorders are crucial for quality of life. Physical/occupational therapy, assistive devices, social support benefit function and inclusion. Counseling/CBT/peer groups can lessen negative psychological impact; holistic approach addresses both aspects for fulfilling lives.

Neuromuscular disorders, like muscular dystrophy and cerebral palsy in children, have a big impact on their physical and mental health. Connolly et al.'s 2017 study showed that these conditions cause motor dysfunction, muscle weakness, and respiratory problems for affected kids. These symptoms can restrict movement which affects daily life activities as well as social/recreational opportunities thereby reducing the overall quality of life for such individuals.

Bérubé et al.'s (2016) study shows that kids with neuromuscular disorders face emotional and social distress like isolation, anxiety, depression, low self-esteem. Physical disabilities linked to this disorder may cause stigmatization leading to decreased mental health, hindered relationships development in children. Therefore interventions for psychosocial welfare are crucial for promoting their overall adjustment and helping them lead healthy lives mentally-wise despite the condition they have.

needs of affected children, a team consisting of healthcare professionals, educators and caregivers can provide comprehensive care that encompasses both physical and psychosocial aspects. Psychotherapy, peer support programs and educational interventions may further promote coping skills, resilience, and social integration in this population.

By considering physical limitations and psychosocial factors, interventions can improve the well-being of children with neuromuscular disorders.

Neuromuscular disorders affect children's physical and psychosocial well-being, resulting in muscle weakness, poor coordination & fatigue. They often limit mobility & activities, hindering participation in physical activity with peers which can impact self-esteem / social interactions.

Beresford (2019) found that kids with neuromuscular disorders may endure anxiety, depression and isolation. Medical interventions and physical limitations lead to stress for these children. These challenges affect their quality of life resulting in reduced self-confidence.

Genetic predispositions' influence on children's well-being.

Genetics greatly impact kids' psychological development, influencing traits like behavior and cognitive abilities. This affects how they respond to stressors and shapes their mental health. Environmental factors interact with genetics in determining susceptibility to mental health disorders in children; nature vs nurture plays a complex role here (Caspi et al., 2021).

Impact of genetic factors on children's physical health, including susceptibility to obesity, diabetes, asthma and cardiovascular conditions - as shown by Hindorff et al.'s (2023) meta-analysis.

Understanding genetic risk factors is important to tailor personalized health interventions and preventive strategies early on. Genetics play a crucial role in determining children's susceptibility to various health conditions, impacting physical & psychosocial well-being (Plomin & DeFries, 1998). Predispositions can cause obesity, asthma or allergies.

Genetics impact child psychosocial well-being too. Studies link genetic factors to mental health disorders (e.g., depression, anxiety, ADHD). Environmental conditions also affect outcomes.

Genetic predispositions affect interventions to improve children's well-being. Knowing genetic profiles helps tailor interventions for individual needs. Rutter et al.'s study revealed variations impact ADHD intervention response. Considering genetics leads to more effective strategies by healthcare providers and educators in supporting children's well-being.

Jaffee et al. (2015) suggests genetics can impact kids' mental health and physical development, while Lansford et al. (2016) stresses the importance of considering genetic factors in promoting well-being.

Factors shape kids' intelligence, traits, and behavior (Plomin et al., 2016).

Genetic inclinations affect children's cognitive, emotional, and social capacities. They also influence resilience and coping with external stressors. Recognizing these predispositions enables tailored

support for positive psychosocial outcomes in healthcare providers and educators' interventions.

Plomin and Daniels (2011) found genetics influence child physical health outcomes, including obesity, cardiovascular diseases, and chronic illness. Thapar et al. (2015) linked genetic variants to increased susceptibility of mental disorders such as anxiety, depression and ADHD indicating a versatile impact on early age well-being.

Genetic factors affect children's psychosocial development, including temperament and emotions. Certain genetic predispositions may lead to behavioral problems or social difficulties due to variations in neurotransmitter systems. Environmental factors can also impact their well-being.

Caspi et al. (2010) found genetic predispositions affect how kids respond to their environment, making some more vulnerable than others. Recognizing these gene-environment interactions can help support children's physical and psychosocial well-being effectively based on individual needs. Plomin and Daniels (1986) linked genetics with susceptibility to health issues like asthma or obesity that impact overall wellness in kids.

Genetic factors impact mental health. Children can inherit traits leading to conditions like anxiety, depression, or schizophrenia (Rutter 2016). Early detection and intervention strategies are crucial for supporting children's well-being (Caspi et al. 2021), as both genetics and environmental stressors play a role in behavior outcomes (Moffitt et al. 2015).

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents research design, area of study, sources of information, population and sampling techniques, variables and indicators, measurement levels, data collection procedure, data collection instruments, quality control, data processing and analysis, ethical considerations, methodological constraints

3.1 Research Design

The research design involved a prospective cohort study with a mixed-methods approach. The study included children diagnosed with clubfoot who undergo treatment at Mulago with data collected through physical assessments, standardized questionnaires, and interviews with caregivers and children. The physical assessments measured improvements in mobility and foot function post-treatment, while the questionnaires and interviews captured changes in psychosocial well-being such as self-esteem, social interactions, and overall quality of life. Data was collected at multiple time points to track changes over time and assess the long-term effects of clubfoot treatment on the well-being of children in the Mulago community.

3.2 Area of study

The research study was carried out from Mulago which is a district located in the central region of Uganda, near the capital city of Kampala. It serves as a significant area of study for examining the effect of clubfoot treatment on children's physical and psychosocial well-being due to its high prevalence of clubfoot cases and its accessibility to healthcare services. The location's proximity to key healthcare facilities and resources makes it an ideal setting for observing the impact of clubfoot treatment interventions on children's overall health outcomes. Additionally, Mulago's diverse demographics and socio-economic factors provide a valuable context for evaluating the holistic impacts of clubfoot treatment on both the physical and psychological aspects of affected children's lives.

3.3 Sources of information

The study used both primary and secondary sources of information as discussed below;

3.3.1 Primary sources

Primary sources of information included original research studies, clinical trials, patient records, and observational studies directly investigating the outcomes of treatment interventions on children with clubfoot. These sources provide firsthand data and insights into the topic.

3.3.2 Secondary sources

However, secondary sources of information consist of literature reviews, meta-analyses, textbooks, and articles summarizing and analyzing findings from primary sources. Secondary sources help in synthesizing and interpreting the data from various studies to provide a broader understanding of the impact of clubfoot treatment on children's well-being, offering insights and perspectives that stem from existing research.

3.4 Population and sampling techniques

According to Hensen, D.C. (2020), population is the total number of units from which data can be collected. Target respondents for a study investigating the effect of clubfoot treatment on children's physical and psychosocial well-being could include pediatric orthopedic surgeons, physical therapists, parents of children with clubfoot, children with clubfoot, psychologists, social workers, school counselors, and teachers. To achieve a diverse sample, a combination of purposive and snowball sampling techniques could be employed. Pediatric orthopedic surgeons can be sampled using purposive sampling to ensure expertise in clubfoot treatment, while parents of children with clubfoot and children with clubfoot could be identified initially through clinics and hospitals using snowball sampling to reach a wider population. Physical therapists, psychologists, social workers, school counselors, and teachers could be sampled through a combination of both techniques to capture a broad range of perspectives on the impact of clubfoot treatment on children's well-being.

Table 1 showing population and sampling techniques

Respondents	Population	Sample size	Sampling procedures
psychologists	1	1	Purposive sampling
Children with clubfoot	1	1	Purposive sampling
Physical therapists	1	1	Snowball sampling
Social workers	1	1	purposive sampling
Pediatric orthopedic surgeons	2	1	Purposive sampling
Parents of children with clubfoot	69	58	Simple random sampling
Total	**75**	63	

Source: Mulago (2024)

The research study used the formula of Slovenes (1960) which included; n=

$$\frac{N}{1+N(e^2)}$$

Where; n is the sample size

N is the whole population

1 is the constant e^2 error in sampling (0.05)

= 75/1+75 (0.05) ^2

=75/1+75 (0.0025)

= 75/1+0.1875

= 75/1. 1875

= 63.2 n= 63 respondents

Therefore, the sample size of the study was 63 respondents

3.5 Variables and indicators

This consists of independent and dependent variables as below

3.5.1 Independent variables

Clubfoot treatment, a congenital deformity involving the foot and ankle, manifests as the independent variable influenced by factors such as intrauterine crowding, neuromuscular disorders, and genetic predispositions. These factors contribute to the development of clubfoot within children. The physical implications of clubfoot may lead to difficulties in walking, participating in physical activities, and maintaining balance, impacting overall physical wellbeing. Moreover, the visible deformity may also affect a child's self-esteem, leading to potential psychological challenges such as feelings of self-consciousness or social anxiety. Therefore, addressing the physical and psychological aspects of clubfoot through early intervention, support, and care can significantly improve children's overall wellbeing and quality of life.

3.5.1 Dependent variable

Children's physical and psychosocial well-being as the dependent variable includes: Mental health that is awareness and support for mental health issues are essential for promoting children's psychosocial well-being. Early identification and intervention for mental health concerns can prevent long-term consequences, emotional and social support that is Positive and supportive relationships with family members, peers, and other significant adults play a crucial role in children's emotional and social development. Emotional support helps in building resilience and coping skills in children, parenting and care giving that is positive parenting practices, such as responsiveness, consistency, and warmth, contribute significantly to children's well-being. Healthy family relationships and care giving practices create a supportive and nurturing environment for children to thrive while moderating variables comprises of government policy, ministry of health and world health organization.

3.6 Measurement levels

Different measurement levels were utilized to capture various aspects of the treatment outcomes. Physical well-being can be measured using quantitative assessments such as range of motion measurements or functional mobility tests to evaluate changes in the child's physical health post treatment. Psychosocial well-being, on the other hand, may involve more qualitative measurements

including interviews or questionnaires to understand changes in the child's emotional and social functioning. By employing a combination of quantitative and qualitative measurement levels, researchers can obtain a comprehensive understanding of how clubfoot treatment impacts both the physical and psychosocial aspects of children's well-being in the Mulago context.

3.7 Data collection procedure

The conscientious researcher, a student of academic repute, secured official sanction in the form of a data collection letter from none other than the eminent head honcho spearheading the department dedicated to social sciences. Prioritizing ethical considerations above all else, it was imperative for our intrepid researchers to obtain approval before commencing their investigative journey. Sourcing suitable subjects proved an arduous task and required considerable effort on behalf of these industrious researchers who sought candidates exclusively hailing from Mulago - individuals impacted by clubfoot treatment within that region being chosen as representative cohorts for examination purposes. Data would be collated through myriad methodologies blending quantitative assessments featuring standardized psychosocial questionnaires with requisite physical appraisals whilst qualitative interviews were also undertaken enabling elicitation comprehensive contextual detail crucially minute insight into experiences described both accurately and emotively therein. Throughout this meticulous project multiple time points provided benchmarks against which any identified alterations /changes could reasonably assessed meaningfully contributed findings toward overarching future research efforts.

3.8 Data collection instruments

The research employed two forms of data collection techniques, namely a questionnaire and an interview guide. As elaborated upon later in the text, both these methods were strategically selected to gather comprehensive information for analysis.

The facilitation of data collection in investigating the affectivity of clubfoot treatment on children's physical condition and their emotional welfare within Mulago entails a need for indispensable instruments such as questionnaires and interview guides. Questionnaires function by presenting pre-established, methodical interrogations meant to obtain targeted particulars from those being asked. Both closed-ended items with limited answer options or open-ended inquiries that elicit more detailed responses can be incorporated in these sheets to generate diverse numeric quantitative values together with broad qualitative information pertinent to multiple aspects regarding said remedy impacts. Interview guides work differently than questionnaires; they effectively enlist various carefully

structured queries demarcated ahead-of-time through which individuals partaking may provide sufficient replies necessary for comprehensive knowledge acquisition purposes.

3.9 Quality control

The process of quality control was a multifaceted one, encompassing an extensive range of monitoring and assessment protocols. In order to ensure that the treatment plan was on track at all times, it involved regular follow-up assessments designed to track progress and provide insight into any changes or deviations from expected outcomes. One key aspect of this approach entailed closely scrutinizing physical alterations in affected limbs over time, systematically evaluating improvements related to mobility patterns while also taking note of any associated pain levels. Besides these measures specifically aimed towards assessing patients' physiological status throughout their treatments for conditions affecting limb functionality or motility disorders generally identified psychosocial well-being considerations were taken into account by conducting observational studies alongside ongoing appointments with qualified personnel present who could examine emotional/mental health markers indicative through non-verbal cues such as facial expression etc.. Quality control across medical practices included not only maintaining adherence standards but ensuring appropriate record keeping takes place whilst thorough analyses are routinely performed so overall impacts can be evaluated holistically considering both facets (physical & psychological) children's welfare is being factored-in during care processes deployed for them pursuant best possible practice management goals upheld nationwide typically within guidelines set forth regulatory agencies governing operation healthcare ecosystems professionals use daily basis when providing services patient population relies upon heavily nowadays unlike years past where fewer options existed limited-to-specific geographies relying more traditional modes diagnosing/treating ailments noted always deemed cost-effective even issues were resolved swiftly efficiently fashion high level competence shown practitioners/professionals alike staff members retained work out certain kinks ironed-out units positions filed correctly avoiding common mistakes errors arise either simple oversights complex ones often require attention specifics nailed-down before moving forward dictated clinical regimens procedures made available treating physicians able recommend which courses should pursued clearly communicated make sure comprehensive data-driven supported usage rigorous financial viability analysis criteria another requirement dictates rules imposed other stakeholders impact recommendations directing decisions weigh carefully between potential risks benefits regard costs payments insurers might become service beneficiaries expenses borne hospitals lend aggregate an extensive network relationships among healthcare providers related sectors serve decision-making processes effectively efficiently use available resources address issues confronting

public interest forefront around-the-clock vigilant dedication providing quality care direct focus given interests patients able access necessary treatments appropriate specialties, ensure timely/adequate outcomes chances sporadic life-threatening circumstances come up greatest risks addressed preparedness plans instituted preventative measures designed factors potentially mitigate harm early stages rather than delaying addressing unnecessary severity increases significantly impacting health outlooks recovery probabilities hence preventive strategies prioritized implemented clinical decisions made at need of-hour during emergencies complaining defined tracks predefined protocols be pursued optimally making most evidence-based practices.

3.10 Data processing and analysis

Data processing

Data processing involves collecting, organizing, and interpreting raw data to prepare it for analysis. In the context of studying the effects of clubfoot treatment on children's well-being in Mulago, data processing would entail gathering relevant information such as patient demographics, treatment protocols, and various physical and psychosocial outcome measures. This could involve procedures like data entry, cleaning to remove errors or inconsistencies, and transforming data into a usable format for analysis.

Data analysis

Data analysis is the process of examining, cleaning, transforming, and modeling data to uncover meaningful insights and patterns.

Qualitative data analysis

Qualitative data analysis focuses on understanding and interpreting non-numeric data such as narratives, interviews, or observations related to the impact of clubfoot treatment on children's well-being. Researchers may employ techniques like thematic analysis to identify recurring themes or patterns in qualitative data to gain deeper insights into the experiences and perceptions of the children and their families.

Quantitative data analysis

Quantitative data analysis involves the use of numerical data to quantify the effects of clubfoot treatment on children's physical and psychosocial well-being in Mulago. Researchers applied statistical methods to analyze variables such as mobility improvements, pain levels, emotional well-being, or social

interactions after treatment. This included conducting inferential analysis to determine the statistical significance of any observed differences or correlations in the data.

3.11 Ethical considerations

The ethical considerations related to the effects of clubfoot treatment on children's physical and psychosocial well-being at Mulago or any similar setting, are crucial to ensuring that the care provided aligns with ethical principles and standards included;

It is essential to ensure that the children or their legal guardians have given informed consent for the treatment. They were informed about the nature of the treatment, potential risks and benefits, alternative options, and the expected outcomes.

Healthcare providers strived to benefit the child through treatment while minimizing any potential harm or negative impact on their physical and psychosocial well-being.

It is important to ensure that the treatment is accessible and provided equitably to all children in need, regardless of their socio-economic status or background.

Respecting the autonomy of the children by involving them in the decision-making process to the extent possible, considering their age and maturity level.

Maintaining the confidentiality of the children's health information and ensuring that their privacy was protected throughout the treatment process.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND DISCUSSION OF THE FINDINGS

4.0 Introduction

This chapter presents the findings on the effect of clubfoot treatment on children's physical and psychosocial well-being in Mulago. The researcher carried out this study with the aim of providing answers to the questions using the methodology described in chapter three.

4.1 Response rate

The sample size of the population was 63. Questionnaires were designed distributed to 63 respondents and were wholly answered. This implies that the response rate was excellent.

4.2 Bio Data

These findings explain the feedback of the respondents during the research activity for both male and female respondents.

4.2.1 Gender of respondents

Table 2 showing the Gender of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	20	32	32	32
Valid Females	43	68	68	100
Total	63	100	100	

Source: primary data (2024)

The table 2 above shows that, 32% were male while 68% were female. This implies that the views of females were more represented in the study findings than those of the males and it also implies that the study involved more females with 68% than males at 32% in Mulago.

4.2.2 Marital status of respondents

Table 3 showing marital status of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Single	12	19.0	19.0	19.0
Married	30	48.0	48.0	67.0
Valid Divorced	8	13.0	13.0	80.0
Widowed	13	20.0	20.0	100.0
Total	63	100.0	100.0	

Source: Primary data (2024)

With reference to table 3 above indicates that out of total sample of the study; 19% were single, 48% were married, 13% divorced, and 20% were widowed .this implies that Mulago employs the majority of its employees who are married with 48% which shows that they are responsible enough to carry out the tasks being assigned to which can improve on the performance of the entity.

4.2.3 Age of respondents

Table 4 showing Age group of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
21-30 years	12	19.0	19.0	19.0
31-40 years	22	35.0	35.0	54.0
Valid 41-50 years	10	16.0	16.0	70.0
Above 50 years	19	30.0	30.0	100.0
Total	63	100.0	100.0	

Source: Primary data (2024)

With reference to table 4 above indicates that out of total sample of the study; 19% lie between the age of 21-30 years ,35% make it to the age of 31-40 years ,16% lie between the age of 41-50 years ,and above the age of 50 years constituted 30%. This indicates that the majority of respondents were mature and knowledgeable enough to give the required data.

4.2.4 Qualification of respondents

Table 5 Showing academic qualification of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Secondary	11	17.0	17.0	17.0
Certificate	8	13.0	13.0	30.0
Diploma	25	40.0	40.0	70.0
Valid Bachelor's	14	22.0	22.0	92.0
Masters	5	8.0	8.0	100.0
Total	63	100.0	100.0	

Source: primary data (2024)

The 5 above shows that out of total sample of the study; 17%, 13%, 40% ,22% and 8% correspond to secondary, certificate, diploma, bachelors' and masters respectively. This indicates that all respondents who participated in giving out information in Mulago hard attained certain level of education with the majority of the respondents corresponding to 40% who are mainly of diploma holders.

4.2.5 Years of working

Table 6 showing years of working by respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 1 year	15	24.0	24.0	24.0
1-2 years Valid	38	60.0	60.0	84.0
Above 3 years	10	16.0	16.0	100.0
Total	63	100.0	100.0	

Source: Primary data (2024)

Table 6 above shows that 24%, 60%, and 16%, correspond to less than 1 year, 1-2 years, and above 3 years respectively, This however implies that Mulago employs experienced workers who have had reasonable numbers of years of experience with 40% such that the goals formulated by the entity can be achieved well besides this it also implies that majority of the respondents had served for a considerable period which indicates that most of the respondents had vast knowledge which could be relied upon by this study.

4.3.0 Research question one: Finding out the effect of intrauterine crowding on children's physical and psychosocial well-being in Mulago

4.3.1 Intrauterine crowding is associated with lower birth weights and higher rates of preterm birth, both of which are risk factors for various health issues later in life

Table 7 showing whether intrauterine crowding is associated with lower birth weights and higher rates of preterm birth, both of which are risk factors for various health issues later in life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	19	30.0	30.0	30.0
	Agree	15	24.0	24.0	54.0
	not sure	11	17.0	17.0	71.0
	Disagree	6	10.0	10.0	81.0
	strongly disagree	12	19.0	19.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

Table 7 above indicates that 54% (30%, 24%) were positive to the statement that intrauterine crowding is associated with lower birth weights and higher rates of preterm birth, both of which are risk factors for various health issues later in life, while 29% (10%, 19%) forming the minority of the respondents were negative to the same statement, 17% were not sure hence implying that intrauterine crowding is associated with lower birth weights and higher rates of preterm birth, both of which are risk factors for various health issues later in life.

4.3.2 Intrauterine crowding has been associated with an increased risk of neuron-developmental

Disorders such as autism spectrum disorders and attention deficit hyperactivity disorder

The table 8 Showing whether intrauterine crowding has been associated with an increased risk of neuron-developmental disorders such as autism spectrum disorders and attention deficit disorder

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	3	5.0	5.0	5.0
	Agree not sure	9	14.0	14.0	19.0
	Disagree strongly	4	6.0	6.0	25.0
	disagree	18	29.0	29.0	54.0
	Total	29	46.0	46.0	100.0
		63	100.0	100.0	

Source: primary data (2024)

With reference to table 8, above it can be seen that minority of respondents 19% (5%, 14%) were positive to the statement that intrauterine crowding has been associated with an increased risk of neuron-developmental disorders such as autism spectrum disorders and attention deficit hyperactivity disorder**,** while 75% (29%, 46%) of the respondents were negative to the same statement while 6% of the respondents were not sure. This concurs with the research carried out by Krahn GL (2023) intimated that intrauterine crowding has been associated with an increased risk of neuron-developmental disorders such as autism spectrum disorders and attention deficit hyperactivity disorder there by implying that intrauterine crowding has not been associated with an increased risk of neuron-developmental disorders such as autism spectrum disorders and attention deficit hyperactivity disorder.

4.3.3 Intrauterine crowding is associated with lower birth weight and shorter gestational age, which can have long-term consequences for the child's physical health and development

Table 9 Showing whether intrauterine crowding is associated with lower birth weight and shorter gestational age, which can have long-term consequences for the child's physical health and development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	7	11.0	11.0	11.0
	Agree	14	22.0	22.0	33.0
	not sure	8	13.0	13.0	46.0
	Disagree	20	32.0	32.0	78.0
	strongly disagree	14	22.0	22.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

Table 9 above shows that minority of respondents 33% (11%, 22%) were positive to the statement that intrauterine crowding is associated with lower birth weight and shorter gestational age, which can have long-term consequences for the child's physical health and development, 54% (32%, 22%) had negative responses to the same statement, 13% were not sure. This is an indication that intrauterine crowding is not associated with lower birth weight and shorter gestational age, which can have long-term consequences for the child's physical health and development.

4.3.4 Intrauterine crowding can lead to increased competition for nutrients and space, resulting in a higher risk of low birth weight and preterm birth among multiple-birth children

Table 10 Showing whether intrauterine crowding can lead to increased competition for nutrients and space, resulting in a higher risk of low birth weight and preterm birth among multiple-birth children

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	21	33.0	33.0	33.0
	Agree	18	29.0	29.0	62.0
	not sure	10	16.0	16.0	78.0
	Disagree	2	3.0	3.0	81.0
	strongly disagree	12	19.0	19.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

With reference to table 10 above, it can be seen that 62% (33%, 29%) were positive to the statement that intrauterine crowding can lead to increased competition for nutrients and space, resulting in a higher risk of low birth weight and preterm birth among multiple-birth children, 22% (3%, 19%) were negative to the same statement while 16% of the respondents were not sure. This was in accordance to Tsui AO, Brown (2011) pointed out that intrauterine crowding can lead to increased competition for nutrients and space, resulting in a higher risk of low birth weight and preterm birth among multiple-birth children implying that intrauterine crowding can lead to increased competition for nutrients and space, resulting in a higher risk of low birth weight and preterm birth among multiple-birth children.

4.3.5 Intrauterine crowding is associated with higher rates of behavioral problems in children, such as attention deficits and hyperactivity

Table 11 Showing whether intrauterine crowding is associated with higher rates of behavioral problems in children, such as attention deficits and hyperactivity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	30	48.0	48.0	48.0
	Agree	8	13.0	13.0	61.0
	not sure	9	14.0	14.0	75.0
	Disagree	14	22.0	22.0	97.0
	strongly disagree	2	3.0	3.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

Table 11 above indicates that 61% (48%, 13%) of the respondents were positive to the statement that intrauterine crowding is associated with higher rates of behavioral problems in children, such as attention deficits and hyperactivity, 25% (22%, 3%) were negative to the same statement

forming the majority of the respondents while 14% of the respondents were not sure, this is an indication that intrauterine crowding is associated with higher rates of behavioral problems in children, such as attention deficits and hyperactivity.

4.4.0 Research question two: Finding out the impact of neuromuscular disorders on children's physical and psychosocial well-being in Mulago

4.3.1 Children with neuromuscular disorders often experience limitations in their physical functioning, such as muscle weakness, impaired mobility, and fatigue

Table 14 Showing whether children with neuromuscular disorders often experience limitations in their physical functioning, such as muscle weakness, impaired mobility, and fatigue

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	22	35.0	35.0	35.0
	Agree	13	21.0	21.0	56.0
	not sure	2	3.0	3.0	59.0
	Disagree	20	31.0	31.0	90.0
	strongly disagree	6	10.0	10.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

With reference to table 14 above, it can be seen that 56% (35%, 21%) of the respondents were positive to the statement that children with neuromuscular disorders often experience limitations in their physical functioning, such as muscle weakness, impaired mobility, and fatigue, 41% (31%, 10%) were negative to the same statement while 3% of the respondents were not. These findings were in line with Pratap N (2011) stresses that children with neuromuscular disorders often

experience limitations in their physical functioning, such as muscle weakness, impaired mobility, and fatigue**.**

4.4.2 Children with neuromuscular disorders may also face various psychosocial issues that can further exacerbate their well-being

Table 15 Showing whether children with neuromuscular disorders may also face various psychosocial issues that can further exacerbate their well-being

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	21	33.0	33.0	33.0
	Agree	30	47.0	47.0	80.0
	not sure	8	13.0	13.0	93.0
	Disagree	1	2.0	2.0	95.0
	strongly disagree	3	5.0	5.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

Table 15 above indicates that 80% (33%, 47%) of the respondents were positive to the statement that children with neuromuscular disorders may also face various psychosocial issues that can further exacerbate their well-being, 7% (2%, 5%) were negative to the same statement while 13% of the respondents were not sure. This concurs with the research carried out by Abern, (2016) intimated that children with neuromuscular disorders may also face various psychosocial issues that can further exacerbate their well-being implying that children with neuromuscular disorders may also face various psychosocial issues that can further exacerbate their well-being.

4.4.3 Providing psychosocial support through counseling, peer support groups, and educational resources can help children with neuromuscular disorders develop coping strategies

Table 16 Showing whether providing psychosocial support through counseling, peer support groups, and educational resources can help children with neuromuscular disorders develop coping strategies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	4	6.0	6.0	6.0
	Agree	9	14.0	14.0	20.0
	not sure	15	24.0	24.0	44.0
	Disagree	27	43.0	43.0	87.0
	strongly disagree	8	13.0	13.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

With reference to table 16 above, it can be seen that 20% (6%, 14%) were positive to the statement that providing psychosocial support through counseling, peer support groups, and educational resources can help children with neuromuscular disorders develop coping strategies, 56% (43%, 13%) of the respondents were negative to the same statement and 24% of the respondents were not sure. This is an indication that providing psychosocial support through counseling, peer support groups, and educational resources can help children with neuromuscular disorders develop coping strategies**.**

4.4.4 Children with neuromuscular disorders often experience difficulties in tasks requiring physical strength and endurance, leading to decreased participation in school, sports, and social activities

Table 17 showing whether children with neuromuscular disorders often experience difficulties in tasks requiring physical strength and endurance, leading to decreased participation in school, sports, and social activities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	16	25.0	25.0	25.0
	Agree	20	32.0	32.0	57.0
	not sure	6	10.0	10.0	67.0
	Disagree	8	13.0	13.0	80.0
	strongly disagree	13	20.0	20.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

With reference to table 17 above, it can be seen that 57% (25%, 32%) were positive to the statement that children with neuromuscular disorders often experience difficulties in tasks requiring physical strength and endurance, leading to decreased participation in school, sports, and social activities, 10% of the respondents were not sure while 33% (13%, 20%) were negative to the same statement making the minority of the respondents. This is an indication that children with neuromuscular disorders often experience difficulties in tasks requiring physical strength and endurance, leading to decreased participation in school, sports, and social activities.

4.4.5 Unpredictable nature of symptom progression in neuromuscular disorders can create uncertainty and stress for both the child and their family members

Table 18 showing whether unpredictable nature of symptom progression in neuromuscular disorders can create uncertainty and stress for both the child and their family members

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	22	35.0	35.0	35.0
	Agree	10	16.0	16.0	51.0
	not sure	6	10.0	10.0	61.0
	Disagree	14	22.0	22.0	83.0
	strongly disagree	11	17.0	17.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

Table18 above indicates that the majority of the respondents 51% (35%, 16%) were positive to the statement that unpredictable nature of symptom progression in neuromuscular disorders can create uncertainty and stress for both the child and their family members, 39% (22%, 17%) were negative to the same statement while 10% of the respondents were not sure. These findings were in line with Agbaje MA (2016) pointed out unpredictable nature of symptom progression in neuromuscular disorders can create uncertainty and stress for both the child and their family members. This is an indication that unpredictable nature of symptom progression in neuromuscular disorders can create uncertainty and stress for both the child and their family members.

4.5.0 Research question three: Finding out the effect of genetic predispositions on children's physical and psychosocial well-being in Mulago

4.5.1 Genetic variations can interact with environmental factors to influence susceptibility to mental health disorders in children

Table 19 showing whether genetic variations can interact with environmental factors to influence susceptibility to mental health disorders in children

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	5	8.0	8.0	8.0
	Agree	13	21.0	21.0	29.0
	not sure	7	11.0	11.0	40.0
	Disagree	18	29.0	29.0	69.0
	strongly disagree	20	31.0	31.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

With reference to table 19 above, it can be seen that 29% (8%, 21) were positive to the statement that genetic variations can interact with environmental factors to influence susceptibility to mental health disorders in children, 60% (29%, 31%) were negative to the same statement while 11% of the respondents were not sure. This concurs with the research carried out by Noble JA. (2017) postulated that genetic variations can interact with environmental factors to influence susceptibility to mental health disorders in children. This implies that genetic variations cannot interact with environmental factors to influence susceptibility to mental health disorders in children.

4.5.2 Genetic predispositions can also influence children's physical well-being, such as susceptibility to certain diseases and health conditions

The table 20 Showing whether genetic predispositions can also influence children's physical well-being, such as susceptibility to certain diseases and health conditions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	24	38.0	38.0	38.0
	Agree	15	24.0	24.0	62.0
	not sure	11	17.0	17.0	79.0
	Disagree	4	6.0	6.0	85.0
	strongly disagree	9	15.0	15	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

Table 20 above shows that the majority of the respondents 62% (38%, 24%) were positive to the statement that genetic predispositions can also influence children's physical well-being, such as susceptibility to certain diseases and health conditions, 21% (6%, 15%) were negative to same while 17% of the respondents were not sure. This agrees with the research carried out by Birdsall N (2016) asserted that genetic predispositions can also influence children's physical well-being, such as susceptibility to certain diseases and health conditions, hence implying that genetic predispositions can also influence children's physical well-being, such as susceptibility to certain diseases and health conditions.

4.5.3 Genetic influences account for a substantial portion of individual differences in physical health outcomes among children

Table 21 Showing whether genetic influences account for a substantial portion of individual differences in physical health outcomes among children

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	14	22.0	22.0	22.0
	Agree	18	29.0	29.0	51.0
	not sure	10	16.0	16.0	67.0
	Disagree	9	14.0	14.0	81.0
	strongly disagree	12	19.0	19.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

Table 21 above shows that the majority of the respondents 51% (22% , 29%) had a positive response to the statement that genetic influences account for a substantial portion of individual differences in physical health outcomes among children, 33% (14%, 19%) of the respondents were negative to the same statement meanwhile 16% of the respondents were not sure. This is an indication that genetic influences account for a substantial portion of individual differences in physical health outcomes among children.

4.5.4 Genetic factors can influence children's physical development, such as height, weight, and overall health status

Table 22 Showing whether genetic factors can influence children's physical development, such as height, weight, and overall health status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	34	54.0	54.0	54.0
	Agree	13	21.0	21.0	75.0
	not sure	1	2.0	2.0	77.0
	Disagree	11	17.0	17.0	94.0
	strongly disagree	4	6.0	6.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

With reference to table 22 above , it can be seen that 75% (54%, 21%) were positive to the statement that genetic factors can influence children's physical development, such as height, weight, and overall health status, 23% (17%, 6%) respondents were negative to the same statement while 2% of the respondents were not sure. This was in accordance to Finnigan (2012) intimated genetic factors can influence children's physical development, such as height, weight, and overall health status. This is a manifestation that genetic factors can influence children's physical development, such as height, weight, and overall health status.

4.5.5 Genetic predispositions can contribute to variations in children's physical growth trajectories, emphasizing the importance of considering genetic factors in promoting children's well-being.

Table 23 Showing whether genetic predispositions can contribute to variations in children's physical growth trajectories, emphasizing the importance of considering genetic factors in promoting children's well-being.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	27	43.0	43.0	43.0
	Agree	16	25.0	25.0	68.0
	not sure	8	13.0	13.0	81.0
	Disagree	10	16.0	16.0	97.0
	strongly disagree	2	3.0	3.0	100.0
	Total	63	100.0	100.0	

Source: primary data (2024)

With allusion to table 23 above, it can be observed that the majority of the responds 68% (43% ,25%) had a positive response to the statement that genetic predispositions can contribute to variations in children's physical growth trajectories, emphasizing the importance of considering genetic factors in promoting children's well-being, 19% (16%, 3%) were negative to the same statement while 13% of the respondents were not sure hence implying that genetic predispositions can contribute to variations in children's physical growth trajectories, emphasizing the importance of considering genetic factors in promoting children's well-being.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction.

In this chapter the researcher gives a summary of findings, conclusions and recommendation in line with the research questions and objectives.

5.1 Summary of findings.

The researcher provided a summary of findings in line with the objectives as follows;

5.1.1 Research Question one: Findings on the effect of intrauterine crowding on children's physical and psychosocial well-being in Mulago

The study investigated into the effect of intrauterine crowding on children's physical and psychosocial well-being in Mulago**.** Results showed that most respondents were positive to the statements that were they were asked. For example; majority of respondents constituting 54% of the respondents were positive to the statement that intrauterine crowding is associated with lower birth weights and higher rates of preterm birth, both of which are risk factors for various health issues later in life; 62% were positive to the statement that intrauterine crowding can lead to increased competition for nutrients and space, resulting in a higher risk of low birth weight and preterm birth among multiple-birth children, and higher opportunity costs; 61% of the respondents were positive to the statement that intrauterine crowding is associated with higher rates of behavioral problems in children, such as attention deficits and hyperactivity.

On the other hand, 75% constituting the majority were negative to the statement that intrauterine crowding has been associated with an increased risk of neuron-developmental disorders such as autism spectrum disorders and attention deficit hyperactivity disorder, 54% were negative to the statement that intrauterine crowding is associated with lower birth weight and shorter gestational age, which can have long-term consequences for the child's physical health and development.

It can be concluded that intrauterine crowding have a significant effect on children's physical and psychosocial well-being in Mulago.

5.1.2 Research Question two: Findings on the impact of neuromuscular disorders on children's physical and psychosocial well-being in Mulago.

The study investigated into the impact of neuromuscular disorders on children's physical and psychosocial well-being in Mulago. Majority of the respondents 56% of the respondents were positive

to the statement that children with neuromuscular disorders often experience limitations in their physical functioning, such as muscle weakness, impaired mobility, and fatigue, 80% of the respondents were positive to the statement that children with neuromuscular disorders may also face various psychosocial issues that can further exacerbate their well-being, it can be observed that 57% were positive to the statement that children with neuromuscular disorders often experience difficulties in tasks requiring physical strength and endurance, leading to decreased participation in school, sports, and social activities, 51% were positive to the statement that unpredictable nature of symptom progression in neuromuscular disorders can create uncertainty and stress for both the child and their family members while 56% of the respondents forming the majority were negative to the statement that providing psychosocial support through counseling, peer support groups, and educational resources can help children with neuromuscular disorders develop coping strategies. Basing on the above results, it can be concluded that neuromuscular disorders have a significant effect on the children's physical and psychosocial well-being in Mulago**.**

5.1.3 Question three: Findings on the effect of genetic predispositions on children's physical and psychosocial well-being in Mulago

The findings contends that 62% forming the majority of respondents were positive to the statement that genetic predispositions can also influence children's physical well-being, such as susceptibility to certain diseases and health conditions, 51% had a positive response to the statement that genetic influences account for a substantial portion of individual differences in physical health outcomes among children, 75% were positive to the statement that genetic factors can influence children's physical development, such as height, weight, and overall health status, 68% had a positive response to the statement that genetic predispositions can contribute to variations in children's physical growth trajectories, emphasizing the importance of considering genetic factors in promoting children's well-being. On the other hand, 60% forming the majority disagreed to the statement that genetic variations can interact with environmental factors to influence susceptibility to mental health disorders in children**.** Results according to probable statistics, it can be concluded that genetic predispositions have a significant effect on children's physical and psychosocial wellbeing in Mulago.

5.2 Conclusion

Basing on the research objective one which was to assess the effect of intrauterine crowding on children's physical and psychosocial well-being in Mulago, it can concluded that children's

physical and psychosocial well-being in Mulago and can be improved by improving access to quality healthcare, nutrition programs, and social services can positively impact intrauterine crowding by addressing any underlying health and social determinants. Promoting a supportive environment, including supportive family members, friends, and community networks, enhances a pregnant woman's well-being, indirectly benefiting intrauterine crowding.

With reference to the research objective two which was to evaluate the impact of neuromuscular disorders on children's physical and psychosocial well-being in Mulago. It can be concluded that neuromuscular disorders have a significant effect on the children's physical and psychosocial wellbeing in Mulago and can be enhanced by motivating children with neuromuscular disorders to engage in regular physical activity within their abilities may improve overall physical well-being, muscle strength, cardiovascular conditioning, and promote a healthy lifestyle. Encouraging social interactions with peers, siblings, and the community at large can enhance a child's psychosocial well-being. This can include participation in inclusive recreational activities, clubs, or programs specifically designed for children with disabilities.

Making allusion to the third objective, which aimed at identifying how genetic predispositions impact children's physical and psychosocial well-being in Mulago, it can be deduced that access to healthcare services has an enormous influence on orphans' and vulnerable children's teacher-student ratio in Kalas Girls Primary School. Importantly, this study established that a child's overall health outcomes are greatly affected by their unique genetic make-up. To maximize these benefits further for students who possess such traits then entails providing them with supportive family environments where they feel safe emotionally connected whilst enabling positive relationships crucial towards better mental health development. In addition, encouraging cognitive abilities like reading books; solving puzzles utilizing educational games could help enhance not only one's natural potential but also promote critical thinking skills- hence developing cognitive ability while positively influencing neural function even more!

5.3 Recommendations

Mulago's management should provide quality healthcare, nutrition programs and social services to improve intrauterine crowding. A supportive environment with family, friends and community networks is beneficial for pregnant women. Prenatal checkups detect health issues early while avoidance of smoking, alcohol and drugs reduces the risk of adverse effects on fetal development.

Encouraging physical activity improves overall well-being for children with neuromuscular disorders. Social interactions enhance psychosocial health through inclusive recreational activities and programs. Inclusive education, accommodations, and tailored plans support development and enhance well-being.

Mulago needs to provide a nurturing and secure environment that promotes positive relationships and mental wellbeing. Encourage cognitive development through activities like reading, puzzles, games, and critical thinking. These activities can enhance genetic potential and cognitive function. Teach children emotional regulation skills, encouraging open communication, validate their feelings, and support them in managing stress and adversity. Emotional well-being is crucial for overall health and resilience. Genetic counseling can provide valuable information about inherited conditions, risk factors, and preventive measures. It helps parents make informed decisions and take steps to optimize their child's genetic predisposition.

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APPENDICES APPENDIX I: QUESTIONNAIRE

Dear respondent;

I am Nalweyiso Suzan carrying out research on the topic "effect of clubfoot treatment on children's physical and psychosocial well-being in Mulago." as a partial fulfillment for the award of bachelors degree of social work and social administration at Uganda Christian University .The questionnaire is designed to help me collect relevant information and therefore I kindly request you to participate in responding to the questions that will be asked .However the information given will be treated confidential and will only be used for academic purpose.

SECTION 1: DEMOGRAPHIC DATA

(Tick in the box provided)

1. Gender distribution of the respondent

a) Male ☐ b) Female ☐

2. Marital status of the respondent

a) Single ☐ b) Married ☐ Divorced ☐ Widowed ☐

3. Age bracket of the respondent (years)

a) 20-30 ☐ b) 31-40 ☐ c) 41-50 ☐ C) 60 and above ☐

4. Academic qualification of respondent

a) Secondary ☐ b) Certificate ☐ c) Diploma ☐ d) Bachelors' e) Masters ☐

5. Years of working by the respondents.

a) Less than 1 year ☐ b) 1-2 years ☐ c) 3 years and above ☐

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Section A: To assess the effect of intrauterine crowding on children's physical and psychosocial well-being in Mulago. This section aims at assessing the effect of household income levels on school enrollment rates of orphans and vulnerable children of Mulago. Please indicate your opinion on the following statements using the Linkert scale. Key: **1= agree, 2= strongly agree; 3= not sure; 4= disagree; 5= strongly disagree.**

No		1	2	3	4	5
1	Intrauterine crowding is associated with lower birth weights and higher rates of preterm birth, both of which are risk factors for various health issues later in life					
2	Intrauterine crowding has been associated with an increased risk of neuron-developmental disorders such as autism spectrum disorders and attention deficit hyperactivity disorder					
3	Intrauterine crowding is associated with lower birth weight and shorter gestational age, which can have long-term consequences for the child's physical health and development					
4	Intrauterine crowding can lead to increased competition for nutrients and space, resulting in a higher risk of low birth weight and preterm birth among multiple-birth children					
5	Intrauterine crowding is associated with higher rates of behavioral problems in children, such as attention deficits and hyperactivity					
6	Early identification of children at risk for adverse outcomes, such as those affected by intrauterine crowding, can facilitate timely interventions to promote optimal growth and development					

Section B: To evaluate the impact of neuromuscular disorders on children's physical and psychosocial well-being in Mulago

This section aims at evaluating the impact of neuromuscular disorders on children's physical and psychosocial well-being in Mulago. Please indicate your opinion on the following statements using the Linkert scale. Key: 1= agree, 2= strongly agree; 3= not sure; 4= disagree; 5= strongly disagree.

No		**1**	**2**	**3**	**4**	**5**
1	Children with neuromuscular disorders often experience limitations in their physical functioning, such as muscle weakness, impaired mobility, and fatigue					
2	Children with neuromuscular disorders may also face various psychosocial issues that can further exacerbate their well-being					
3	Providing psychosocial support through counseling, peer support groups, and educational resources can help children with neuromuscular disorders develop coping strategies					
4	Children with neuromuscular disorders often experience difficulties in tasks requiring physical strength and endurance, leading to decreased participation in school, sports, and social activities					
5	Unpredictable nature of symptom progression in neuromuscular disorders can create uncertainty and stress for both the child and their family members					

Section C: To identify the effect of genetic predispositions on children's physical and psychosocial well-being in Mulago

This section aims at identifying the effect of genetic predispositions on children's physical and psychosocial well-being in Mulago. Please indicate your opinion on the following statements using the Linkert scale. Key: 1= agree, 2= strongly agree; 3= not sure; 4= disagree; 5= strongly disagree.

No		**1**	**2**	**3**	**4**	**5**
1	Genetic variations can interact with environmental factors to influence susceptibility to mental health disorders in children					
2	Genetic predispositions can also influence children's physical well-being, such as susceptibility to certain diseases and health conditions					
3	Genetic influences account for a substantial portion of individual differences in physical health outcomes among children					
4	Genetic factors can influence children's physical development, such as height, weight, and overall health status					
5	Genetic predispositions can contribute to variations in children's physical growth trajectories, emphasizing the importance of considering genetic factors in promoting children's well-being.					
6	Genetic predispositions can contribute to variations in children's cognitive abilities, emotional regulation, and social interactions					

APPENDIX II: INTERVIEW GUIDE

Can you explain what intrauterine crowding is and how it may affect a child's development?

What are some common physical health issues that can arise due to intrauterine crowding?

1. How does intrauterine crowding impact a child's psychosocial wellbeing? Are there any specific challenges they may face?
2. Are there any long-term implications of intrauterine crowding on a child's physical and psychosocial wellbeing? If yes, could you elaborate on them?
3. Are there any interventions or strategies that can help mitigate the negative effects of intrauterine crowding on children's wellbeing?
4. What are some common neuromuscular disorders that can affect children's physical and psychosocial wellbeing? Could you briefly explain them?
5. How do these disorders impact a child's physical health? Are there any specific limitations or challenges they may face?
6. In what ways do neuromuscular disorders influence a child's psychosocial wellbeing? Are there any emotional or social implications?
7. Are there any interventions or treatments available that can help improve the physical and psychosocial wellbeing of children with neuromuscular disorders?
8. What kind of support systems or resources are helpful for children with neuromuscular disorders and their families?
9. How does genetic predisposition play a role in a child's physical and psychosocial wellbeing?
10. Can you provide examples of genetic predispositions that can affect children's physical health? How do these conditions impact their overall wellbeing?
11. Are there any specific psychosocial challenges or implications associated with genetic predispositions in children?
12. What are some potential benefits of understanding a child's genetic predisposition in terms of their physical and psychosocial wellbeing?
13. Are there any preventive measures or interventions that can be taken to support children with genetic predispositions and enhance their wellbeing?

Appendix I: Work plan

		2024							
Task	Person in charge	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JULY**	**AUG**
Formulating the problem	Researcher and supervisor								
Selection of the sample	Researcher								
Formulating the collection instruments	Researcher								
Writing the report and handing it in	Researcher and supervisor								
Data collection	Researcher								
Analysis of the data	Researcher								
Writing of the research report	Researcher								
Submission of the research report	Supervisor								

UGANDA CHRISTIAN UNIVERSITY

A Centre of Excellence in the Heart of Africa

June 26th 2024

TO WHOM IT MAY CONCERN

Dear Sir/Madam

Re: INTRODUCTORY LETTER FOR RESEARCH

This is to introduce to you **NALWEYISO Susan** Registration number **J22B15/137**, a student of Uganda Christian University, pursuing Bachelor's degree in Social Work. She is expected to carry out research in the final year under the guidance of a university supervisor in partial fulfillment for the requirements of the above mentioned award.

Topic: "Effects of Clubfoot on Children's Physical and Psychosocial wellbeing in Mulago Kampala."

The purpose of this communication is to request your office to allow her collect data from your organization. Any assistance rendered to her will be highly appreciated.

Yours faithfully,

26 JUN 2024

.....

Doreen Kukugiza
Coordinator, Research & Fieldwork Programmes
Tel: 0773395349
Email:dkukugiza@ucu.ac.ug

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