

**PARENTAL AND HEALTH PROFESSIONALS' AWARENESS
OF SPEECH THERAPY FOR EFFECTIVE INTERVENTION
AMONG CHILDREN WITH COMMUNICATION DISORDERS IN
SELECTED HOSPITALS, MWANZA, TANZANIA**

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DECLARATION

I declare that this research project is my original work and has not been presented for certification in any other university or institution. Texts such as graphics, pictures, tables have been borrowed from other sources. These are specifically accredited and references cited using current APA system and in accordance with anti-plagiarism regulations.

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DEDICATION

I dedicate this work to my beloved wife Rahel Joseph Issayah who has been praying for me and taking care of my children during my master's studies in Kenya. I express my sincere gratitude to my parents; my father Sillas Marwa and my mother, Sillimina Silla for their support, encouragement and prayers for me and my family during my study.

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ABBREVIATIONS AND ACRONYMS

IDEA	Individual with Disability Education Act
NID	National Institute of Deaf
NTP	Normalization Process Theory
UNICEF	United Nations International Children's' Emergency Fund
WHO	World Health Organization

ABSTRACT

This study sought to assess parental and health professionals' awareness of speech and language therapy for effective intervention of children with communication disorders in three selected hospitals in Mwanza City, Tanzania. The objectives of the study were: determine level of awareness among parents and health professionals concerning available speech-language therapy services for effective intervention for children with communication disorders; to examine parental and health professionals' views on referral and information related to speech-language therapy for effective intervention for children with communication disorders, to establish parental and health professionals' roles in speech and language development for effective intervention for children with communication disorders and to investigate parental and health professional influence on awareness creation about speech-language therapy for effective intervention for children with communication disorders. The research was guided by Normalization Process Theory. The study employed descriptive survey design with both qualitative and quantitative methods. The target population included parents of children with communication disorders and health professionals who attend to children with communication disorders specifically, those with hearing loss, cleft palate/lip, Down syndrome and autism. The study used sample size of 100 respondents in which 85 were parents and 15 health professionals. The study employed purposive sampling in selecting respondents who were parents and health professionals. Validity was ensured through professional reviews, while reliability test was performed using Cronbach's Alpha to establish internal consistency of the items in the questionnaires. Test-retest method was used to measure reliability in the piloting institution. Data was collected by using questionnaires for the parents, interviews for the health professionals and document analysis of records of parents of children with communication disorders. Qualitative data from interview and document analysis was analyzed thematically and quantitative data from questionnaires was analyzed using descriptive statistics in form of frequency, percentage, tables and graphs with the aid of SPSS computer program. The study found that majority of the parents and health professionals have limited awareness on availability of speech and language therapy services. Many parents and health professionals reported that there is low level of information and referral systems related to speech-language therapy. The study also found that many parents have limited awareness of their roles in speech and language development, while some health professionals try to help the children but not effectively. The findings indicated that there were low level of awareness and limited roles of parents and health professionals on speech therapy services in the selected hospitals. The study recommended that there was a great need to raise awareness of speech and language therapy to the parents and health professionals for effective intervention for children with communication disorder.

CHAPTER ONE:

INTRODUCTION AND BACKGROUND TO THE STUDY

1.0 Introduction

This chapter gives the description of background to the study, statement of the problem, purpose of the study, research objectives, research questions, significance of the study, limitations and delimitation of the study, theoretical framework, conceptual framework and operational definition of terms.

1.1 Background to the study

Children who are at risk for communication disorders are of several types such as children with cleft palate/lip, Autism Spectrum Disorders, Cerebral palsy, hearing loss and those with Down Syndrome (NID, 2018; Samwel et al, 2015). These children usually have challenges with either receptive language, expressive language or both. Early intervention is known to be helpful in speech-language development among children with communication disorders. Early intervention is done by multidisciplinary team that includes: parents, speech-language therapists and health professionals. Parents of children with communication disorders and health professionals should be involved in any designed intervention program. To have effective participation for implementation of early speech-language intervention program, parents of children with communication disorders and health professionals must have adequate awareness of speech –language therapy services available. Parental awareness of speech and language therapy is for parental participation in early identification of communication disorders, diagnosis process, home treatment program, advocating for intervention program, and in choosing

communication skills needed to enhance speech and language skills of their children and in providing evaluation and progress of children's speech-language development milestones (Rosenbaum & Simon, 2016).

Health professionals, apart from speech-language therapists, have great roles in child's language development. They work closely with speech therapists and parents in evaluating, monitoring, providing referrals to the parents to seek speech therapy, advocating for the child's speech-language needs and promote rehabilitation and habilitation of the children with communication disorders (Mostafa, 2017; Intezar et al, 2018).

According to WHO (2012: WHO, 2013), early childhood intervention is viewed as important component of a child's development. WHO encourages family competencies and social inclusion of families with children who have disabilities in early intervention. It also reports the importance of health care team working towards the management of children with disabilities. UNICEF (2007) warns that communication disorders is a catastrophe that affect many children Worldwide and thus, parental involvement is one of the principles that should be considered in early childhood development. Parents have been identified as an important group that communicate with their children in naturalistic and cultural contexts. The Individual with Disability Education Act passed in 1990 in USA, extended the roles of family in decision-making during intervention for young children and introduced the concept of family as client rather than solely the child.

In developed countries like America and Britain, speech-language intervention for children with communication disorders is done in different settings. Parents are trained in order to provide home treatment and advocacy for speech and language intervention program (Rosenbaum & Simon, 2016). Awareness is raised among health care team on speech-language management and in other health programs such as: occupational therapy, physiotherapy, audiology, as well as through students who take some courses on speech-language pathology for management of children with communication disorders (Felsher & Ross, 1994). Health professionals provide referrals to parents to seek speech therapy for their children with communication challenges. However, some studies have reported that parents are not satisfied with referrals and information they are given related to speech-language therapy (Rannard et al., 2005).

Due to the great change in therapeutic approaches from therapist-centered approach to family-centered approach, evidence-based studies suggest that intervention to improve speech-language of children with communication disorders needs parental participation since parents 'experience, knowledge and awareness are very important glue in bringing effective speech-language intervention (Dalma et al., 2017).

Parental and health professional awareness about speech-language therapy has been found to be one of the most effective supports in early speech-language intervention. Parents of children with communication disorders and health professionals should be aware of intervention available for children, aware of speech-language therapy services, roles of speech- therapists and their own roles in intervention process (Robert,2011).

Some researches show that many parents have little awareness on speech-language intervention. For example, research on views and awareness of parents of children with speech and language disorders in Turkey, (Ayse, et al. 2019) found that many parents were unaware and even have limited knowledge on speech and language therapy. Another research on parents' expectation, awareness and experience of speech-language therapy services for their children with Autism in Australia, (Auert, et al.2012) has found parents having little knowledge to practice speech and language therapy. A study on awareness and knowledge of Audiologist regarding benefits of spechh-language therapy for hearing impaired individuals in Pakistan (Intezar, 2020) and study on role of speech-language pathologists by students in other health care programs in Canada (Sullivan,2003), report that health professionals are aware of speech-language therapy while some studies in Egypt (Mostafa, 2017), report limited awareness of speech-language therapy among health care providers. However, the reported studies on awareness of parents and healthcare professionals were all conducted in developed countries. The prevailing situation developing countries like Tanzania in terms of level of awareness speech and language therapy services is unknown.

In Africa, there are limited studies on parental and health care providers' awareness about speech and language intervention to children with communication disorders. Only South Africa is ahead of other Sub-Sahara countries in speech-language intervention service provision. In South Africa, studies indicate that some parents and health professionals have awareness of speech and language therapy (Watherson et al.,2017). A study involving parents in a project for language intervention for children with autism in South

Africa, in which views and knowledge of parents of children with autism on range of treatment offered to their children was evaluated found that some parents had knowledge and awareness of speech and language intervention. This has contributed to effective participation of parents in speech-language intervention for their children with communication challenges in South Africa (Gangat, 2017).

In Egypt, a study on effect of parents' interaction on language development in children with communication disorders found that majority of parents who participated in the study had received awareness about intervention but were not able to use effective intervention methods to help in speech and language development of their children because they thought that speech therapists are the only specialists who should offer speech therapy and that parents' role is minimal (Safwat et al, 2014).

In East Africa; Tanzania, Kenya and Uganda, it is commonly known that speech and language therapy services are affected by cultural and linguistic aspects and scarcity of speech therapists. Many parents and communities still have negative perspective towards children with communication disorders (Ngugu & Kinyua,2009). Some Parents are not aware of the causes, symptoms and treatment of communication disorders (Lorna, 2000). A study in Kenya on assessment of care givers involvement in intervention program for speech and language disorders found that few parents had knowledge on speech and language therapy and they were not effectively involved in speech and language therapy program (Obure, 2018).

In Tanzania, there are limited studies in the area of parental and health professional's awareness of speech-language therapy. A study on the area of Parental Perspective pre- and post- cochlear implantation in Tanzania (Hassuji,2019), reported that parents still raise concerns on the need of speech and language development following the cochlear implants.

A study in Tanzania on provision for children with speech and language difficulty evaluated awareness of speech-language among health professionals and special Need Educators. The findings indicate that few participants were aware of speech and language disorders and among the groups, health professionals had less awareness than teachers (Marshall, 2006). The world Bank and World Health Organization (2011) has also acknowledged that, due to scarcity of speech therapists, speech therapy services are either rare or non-existent in most developing countries like Tanzania (Wylie at al. 2016). Research in the area of parental and health awareness of speech and language therapy for effective intervention of children with communication disorders, has not been done in any hospital in Tanzania (Marshall, 2009). Therefore, the current study seeks to assess parental and health professionals' awareness of speech-language therapy for effective speech-language intervention.

1.2 Statement of the Problem

Children with communication disorders experience, psychological turmoil, socio-cultural isolation, academic and economic problem (Sammuel & Mabuku, 2014). Speech and language impairments are among the common challenges facing their communicative ability in the aspects of receptive and expressive language. In the developed countries,

parents and health care providers are essential participants in child's speech-language development and effective speech therapy due to the fact that they play crucial roles in child's health management and developmental milestones. Parents provide therapeutic services at home, take their children to rehabilitation centers, interact with their children in social, cultural and economic aspects of their lives, advocate for speech-language concerns of their children and work on monitoring and evaluating child's progress. Health care professionals also advocates for children's speech-language needs and provide referrals to the parents to seek speech therapy services. However, in most of developing countries in Sub-Sahara Africa including Tanzania, there is a scarcity or non-existence of speech therapists and an ever-increasing number of children with communication disorders (World Bank and World Health Organization, 2011).

It is, therefore, not clear whether parents of children with communication disorders and health professionals have adequate relevant information regarding speech therapy to enable them participate in early speech and language intervention process. Some studies report that the number of children born with conditions related to communication disorders is increasing in Tanzania though there is limited information about the total number of children with communication disorders. Speech-language therapy services in the country is provided in Muhimbili National hospital and one private clinic both in Dares Salaam. Speech therapists at Muhumbil hospital have reported that the number of children attending speech and language therapy at the hospital is very low when compared to the children who needs speech-language therapy services in the country. There are many hospitals in Tanzania including Lake zone regions where children with

communication disorders receive other medical treatment, for example, Bugando Lake Zone Medical Hospital, Sekou-Toure and Mabatini Community Rehabilitation Centre. However, nothing is known about general awareness among parents and health professional and the roles they play in speech-language intervention among children with communication attend the hospitals. Therefore, the current study sought to establish parental and health professional level of awareness concerning speech-language therapy for effective intervention among children with communication disorders.

1.3 The Purpose of Study

The purpose of this study was to assess parental and health professional awareness of speech and language therapy for effective intervention of children with communication disorders in selected hospitals, Mwanza City, Tanzania.

1.4 Research Objectives

The objectives of the study were to:

- 1 Determine parental and health professional's level of awareness concerning speech-language therapy services for intervention of children with communication disorders in selected hospitals
- 2 Examine parental and health professionals' views on referral and information related to speech-language therapy for effective intervention in selected hospitals
- 3 Establish parental and health professional's roles in speech and language development for intervention of children with communication disorders.

- 4 Investigate parental and health professional influence on awareness creation about speech-language therapy for effective intervention among children with communication challenges.

1.5 Research Questions

1. What is the level of awareness among parents and health professionals on speech-language therapy for intervention of children with communication disorders in selected hospitals?
2. What are the views of parents and health professionals on referral and information related to speech-language therapy for intervention of children with communication disorders in selected hospital?
3. To what extent are parents and health professionals play the roles in speech and language development for intervention of children with communication disorders in selected hospital?
4. What are the influence of parents and health professionals on awareness creation about speech-language therapy for effective intervention among children with communication challenges?

1.6 Significance of the Study

The findings of this study may provide relevant information to speech therapists and other health professionals on the importance of creating awareness on speech-language therapy and the need for involvement of parents in speech-language therapy for effective intervention process. In addition, the government and non-governmental organizations may get relevant information on the need to develop policies that may help in creating

public awareness about communication disorders and their causes and treatment options as well as training of parents of children with communication disorders and health professionals on communication disorders for effective participation in intervention process.

1.7 Limitation and Delimitation of the Study

This section discusses limitation and delimitation of study

1.7.1 Limitations of the Study

It was difficult to get hospitals and rehabilitative centers in Mwanza City where parents of children with communication disorders attend in great numbers for a pilot study. Therefore, in order to get enough number of respondents for pilot study, researcher did a pilot study in one hospital with the same characteristics in Mwanza City. It was also difficult to get large number of targeted population because other parents are not bringing their children with communication disorders to hospitals. Therefore, researcher consulted hospitals' administration to help in getting into contacts with parents of children with communication disorders.

1.7.2 Delimitation of the Study

The study assessed the level of parental and health professional's awareness concerning speech-language therapy for effective intervention among children with communication disorders specifically, parents of children with either hearing loss, autism spectrum disorders, cleft palate/lip, cerebral palsy or Down syndrome because these conditions usually affect language and speech intelligibility. The study involved only parents of the children with communication disorders who brought their children for health services in

the three selected health centers. The study was done in hospitals while excluding schools because health centers receive many children with communication disorder.

1.8 Assumptions

The research was guided by the following assumptions

- (i) Parents and health professionals have limited referral and information related to speech-language therapy for intervention of children with communication disorders.
- (ii) Parents of children with communication disorders have low awareness on their roles in speech-language therapy for intervention of children with communication disorders.

1.9 Theoretical Framework and Conceptual Framework

This section covers the theory underpinning the study and the conceptual frame work that explain the connection of the variables of the study.

1.9.1 Theoretical Framework

The study was guided by Normalization Process Theory (May & Finch, 2009). This theory was propounded by May and Finch in collaboration with national and international colleagues. It was developed between 1998 and modified in 2009 from Normalization Process Model which addresses the adaptation of new technologies in health care focusing on complex relationship between actors, objects and contexts. Actors are the groups that encountered each other including health professionals, patients and family members. It explains how health care should integrate internal and external elements in intervention process. NPT incorporates different professionals in the process of diagnosis,

treatment, implementation and evaluation processes (May et al, 2009). This theory discusses the need for sharing knowledge among multidisciplinary team (entities or agencies) who deal with the treatment of patients to ensure effective treatment plan and practices. It has four mechanisms explaining its concerns which are coherence, cognitive participation, collective action and reflexive monitoring.

The current study sought to establish the level of parents' and health professionals' awareness of speech- language therapy for effective intervention among children with communication disorders. Therefore, the three mechanisms of this theory which are cognitive participation, collective action and reflexive monitoring are applicable in this study due to fact that speech and language intervention is one of the complex intervention processes that requires the input of a group of allied professionals, medical professionals and families. May explains the mechanism of cognitive participation as a relational work that people do to build and sustain a community of practice around new technology or complex intervention through knowledge sharing among the participants. Speech-language intervention is one of the complex interventions which needs the sharing of knowledge among multidisciplinary team who are speech-language therapists, parents and other allied health professionals. In this case, children with communication disorders must be treated with a designed program that allow effective parents' and health professionals 'knowledge sharing in intervention process (Hooker et al, 2015; James, 2011). Collective action as one of the mechanisms of NPT refers to the operational work that people do as a group to enact a set of practice which represent new technology or complex health care intervention.

Speech-language intervention needs a close participation of a multidisciplinary team including parents and health care providers. Both interdisciplinary professionals and allied health professionals will need information from the parents during diagnosis process given the fact that parents interact with their children in different aspects of life where language is the main means of communication while health professionals work on diagnosis, referrals and information required for management. Reflexive monitoring is the appraisal work that people assess and understand the way a new set of practice affect them and others around them (Hooker, 2015). Speech-language intervention needs evaluation process and monitoring progress. Parents and health professionals play vital roles in evaluation and monitoring of the child's speech-language development. Therefore, this makes normalization process theory significant because it integrates parents and health providers in designing, practicing, evaluating and implementing the program by sharing their knowledge for effective intervention (May et al, 2018).

1.9.2 Conceptual frame work

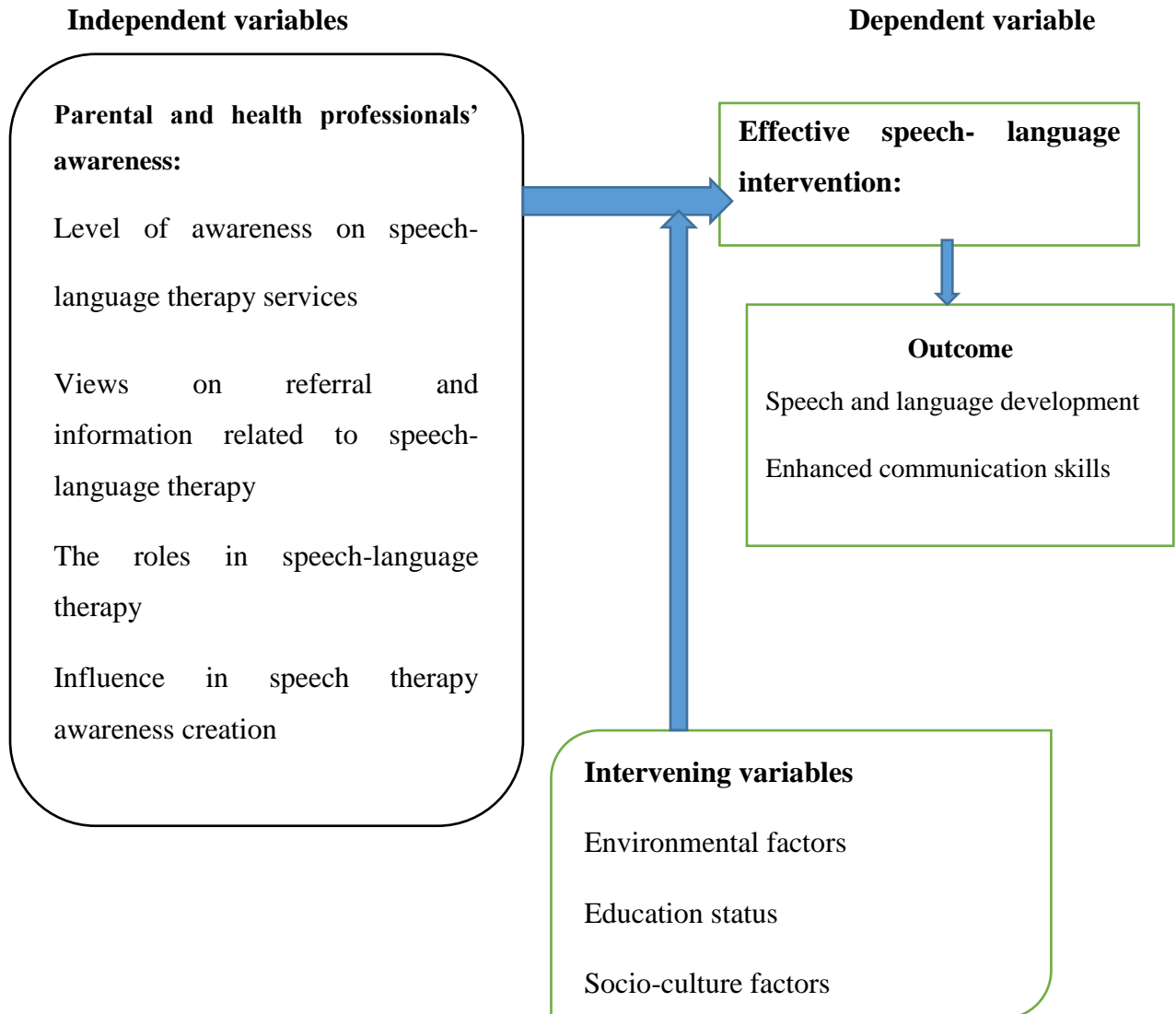


Figure 1.1 Conceptual Frame Work

The conceptual frame work above was a guideline to understand the integrated variables of the study. It is a fact that parental and health professionals' awareness about speech and language therapy contributes positive results for effective speech and language intervention for their children with communication disorders. The model of the study sought to establish level of awareness on speech-language therapy among parents and

health professionals for early speech and language intervention for children with communication disorders.

The independent variable of this study was parents' and health professionals' awareness about speech and language therapy for children with communication disorders. If parents and health professionals have awareness of speech-language therapy, there would be positive results in early speech and language intervention for the children with communication challenges. The dependent variable was speech-language intervention among children with communication disorders. Any early intervention is effective when parents and health professionals have awareness and are involved in the program. It is expected that if parents of children with communication disorders and health professionals are aware and are able to participate fully with knowledge they have in speech and language therapy; the result would be effective intervention. Intervening variables in this study can easily influence intervention either positively or negatively. Intervening variables were environmental factors, education and economic status as well as socio-cultural perspective of the parents.

Environments can support in creating awareness and knowledge about speech and language therapy. Parents and health professionals who live in urban areas may have awareness about intervention than parents who live in rural areas, parents who take their children to hospitals where there is speech-language therapy may have awareness than parents who are unable to do so. Educational and economic status can also influence parents and health professionals' involvement, in speech and language intervention

process. Socio-cultural perspective can influence parents to participate in intervention or ignore intervention.

1.10 Operational Definition of Terms

This section presents brief definitions of the key terms used in this the study.

Awareness the state of being conscious or having information about speech-language therapy service for effective intervention among children with communication disorders.

Children with communication disorders infants, toddlers or Young children who have been diagnosed having communication challenges. They include children with hearing loss, autistic children, cleft palate children and other communication disorders.

Health professionals' group of qualified health providers who work with parents and their children with communication disorders in hospital contexts.

Parents, a biological individual who is either mothers or fathers who care for child with communication disorder.

Speech and language therapy, the program designed to provide diagnosis, treatment and care supports to the children with communication and swallowing disorders.

Speech-language intervention refers the application of variety of practices, methods, approaches and programs that are designed to promote speech or language development.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This Chapter reviews literature on previous studies and works relating to the study based on the study objectives. The review focuses on what other researchers, scholars and other educationists have said on level of awareness among parents and health professionals on speech and language therapy, parents and health professional views on referrals system, their roles in speech and language therapy and their influence on awareness creation about speech and language development.

2.2 Parents' and Health Professionals' Level of Awareness of Speech-Language Therapy

Lack of parental and health professionals' awareness of speech-language therapy available in the country is among the factors that hinder effective speech-language intervention process. Parental and health professionals 'awareness of speech-language intervention services available in the country is a primary component that encourage participation in any designed intervention program (Robert, 2011 & Ayse, 2019). As one of the multidisciplinary teams needed in speech-language intervention process, parents of children with communication disorders and health professionals should be aware of intervention process available in the country, the specific hospitals, schools, or any center where speech-language therapy is provided, individual professionals who are concerned with speech-language intervention, the importance of early speech-language intervention and the roles they should play in intervention process.

It has been found that in developed countries parental and health professionals' awareness of speech-language therapy is created through different sources like mass media such as radios, television, News Papers and magazines (Yolanda et al, 2016). Social medias like, you tube, Facebook, twitter, WhatsApp, and Instagram help parents to get information about speech-language therapy (Bishop, 2012).

Parental awareness is also raised through training, dissemination of professional information, referrals, other parents whose children attend speech-language therapy services and from published documents, articles and reports (Lowry, 2016). Effective involvement of parents in speech and language therapy has been found to be a key strategy to spread awareness and knowledge among parents and community in general (Barbosa & Fernandes, 2017). Due to guidelines and policies from international organizations, international laws and United Nations that address the right of children and individuals with disabilities to access education and health services (United Nations, 2018, 2014, WHO, 2011; UNICEF, 2016), developed countries have tried to create awareness among families of children with communication disorders and health professionals about the need for early speech-language intervention.

Health professionals in developed countries are well informed about communication disorders and there are guidelines for assessment and treatment of speech-language disorders. In other medical disciplines like occupational therapy, physiotherapy and audiology, speech-language pathology is taught as course in first year programs. This has helped to create awareness and knowledge among other health professionals. A study on the roles of speech-language pathologists by students in other health programs has

reported that health professionals have some level of awareness and knowledge related to speech-language therapy (Sullivan, 2003).

In America, a scope of Practice in Speech-Language Pathology is documented with the clear guidelines that describe the roles of speech-language pathologists and other health professionals in provision of intervention for children with communication disorders. Health professionals get training in the field of speech-language therapy and they work closely with speech-therapists in public and private sectors towards the management of children with communication difficulties (ASHA, 2010). Furthermore, in America and England, every newborn child with risks of communication disorders like those with hearing loss, down syndrome, Cleft palate/lip are screened and further diagnosis processes is done for effective speech-language intervention process (Wood et al. 2015; Lang, 2014). Parents are informed about the significance of early speech-language intervention to their children.

Speech-language pathology is a new field in many countries in Africa. Some Sub-Sahara countries in Africa have few speech-language therapists, some of which are natives while others are foreigners from Western countries. Other African countries use occupational therapists and physiotherapists to help in providing speech therapy services (Marshall et al, 2018). However, little has been done to evaluate the level of parental and health professionals' awareness despite the fact that parents and health professionals are the important groups needed in the child's speech-language development.

In East Africa, speech-language therapy is affected by several factors including cultural and linguistic differences, religious barriers, negative cultural perceptions towards children with communication disorders, stigmatization of the children with communication disorders and their parents (Marshall, 2006; Ndugu & Kinyua, 2009).

A study by Ayse, (2018) on views and knowledge of parents of children with speech and language disorders in Turkey found that some parents had limited awareness on speech-language therapy and few others were not aware of speech-language therapy services in the country. Other similar studies in Turkey also revealed that some parents were neither aware of the roles of speech-language pathologist, nor their roles in intervention process while a few others were not aware of the importance of early intervention (Auert et al. 2012; Mohmoud et al. 2014).

Lack of awareness and knowledge among parents has been found to be associated with factors such as the program being new in the country (Ayse, 2018), referral delay and absence of information from health professionals to parents about the need to attend speech-language therapy, remote areas, absence of public information and publications on speech and language therapy as well as lack of parental training and ineffective parental involvement in speech-language intervention (Salmons, 2015; Barbosa, 2017).

Parents or caregivers' failure to attend therapy services or non-adherence to treatment appointments can be as a result of lack of awareness or knowledge of available treatment services, importance of speech therapy, or lack of awareness of the roles of speech therapists and parental roles in intervention process (Bultman & Svarstad, 2002).

In Tanzania, Speech-language therapy services are provided in very few places and the number of children who attend these services is very low despite the high number of children with communication disorders in the country (CCBRT, 2015). Studies to establish parental and health professionals' levels of awareness of speech-language therapy available in the country have not been done in any region including Mwanza region. Furthermore, no study has been done in any hospital to assess parental level of awareness of speech-language therapy although hospitals have been receiving children with communication disorders. Therefore, the current study will examine the parental and health professionals' awareness of availability of speech-language therapy services in the country.

2.3 Parental and health professionals' views on referrals and information related to speech-language therapy

Limited information related to speech-language therapy, referrals delay and dissatisfaction with referrals among parents and health professionals have been found as some of the factors that hinder effective speech-language intervention among children with communication disorders (Watts, 2010; Rannard & Lyons, 2005; Watts & McLeod, 2015). Parents and health professionals are supposed to raise concerns on speech-language disorders among children and parents should be given information by health professionals on the need for speech-language intervention for their children. Health professionals provide referrals to parents to seek speech-language therapy services. Effective referrals and information related to speech-language intervention from health

professionals have been found to increase parental awareness and adherence to the child's speech-language treatment (Glogowska & Campbell, 2000).

Health professionals are usually the first experts approached by parents concerning speech-language development in early year. Health professionals play crucial roles in detection, identification and diagnosis and then ensure timely referrals for speech-language therapy. A study on parental concerns and health professionals' response on specific language impairment by Rannard et al (2005) reported that parents raised concerns early to health professionals but health professionals underestimated speech-language problem and failed to take parental views into account. The study established that health professionals relied on possibility of spontaneous recovery and gave inappropriate advice to the parents which resulted in delayed referrals to speech-language therapists (Rannard et al, 2005).

Inter-professional collaboration among health professionals is very important for the management of patients. Children with communication disorders need team working in diagnosis and treatment. Health professionals work closely for the Management of children with communication disorders. Effective referrals and information related to speech-language intervention, help parents to take decision in early intervention (Kruszynski et al, 2018).

A study on rganization of the referrals and counter-referrals system in speech-language pathology and audiology clinic in Brazil (Reginal et al. 2015), reported that there were effective and appropriate referrals made internally when the team work together while

there was external delay of referrals to meet speech-language therapists out of the clinic. Bercow (2008) reviewed services for children and young people (0-9) with speech, language and communication needs in Nottingham and found higher level of public dissatisfaction with speech-language therapy information and referral system.

However, effectiveness of referrals system and information related to speech-language therapy at Bugando Medical Center, Sekou-Toure, Mabatini and other hospitals in Tanzania has not been evaluated though the hospitals care for children with communication difficulties. Therefore, the current study sought to assess parental and health professionals' views on referrals and information related to speech-language therapy for effective intervention.

2.4 Parental and Health Professionals' Roles in Speech and Language Therapy

Over the last several years, the roles of speech-language therapists and parents have undergone changes. Parents are no longer observers of the therapy services, but are now acting as speech-language pathologists through parent- implemented speech-language intervention or parent- centered approach (Stephan, 2017; Hatcher & Page, 2019). The roles have shifted to the parents due to fact that children learn to communicate with their parents in daily activities and in conversational contexts. Parents not only have more time to interact with their children than speech-language therapists, but they also know their child's needs, strengths and weaknesses, and can make speech-therapy an ongoing process beyond the normal scheduled therapy (Lowry, 2016).

Therefore, due to the great change that emphasizes the use of parent- implemented intervention, parents now have several roles to play in the presence or absence of speech-language pathologists. Parents have the responsibility of taking their children to therapy centers and participating in diagnosis, treatment plan and speech-therapy (Pamplona et al. 2000). Parents also have a responsibility to participate in home treatment program (Lowry, 2016), as well as advocate for their children's needs (Marshall, 2016). The responsibilities parents play have increased level of awareness that entail their effective involvement in intervention processes.

Parental training and effective involvement of parents in speech and language therapy in several aspects such as assessment process, diagnostic report, treatment plan, home therapy, counselling and guidance, evaluation and monitoring have been found to help parents to have awareness of Home treatment is one of the therapeutic intervention approaches which integrate parents or One of the commonly known home treatment program that creates parental awareness and knowledge of speech-language therapy in developed countries is Hanen Programs (Robert & Kaiser, 2011). These programs are designed to help parents of children with communication disorders to learn how to promote their child's speech-language abilities by involving parents and train them on how to provide home therapies (Robert & Kaiser, 2011).

A review of literature on the effectiveness of parent-implemented language intervention that involved Hanen Programs, found that parents successfully learned strategies for speech-language therapy and were able to use them in interacting with their children. It

was also found that parents, like speech-language pathologists, were able to help their children improve their speech and language skills (Robert & Kaiser, 2011).

Parents are the decision makers of their child's speech-language intervention. They have a duty to work in hand with speech-language therapists in making decisions on assessment process, treatment plan, therapy approaches, child's referral, discharge and the treatment cost. Effective involvement of parents in decision making help to increase parental awareness and knowledge of their roles in speech-language therapy (Davies, 2014). However, some studies show that low level of parental involvement in speech-language therapy affect their knowledge of their roles in speech-language therapy (Ingber et al, 2018). Pappas, McLeod and McAllister (2008) study on parental involvement in speech intervention found that parents were not effectively involved in services plan, decision making and that they were also unhappy with their level of involvement in therapy services.

A study by Watts et al (2016) on parental beliefs and experience regarding involvement in intervention for their children with speech sound disorders reported that parents wanted to be involved in their child's intervention but they were reluctant to participate because they thought that speech-therapists are the only intervener of the child's speech therapy with a greater role than parents (Watts, McAllister & McLeod, 2016). The findings from a national review in England (Bercow, 2008) show that parents struggled to be considered by professionals as partners in supporting their child's speech as instructed by the guidelines in speech-language therapy but they were not participating any decision making for therapy services.

Health professionals such as occupational therapists, physiotherapists, audiologists, pediatricians, nurses and other health care providers play significant roles in helping children with communication disorders (Ministry of Children and Family Development, 2009). They work as advocates for children's communication needs, participate in identification, detection, diagnosis and provision of referrals for further assessment and treatment of speech-language impairment. They have a duty to work with speech-therapists and other health professionals to attain complete health and function categories of the children with communication disorders (Mcquistin & Kloczko, 2011).

A study on physiotherapy speech, language and hearing science and occupational therapy interdisciplinary practice in disorders of human communication in Southern Brazil which had purpose to identify the perception of physiotherapists, speech therapists and occupational therapists on how the theme of interdisciplinary in health and human communication disorders is developed reported that health professionals recognized the importance of interdisciplinary team working but due to the lack of awareness on the roles of some professionals, brought difficulties in Management of human communication disorders (Ferigollo & Kessker, 2017).

Despite the fact that it has been indicated by evidence-based researches that parental and health professionals' participation in speech and language therapy is crucial for effective speech-language intervention for children with communication disorders, no study has been done in Tanzania to assess parental and health professionals' awareness of their roles in speech-language therapy for effective intervention. The current study therefore

sought to examine parental awareness of their roles in speech-language therapy process as a determinant for effective intervention in selected hospitals.

2.5 Parents' and Health Professionals' Influence on Awareness Creation about Speech-Language Therapy

Higher level of speech-language therapy awareness among parents of children with communication disorders and health professionals is a key factor for effective participation in speech-language intervention. Both parents and health professionals should be aware of cause of speech-language disorders, normal language developmental milestones, diagnosis and treatment process. In developed countries, some studies have reported an increase of level of awareness among parents and health professionals, (Keng & Shin, 2021; Reddy at al. 2016) while other studies still indicate the need to increase level of awareness about speech therapy and communication disorders among parents, health professionals and public in general (Paily, 2020 ; Ayse, 2019; Mostafa, 2017). A preliminary survey report on awareness of communication disorders among nurse trainees and primary teachers that was done in India, has reported that both health professionals and primary teachers had better awareness for most of communication disorders (Shudharshan, 2019).

However, in Africa, a study on health care professionals' awareness of language delay in Sohag upper Egypt has reported that there is need to increase education among health care professionals by including a course on speech-language pathology in curricula for training (Mostafa, 2017).

Parental awareness and knowledge related to speech-language intervention should be taken into consideration since the study demonstrates that the higher the parental education on speech-language disorders, the more they tend to consider the age groups for early phonological acquisition and overcoming speech-language disorders (Wolff & Niegia, 2013). Parents who are not aware of their roles in intervention process will not take into account speech-language development of their children than parents who are aware of speech-language intervention. A study on parents and speech therapists' roles in intervention for pre-school children with speech-language needs that was done in Britain, reported that parents had clear concept of advocacy but were not aware of their roles in supporting their children in language learning (Davies, 2014).

There are several circumstances that make parents to be essential group in child's speech-language development. Parents interact with their children daily than speech therapists, they stay with their children for more days than therapists, parents also know the cultural and linguistic background of their children than speech therapists. Therefore, as the world changes from therapist approach to family-centered approach, parental awareness of speech-language therapy for intervention process is necessary (Robert & Kaiser, 2011).

Health professionals are also key players in speech-language intervention process. Therefore, lack of awareness among health professionals on speech-language intervention may affect their options in providing referrals and information related to speech-language intervention. Even though health professionals are considered as important group in child's communication management, studies in some developed and developing countries show that there is limited awareness among health professionals on supporting children

with communication needs (Rayes, 2014). However, parental and health professionals' views on awareness creation about speech-language therapy has not been established in Tanzania including Mwanza region. Therefore, the current study examined parental views on the need to create awareness of speech-language therapy among parents and health professionals for effective speech-language intervention.

2.6 Summary of the Literature Review

The reviewed literature on parents' and health professionals' awareness of speech-language therapy for effective intervention shows that parental and health professionals' awareness of speech-language therapy services, their roles in speech-language development, effective referrals and information related to speech-language therapy are crucial factors for effective speech-language intervention process (Lowry, 2016). However, some reviewed literatures have revealed that some parents and health professionals still have little awareness and knowledge of speech-language therapy for effective intervention process (Ayse, 2018; Auert et al, 2012& Mohmoud et al,2014). One of the gaps that emerged in reviewed literature is that none of the studies reviewed have focused on both parental and health professionals' awareness of speech-language therapy for effective intervention in developing countries and specially in Tanzanian context. Tanzania, like any other developing countries, there is increasing number of children with communication disorders with some hospitals reporting cases of children with communication impairments but no research has been done to assess the level of awareness of parental and health professionals in speech and language therapy for effective intervention among children with communication disorders.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses research procedures and methodology used in data collection and analysis. It describes research design, locale of the study, operation of the variables, population, sampling techniques and sample size determination, research instruments, pilot study, validity and reliability, data collection procedures, data analysis, logical and ethical considerations.

3.2 Research Design

The study used descriptive survey design. A descriptive survey design is a research design whose primary purpose is to describe the characteristics of the respondents basing on who, how, when, where and what particular phenomenon is taken into account (Oso & Onen, 2009). Descriptive survey was used to give more elaboration the level of awareness of parents and health professionals, how they are aware and how they work as a team in speech and language therapy for effective intervention among children with communication disorders.

3.2.1 Variables

Independent variable is parental and health professionals' awareness. This include indicators such as: parental and health professionals' level of awareness of speech-language therapy services, referrals and relevant information about speech therapy, their roles in speech-language therapy and their influence in awareness creation on speech-language therapy services.

Dependent variable is effective speech-language intervention. If parents and health professionals are aware of the importance of speech-language therapy and aware of their roles in speech therapy, will result into effective communication skills and speech-language development

Intervening variables are: education level, economic status, social status and environments. All these variables can affect parental and health professionals' awareness and participation in intervention process.

3.3 Study Locale

The study was conducted in three selected hospitals in Mwanza City which were: Bugando Medical Center, Sekou -Toure Regional Referral Hospital and Mabatini Rehabilitative Center. Bugando Medical Center was chosen because it is the biggest Lake Zone teaching and referral hospital that receive many children with communication challenges from seven provinces in Tanzania. It is also the hospital where speech-language therapy was done three years ago but not anymore. Sekou-Toure Regional Referral Hospital was chosen because it is the public hospital which receive children with communication difficulties and also make referrals for some of the children. Mabatini Rehabilitative Center is chosen because it is the only center which provide rehabilitation therapy for children who are at risks of communication disorders. Although these hospitals provide health care for children with communication disorders parental and health care professionals level of awareness and involvement in speech-language therapy is not known.

3.4 Target Population

The target population in the study were parents of children with communication disorders, a total of 200 who attended the hospitals for last one year and 60 health professionals who attend to children with communication disorders.

3.5 Sampling Techniques and Sample Size

3.5.1 Sampling Techniques

The researcher used purposive sampling techniques to select parents of children with communication disorders and health professionals including: occupational therapists, physiotherapists, audiologists, pediatricians, ENT, Physicians and neurologists. The researcher contacted the hospital administration to get number of target population and then sample size was obtained using Cochran's sample size formula. Purposive sampling techniques was significantly chosen to helped researcher to obtain respondents who gave the necessary non-probability data.

3.5.2 Sample Size

The sample size in this study comprised of 85 parents that was equal to 35% of targeted parents of children with communication disorders and 15 health professionals for 25% of targeted health care providers which makes total of 100 respondents. Parents of children with communication disorders were those who currently have been attending clinics for last one year and must have children with hearing loss, autism spectrum disorder, down syndrome, cleft palate/lip and cerebral palsy while health professionals were those who have been attending children with communication disorders which

included physiotherapists, audiologists, occupational therapists, physicians, pediatricians, neurologists, orthopedists and ENT doctors.

Table 3.1 Sample Size

No	Category	Target population (N)	Sample size	Sample size percentage
1	Parents of children with communication disorders	243	85	85%
2	Health professionals	60	15	15%
	Total	303	100	100%

3.6 Research Instruments

Research instruments are the measurements tools which researchers use to collect data (Kothari, 2004). The study used questionnaires, observation schedules, interview schedules and document analysis to measure the variables of the interest in data collection process.

3.6.1 Interview Schedule

Interview is the process of primary data collection using questions that direct participants in responding to a specific research questions (Stuckey, 2013). The study applied semi-structure interview to explore information about parental and health professionals' awareness of speech-language therapy, their views on accessing referrals and information related to speech-language therapy, awareness of their roles in speech-language

development and their influence of awareness creation among parents and health professionals. Information were collected from 3 occupational therapists, 4 physiotherapists, 2 audiologists, 2 pediatricians, 1 neuroplasticity surgeon, 2 ENT, and 1 neurologist. Semi structure interview helps researcher to have time to prepare and analyze questions and it is the tool that allowed accessibility and flexibility of interaction between interviewer and interviewee during data collection. The interview questions guidelines focused on four research objectives were reviewed and analyzed several times to ensure validity and reliability. One to one, face to face interview was used to explore more information from respondents an. The interview guides covered four objectives of the study.

3.6.2 Questionnaire

According to Abawi (2014) defines questionnaire as a research instrument that consist of a set of questions aimed to collect information from respondents. In this study, questionnaires were set for all parents focusing on awareness of availability of speech-language therapy, referral and information related to speech-language therapy, their roles in speech-language intervention and their views on needs to create speech-language therapy awareness. Questionnaire involved both closed and open-ended questions. Questionnaire helps to collect data from large population and respondents who cannot participate in interview.

3.6.3 Document Analysis

Is a systematic procedure for reviewing or evaluating documents in qualitative research in order to elicit meaning gain under finding and develop knowledge (Carbin &

Strauss,2008). The study used document analysis to get statistic data of the parents of children with communication disorders and health professionals.

3.7 Pilot study

According to Prof, Orodho (2012) posits that a pilot study is a mini piece of information which is used to make sure that questions are answerable and that the tools to be used will actually work. Due to limited number of big hospitals and community rehabilitation center in which parents of children with communication disorders attend for treatment, the pilot study was done in one private hospital with the same study characteristics in Mwanza City. 20 parents who bring their children with communication disorders for medication were randomly selected and 1 physiotherapist and 1 pediatrician were purposively selected. Pilot study helped to evaluate the instruments in order to discover the strengths and weakness of tools before data were collection.

3.8 Validity and Reliability

3.8.1 Validity

Refers to how well a test measures what it is supposed to be measured (Taherdoost, 2016). Validity explains how well the collected data covers the actual area of investigation. To ensure validity in this study, expert judgement was used to determine face validity of research instruments which were questionnaires, interview guide questions and document analysis. Two Kenyatta university supervisors, verified the content validity of the instruments. The pilot study was done to check the content validity by examining if the items were systematically organized. Research questions were set in

both English and translated in Swahili for parents and were modified in a way that all respondents were able to read and respond according to their level of education.

3.8.2 Reliability

Is defined as a degree to which instrument used for data collection produce consistence results when repeated or when other methods and instruments are replaced (Orodho, 2004). To ensure reliability, the test-retest method was used to determine reliability of the questionnaire. The developed questionnaires were given to a few subjects which were not included in the study sample. The completed questionnaires were scored manually. The same questionnaires were given to the same respondents after a period of three weeks. The completed questionnaires were again scored manually. A comparison between the answers obtained during the first and the second time was made. From the two respondents, spearman rank order correlation was employed to compute the correlation co-efficient in order to establish the extent to which the content of the questionnaire was consistent in eliciting the same responses.

3.9 Data Collection Procedures

Researcher arranged the time table to collect data for each instrument. Document analysis was administered in 2nd week, questionnaires were distributed in 3rd and 4th week and collected after two weeks, interview was administered on the 3rd and 4th weeks of the following month. Researcher administered questionnaires after explaining to the respondents about the need of such information. Questionnaire were distributed to the parents in the selected hospitals and during interview, researcher met with health professionals at the hospitals.

3.10 Data Analysis

Data Analysis is the systematic process of applying statistical or logical techniques to describe and illustrate, condense, recap and evaluate information from the field work (Migrant & Seasonal Head Start, 2006). Since the study uses both qualitative and quantitative approaches, data were analyzed using both qualitative and quantitative data analysis techniques. Qualitative data collected using interviews, document analysis was analyzed thematically. During thematic data analysis, researcher followed all steps including being familiar with data by reviewing audio several times and then transcribing audios. The data from audio were all coded, usually phrase and sentence. Then all coded themes were generated to come up with most repeated themes which were presented in written forms, next, the generated themes were reviewed several time in order to get accurate and useful themes that were representative of the data. The final lists of themes were named, defined and then were reported. Quantitative data collected using questionnaire were analyzed using descriptive statistic. During descriptive statistic data analysis, researcher used distribution statistics to find overall frequency of data, central tendency to find the average of each response and variability of each response and was summarized in percentage, table and charts using SPSS and Excel computer-based analysis.

3.11 Logistical and Ethical Considerations

In the process of data collection, the researcher asked permission letter from Kenyatta University Graduate School office to conduct research. Researcher consult Ministry of Health and Public Development in Tanzania to get permission letter. Researcher asked

permission letters from three selected hospitals before data collection. Researcher ensured the respondents that all information was kept confidentially. The researcher made appointments with respondents before the day of data collection. The researcher also took into consideration the choice of polite language, cultural and linguistic aspects, personal respect and proper ways of dressing when was in the field collecting data.

CHAPTER FOUR

PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter gives the details of data analysis and presentation of findings. The study intended to assess parental and health professionals' awareness of speech-language therapy for effective intervention among children with communication disorders in selected hospitals, Mwanza City, Tanzania.

The chapter captures demographic characteristics of respondents including gender, age categories, educational level of parents, education level of health professionals, health professionals' working experience and categories of communication disorders and findings based on the objectives of the study. 100 questionnaires were distributed to the parents of children with communication disorders who have been attending the clinics at Bugando Medical Center, Sekou-toure Regional Referral Hospital and Mabatini Community Health Rehabilitation Center. 85 questionnaires were properly filled and collected; this amounted to 85% which was adequate for data analysis and discussion. The findings addressed the following objectives:

- 1 To determine parental and health professionals level of awareness concerning speech-language therapy services for intervention of children with communication disorders in selected hospitals

- 2 To examine parental and health professionals' views on referral and information related to speech-language therapy for effective intervention in selected hospitals
- 3 To establish parental and health professionals' roles in speech and language development for intervention of children with communication disorders.
- 4 To investigate parental and health professional influence on awareness creation about communication disorders and speech-language therapy for effective intervention among children with communication challenges.

4.2 Questionnaire Return Rate

Table 4.1The Questionnaire Return Rate

Gender	Frequency (n)			Percentage %
	Rural	Urban	Total	
Male	2	3	5	5.9
Female	10	70	80	94.1
Total	12	73	85	100.0

Table 4.1 shows that the number of parents who returned questionnaires was very high. 100 questionnaires were provided out of which a total of 85 were filled and returned. This indicates that questionnaires returning rate was very high. Few participants who didn't return questionnaires were those who were given appointment to return to clinic after 1 month and above and those who come from other provinces away from Mwanza province. Others feared to answer questions for personal reasons although researcher clearly explained to them the study purpose and confidentiality of information provided.

4.3 Demographic Information of the Respondents

4.3.1 Categories of Communication Disorders

The table below shows the categories of children with communication disorders whose parents were selected to participate in this study.

Table 4.2 Categories of Parents of Children with Communication Disorders who Participated in the Study

Communication disorders	Frequency	Percent	Valid Percent	Cumulative Percent
Hearing disorder	20	23.5	23.5	23.5
Cerebral Palsy	33	38.8	38.8	62.4
Autism	14	16.5	16.5	78.8
Down syndrome	12	14.1	14.1	92.9
Cleft Palate Lip	6	7.1	7.1	100.0
Total	85	100.0	100.0	100.0

The table 4.2 above shows that the highest number of parents of children with communication disorders were parents of children with cerebral palsy, n=33 (38.8%) followed by hearing loss n=20 (23.5%), Autism Spectrum Disorder n=14 (16.5%), Down syndrome, n=12(14.1%) and the least were parents of children with cleft palate/lip n= 6 (7.1%). The small number of parents of children with cleft palate can be attributed to fact that surgical interventions of cleft palate are not commonly done in the selected hospitals due to the prohibitive cost of the procedure. However, parents of children with cerebral

palsy were the majority due to fact that the habilitations and rehabilitations of cerebral palsy are commonly done in the selected hospitals.

4.3.2 Health Professionals' Titles

Health Professionals' titles are summarized on the table 4.3 below

Table 4.3 Health Professionals' titles

Title	Frequency	Percentage
Neurologist	1	6.7
ENT	2	13.3
Plastic Surgeon	1	6.7
Pediatrician	2	13.3
Physiotherapist	4	26.7
Occupational therapist	3	20
Audiologist	2	13.3
Total	15	100.0

Table 4.3 gives the summary of titles of health professionals who participated in the study. The titles were significant in this study because not all health professionals attend to children with communication disorders. The health professionals selected were those who commonly attend to children with communication disorders. They were purposively selected in order to give relevant data because they are the ones who have been closely providing medical and rehabilitation services to children with communication disorders.

4.3.3 Health Professionals' Working Experience

The summary of the health professionals' working experience has been shown in the table 4.4 below

Table 4.4 Health Professionals' working experience

Years	Frequency	Percentage
1-2	4	26.7
3-4	8	53.3
5-6	1	6.7
7 and above	2	13.3
Total	15	100.0

Table 4.4 above shows the working experience of health professionals. Majority of health professionals had a working experience of between 3-4 years and 1-2 years. This indicates that majority of the health professionals who participated in the study had enough experience in working with children with communication disorders. Working experience in this study was considered because the experience is an indication of how long a certain health professional has been attending to children with communication disorders. With working experience, health professionals were in a better position to provide more detailed information about how the children with communication disorders have been assisted. Health professionals who have been working with children for longer time were expected to give more details about intervention process in the selected hospitals than those who have been working with children for shorter period of time.

4.4 Level of Awareness of Speech-Language Therapy among Parents and Health Professionals

4.4.1 Level of Awareness of Speech-Language Therapy among Parents

The first objective of this study intended to determine the level of awareness of parents on availability of speech-language therapy services for effective intervention among children with communication disorders. Therefore, to address this objective, quantitative data through open-ended questionnaire was collected from parents of children with communication disorders who had been attending the clinics. Table 4.5 below shows the summary of parental' responses on their level of awareness of availability of speech-language therapy services for effective intervention among children with communication disorders.

Table 4.5 Parental Awareness of Availability of Speech-Language Therapy

Question	Response	Frequency	Percentage
Have you ever heard information about speech-language therapy services?	Yes	11	12.9
	No	74	87.1
	Total	85	100.0
Do you know any hospital that provides speech therapy in Tanzania?	Yes	8	9.4
	No	77	90.6
	Total	85	100.0
How did you come to know that speech therapy is provided in that hospital?	Mass media	6	7.1
	Readings	16	18.8
	Referral	7	8.2
	Informed by health professionals	3	3.5
	Not yet		62.4
	Total	53	62.4
	85	100.0	
Do you know an expert who deals with speech-language therapy?	Yes	3	3.5
	No	82	96.5
	Total	85	100.0
Are there parents in your community who have children with communication disorders but are not aware of speech-language therapy?	Yes	26	30.6
	No	24	28.2
	I have no information	35	41.2
	Total	85	100.0
Have you ever heard parents are talking about speech-language therapy for their children?	Yes	9	10.6
	No	76	89.4
	Total	85	100.0

From the table 4.5 above on parental awareness of availability of speech and language therapy services for effective intervention, the findings indicate that many parents have

very low awareness of speech and language therapy. When parents were asked if they have heard about speech therapy services, only 11 (12.9%) were in the affirmative while majority of them 74 (87.1%) said no. This means that many parents who attend clinics in three selected hospitals in Mwanza have never heard about speech-language therapy services in the country. When parents were asked if they know any hospital in Tanzania that provides speech therapy, majority of the respondents 77 (90.6%) admitted lack of awareness while only 9 (9.4%) were in affirmative. Therefore, majority of parents don't know even the hospitals in Tanzania which provide speech and language therapy while only few of them know the hospitals that concern with speech therapy. Majority of the participants, 53 (62.4%), reported that they have not yet received information on speech therapy services from any source while 16 (18.8%) got some information through reading of relevant materials, 6 (7.1%) from mass media and 3 (3.5%) from health professionals. The findings indicate that many parents do not have access to information about speech-language therapy services available in some hospitals in Tanzania.

Majority of parents, 82 (96.5) still do not know any individual professional who offer speech-language therapy service while only 8 (3.5%) admitted to have known a speech therapist; This, therefore, means that speech-language therapists are not well known in the selected hospitals. The findings also show that many parents have not heard other parents talking about speech-language therapy for their children since only 9 (10.6%) admitted this while the majority, 76 (89.4), did not agree. If many parents are not aware of therapy services available they will have nothing to tell about it while if they are aware, they will keep talking or telling other parents about such intervention. Majority of

the parents, 78 (91.8%), also reported that they have never heard of health professionals addressing community about speech-language therapy services while only 7 (8.2%) admitted having heard health professionals talking about speech therapy services.

Lack of parental and health professionals' awareness of speech-language therapy available in the country is among the factors that hinder effective speech-language intervention process. Parental and health professionals 'awareness of speech-language intervention services available in the country is a primary component that encourage participation in any designed intervention program (Robert, 2011 & Ayse,2019). Therefore, the findings of this study concur with Ayse (2019) study on the views and knowledge of parents of children with speech/ language disorders on speech and language therapy in Turkey that found that parents have limited awareness and knowledge in speech and language therapy.

4.4.2 Health Professionals' Awareness of Speech-Language Therapy

Qualitative data from interviews with 15 health professionals was based on 7 items on the same objective. The first item sought to establish whether the participants had ever heard of any hospital in Tanzania where speech-language therapy service was provided and the name of that hospital if any. The majority of the health professionals reported that they have heard about speech-language therapy services in Tanzania while only few of them reported that they were not aware if speech-language therapy services are provided in some hospitals in Tanzania. However, those who reported that they have heard about the services in Tanzania said that they don't know much about speech therapy services and its effectiveness in those health centers due to limited information from the health centers

concerned with therapy. When asked to mention the hospitals where speech therapy is provided majority mentioned Muhimbili National Hospital while only a few mentioned Christian Medical Center (KCMC), however, they were not sure if the services are still there.

One of the health professionals said,

“yes, one of my colleagues told me that speech therapy is provided in Muhimbili National hospital but I don’t have more information about how the services is being done and its effectiveness for children who attend there”.

The second item of the interview guides sought to establish how health professionals get information about speech-language therapy in their hospitals. All the health professionals reported that it is difficult to get information about speech therapy in their hospitals because they don’t have an expert in such field. They also reported that in the hospitals there are no trainings, seminars or workshops that they can attend to get information about speech-language therapy services. Those who reported that they have heard about speech language therapy said that they got information from some parents and health professionals who have heard about the services. Others reported that they got general information about speech and language therapy through internet while some reported that they got information from speech therapist who was volunteering some years ago but also admitted further that currently it is not easy to get such information from an expert.

One of the respondents said,

“there was one speech therapist who was volunteering in our hospital, she told us about speech therapy but when she left we are no longer accessing information related to speech and language therapy”

Another said that,

“we don’t have system that train, or provide awareness among us about how to help children with speech impairments who come in the hospital. therefore, this can limit information sharing among health professionals”.

The 3rd item of the interview guides sought to found out what health professionals know about early speech-language intervention for children with communication disorders. The majority of the respondents reported that they have limited knowledge about speech therapy while a few of them, specifically physiotherapist, occupational therapists, ENT and audiologist reported that they only have general knowledge that they got when they were undertaking their training.

One of Occupational therapists had this to say,

“I came to know little about speech-language therapy when I was pursuing my study at KCMC”

Another health professional said,

“I do get many children with communication challenges and I attend only medical conditions that I know but I can’t help them in the aspects of speech and language because nothing I know about it.”

The 4th Item of the interview guides intended to assess general awareness of speech-language therapy among health professionals for intervention process. Majority of them said that they have little awareness about speech therapy. They reported that the absence of speech therapists in the hospitals affect the information access about speech therapy. Many health professionals do not know any speech therapist whom they can refer a child with communication challenges so they end up telling parents that the child will be able to talk later. They added that few health professionals know about speech-language

therapy because speech therapy services are not available in most parts of the country. At least occupational therapists, physiotherapists, audiologists and otolaryngologists have reported having general awareness about speech and language therapy that they received during their studies.

One of physiotherapists said,

“in our hospital, apart from occupational; therapists and physiotherapists, other health professionals are not aware about speech and language therapy.

Another health professional said,

“to say truth many health professionals are not aware of speech-language therapy because several time you can hear doctors telling parents that your child has speech delay but he/she will get better later; this is because they don’t know the kind of intervention the child need in order to develop with language”

When health professionals were asked about the general awareness of speech-language therapy among parents of children with communication disorders, they reported that many parents are not aware of speech-language therapy because they rarely hear parents discussing and raising concerns about speech-language therapy. Parents are not aware of speech and language developmental milestones because they can’t distinguish between normal and abnormal language development.

Some health professionals reported that a few parents know that their children are not able to talk. So, they raise concern by asking why their children are not able to talk when other children of the same age around them are talking. This can be the indicator that some parents are able to realize that there is a problem, however, they don’t know what to

do and to whom they can refer the child for management. This was corroborated by one of health professionals who had this to say,

“I have met with some parents asking me why their children are not talking while other children of the same age are talking well. One parent specifically told me ‘My child can’t even say baba, mama, do you think will he be able to talk?’”

It was also notable that majority of health professionals reported that many parents are not aware of speech-language therapy because some parents attend clinics for 3-4 times but cannot raise concern about language delay while others focus only in doing physiotherapy, occupational therapy and other medications. Parents come to realize that their children are having speech and language impairment when it is very late. Some of them do not focus on speech-language problem of their children because they consider it as it less life threatening to their children, while others do not know if there is a professional who can assist with speech-language therapy. Many parents up to the age of 4 years still hope that their children will speak; this is due to their inability to distinguish between normal and abnormal language developmental milestones. The absence of speech- language pathologists in the hospitals was mentioned by respondents as one of the factors that lead to lack of awareness among parents of children with communication disorders. Parents do not know individual professionals who deal with speech-language therapy and this may be the reason why they don’t know the importance of early speech and language intervention.

One of the health professionals said,

“parents of children with cleft palate/lip whose children get repair get less to focus on speech-language because they are not aware of speech-language therapist, they don’t know if after surgery their children need speech therapy. Some parents do pay attention on physical appearance of the child and that when she/ he has been repaired can compensate the speech issues.”

Another health professional added that,

“when parent raise concern about why her child is not talking and when you ask her what do you think why she is not able to talk or what do you do if she is not able to talk? They report to you that they have been told by other parents and some health professionals that the child will talk later. Sometimes they report that people do tell them that the child has tongue tie this is why she is not able to talk.”

Information sharing among multidisciplinary team is very important in speech and language management for children with communication disorders. Health professionals and parents should be informed and given knowledge related to speech-language therapy so that they can participate effectively in intervention process. Lack of information sharing about speech-language therapy process among health professionals and parents have been found to some of the key factors affecting their effective participation. It is through information sharing that awareness about speech and language therapy services can spread in the country.

The findings of this study therefore demonstrate that majority of the health professionals and parents have limited general awareness about speech and language therapy services. This concurs with the study by Marshall (2010) who reported that the level of awareness was low among health professionals than special need education teachers in Tanzania.

While the results of this study show that there is very limited information and knowledge sharing about speech and language therapy services in the hospitals, it is a contrast to the findings from developed countries like American, Britain, where there is system of information sharing about speech and language services among health professionals (ASHA, 2010).

The findings of this study have also demonstrated that health professionals and parents have limited sources to get information about speech and language therapy. A few of them reported that they get information from some colleagues who have heard about the services in the country while others got information from speech therapists who were volunteering some years ago. However, in America, India, Britain and South Africa, health professionals access information about speech and language therapy from many sources like social medias, mass medias, professionals' information sharing, reading books and through internet (Yolanda et al, 2016; Bishop, 2012).

4.5 Parental and Health Professionals' Views on Referrals and Information System Related to Speech-Language Therapy

4.5.1 Parental Views on Referrals and Information System about Speech Therapy

The second objective of the study intended to assess parental views on referral and information system related to speech-language therapy for effective intervention among children with communication disorders. To address this objective, quantitative data were collected using questionnaires with for parents with 5 items.

Table 4.6 Parental' Views on Referral and Information System Related to Speech-Language Therapy

Question	response	Frequency	Percentage
Are you given information related to speech-language therapy by health professionals?	Yes	24	28.2
	No	61	71.8
	Total	85	100.0
Do health professionals tell you the cause of speech-language disorders for your child?	Yes	26	30.6
	No	59	69.4
	Total	85	100.0
Do health professionals tell you the strategies to improve speech-language development for your child?	Yes	14	16.5
	No	71	83.5
	Total	85	100.0
Have you ever given referral to seek speech therapist at any hospital in Tanzania?	Yes	5	5.9
	No	80	94.1
	Total	85	100.0
Are you satisfied with referrals and information given by health professionals about speech-language therapy?	Yes	6	7.1
	No	79	92.2
	Total	85	100.0

According to Table 4.6 above parents' views on information and referrals system for early speech-language therapy among their children with communication disorders were generally positive. When parents were asked if they receive information about speech-language therapy from health professionals, many of them 61 (71.8%) said no, while only 24 (24.2) said yes. This means that information system about speech-language therapy in the selected hospitals is not effective. 26 (30.6%) parents reported that they were told the cause of speech and language impairment of their children by health professionals while 59 (69.4%) reported that they are never told the cause of speech-language impairment of their children. When they were asked if they are told by health professionals the strategies to improve speech-language development for their children, 71 (83.5%) said no while 14 (16.5%) said yes. Parents also admitted that referral systems related to speech and language therapy were not effective. When asked if do they get referral from health professionals to seek speech-language therapists, only 5 (5.9%) said yes while the majority 80 (94.1%) said no. The majority of parents 79 (92.2%) were also not satisfied with information and referrals system in the selected hospitals while only 6 (7.1%) were satisfied.

4.5.2 Health Professionals' Views on Referrals and Information System for Speech and Language Therapy

Qualitative data, 15 health professionals were interviewed. The first item on the interview guide sought to establish how much information related to speech and language therapy health professionals receive in the hospital. Majority of the respondents reported that it is difficult to get information about speech-language therapy for children with

speech-language challenges because they do not have speech therapists. They further admitted that they have limited knowledge about speech-language impairment. Respondents who are occupational therapists said that other health professionals do refer children to them believing that they are the ones concerned with such problems. Other health professionals also confirmed that sometimes they get referrals of children not able to talk from outside the hospital and that they usually refer them to physiotherapy department. Some respondents reported that there is delay in referral system because speech-language therapy service in the hospitals have not been well organized, since many health professionals deal with other medical services. Some of the respondents who know that Muhimbili National hospital has speech-language therapy services said that it is not easier to provide referral for parents to go to Muhimbili because it is very far from Mwanza such that most parents cannot afford it.

One of the respondents said:

“Sometimes it is not easy to provide referral for parents to go to Muhimbili because it is very far from Mwanza and the fact that many parents come from poor families so they can't afford to go to Muhimbili that is why I sometimes ignore that though the children need speech-language therapy”.

They also said that because the hospitals have not established the speech-language therapy program, their referrals system is affected and that is why health professionals may not focus on speech-language intervention process.

When asked if they are providing referral for the parents to seek speech-language therapy, some of them said they do provide referral though not much because of absence of speech language therapists in the hospitals. Some of the respondents in one of the

hospitals reported that they used to provide referrals for the children to seek speech-language therapy when a volunteer speech therapist was in the hospital but stopped when she left. They reported that they verbally encourage parents to go to Muhimbili but they don't provide written referrals for parents to seek speech-language therapists.

When health professionals were asked if they are satisfied with referral system among themselves and parents, majority were of the view that referral systems for speech therapy service were not satisfactory.

One of the professionals had this to say:

“we know that speech therapists in this country are very few and the fact that even those who are available have not made this discipline known in our public, the referral system won't be effective because even health professionals and parents get difficulty where they can take children for intervention”.

The 3rd item of the interview guide sought to establish whether speech-language therapists from other hospitals or other health centers or anywhere do come to create awareness and share knowledge with health professionals about speech-language therapy. All health professionals reported that they have never seen or met speech therapists from other hospitals in Tanzania raising awareness or sharing knowledge about speech-language therapy.

When asked if they have heard about any speech therapists in Tanzania or in their hospitals addressing the community or informing health professionals about speech therapy through mass media like TV, radio, magazines or newspaper, all the respondents said that they have never heard of any.

One of the respondents said,

“according to me I am sure that speech-language therapy services in Tanzania has not well established and well known by the public. Though Muhimbili is providing the service but still many parents and community in general are not aware about it”.

The fourth item of the interview guide sought to establish whether parents of children with communication disorders raise concern to health professionals about speech therapy.

More than half of respondents reported that parents do raise concern about speech and language delay for their children when it is too late. One respondent summarized this below:

“if you don’t tell them about keeping talking with their children you won’t here they are raising issue but when they see the child is older while is still struggling to speak or is not yet started to speak, is when they start to ask questions related to speech and language impairment. This may be because parents identify and agree with problem when it is very late specifically when they compare their children to other children”.

Another respondent had added

“Some parents are told by other people or their families and community around and some health professionals that their children have only delayed but they will talk as they are growing up, I think these can also be reasons why parents are not raising concern about speech and language impairment for their children earlier” .

One of the pediatricians said many parents do raise concern about other medical problems like convulsion, dysphagia, hearing and other conditions but in case of speech impairment, few of them report that their children are not yet talking, and they may mention it as minor complaint after stating other complaints. Rarely do parents come to

hospitals for speech as the main complain unless they have referrals from elsewhere. This may be due to little awareness about speech and language developmental milestones.

Effective provision of referrals to parents of children with communication disorders to seek speech therapy services from interdisciplinary team of health professionals in management system of children with communication disorders is very crucial for effective early speech and language intervention. Health professionals are normally the first professionals to be approached by parents concerning their children's speech-language impairment in early years. The roles health professionals play in early detections of speech-language difficulties is therefore, very significant in ensuring timely referrals for early intervention. Referral system can raise awareness among parents to seek speech therapists in any hospital, however, failure to provide referral limits awareness creation about speech-language therapy among parents and health professionals.

The findings of this study indicate that information and referral system related to speech-language therapy among health professionals and parents of children with communication disorders are not effective because majority of health professionals do not provide written referrals for parents to seek speech therapy, only a few of them verbally tell parents to seek speech therapists when they are available.

These findings concur with those of Rannard (2005) on parental concerns and health professionals' response which reported that in many cases, parents were the first to realize that there was something wrong with speech and language development of their

children. It was reported that when parents raised their concerns to the health professionals, health professionals tended to underestimate speech and language problems by relying on the possibility of spontaneous recovery, and gave inappropriate advice to the parents.

The findings also concur with Watts and McLeod (2015) study which found limited information related to speech-language therapy, referrals delay and dissatisfaction with referrals among parents and health professionals as some of the factors that hinder effective speech-language intervention among children with communication disorders.

Speech-language therapists as experts in the field of speech-language therapy, play significance role in creating awareness among health professionals, parents and community in general. Unlike in other countries such as New Zealand, Australia, South Africa where researches have reported that speech therapists are working closely with other professionals and parents to create awareness in the public about speech and language intervention, in Tanzania, these findings show that not much is being done. The findings reveal that speech therapists from Muhimbili or other hospitals have never visited the selected hospitals to share knowledge or create awareness about speech and language therapy services among parents and health professionals.

4.6 Parental and Health Professionals' Roles in Speech-Language Therapy

4.6.1 Parental Roles in Speech-Language Therapy

The 3rd objective of the study sought to examine parental awareness of their roles in speech and language therapy for effective intervention. In order to answer this objective

researcher used questionnaires with 5 question items that were distributed to the parents of children with communication disorders.

Table 4.7 Parental' Awareness of Their Roles in Speech-Language Therapy

Question	Response	Frequency	Percent
Do you know your responsibilities in helping your children with language impairment?	Yes	28	32.9
	No	57	67.1
	Total	85	100.00
Are you able to help your child in speech-language development?	Yes	24	28.2
	No	61	71.8
	Total	85	100.00
Do you practice talking with your child at home?	Yes	43	50.6
	No	42	49.4
	Total	85	100.0
Do you take your child to any hospital for speech-language therapy?	Yes	7	8.2
	No	78	91.8
	Total	85	100.0
Do you raise concerns to the health professionals about speech-language problems of your child?	Yes	15	17.6
	No	70	82.4
	Total	85	100.0

Table 4.7 gives a summary of parental roles in speech and language therapy for effective intervention. Majority of the parents, 57 (67.1%), reported that they don't know their responsibilities in helping their children with communication disorders in speech and language development and only a few, 28 (32.9%), admitted that they know their responsibilities. They also reported that they have challenges in helping their children in speech and language development since majority, 61 (71.8%), said that they are not able

while only 24(28.2%) admitted that they are able to help their children. When parents were asked if they practice talking with their children at home, 43(50.6%) confirmed that they practice talking with their children while 42(49.2%) said do not. This therefore means that almost half of the parents practice talking with their children at home as a way of improving speech and language development of their children. The study also found that majority of parents, 78(91.8%), are not taking their children to the hospitals or any health center for speech and language therapy, and that only 7(8.2%) respondents were able to take their children to hospitals or any center for speech and language therapy. On the question of raising concerns to health professionals, majority, (82.4%) said they don't raise any concern while only 15(17.6%) respondents said that they do raise concerns about speech and language problems of their children to health professionals.

4.6.2 Health Professionals' Roles in Speech and Language Therapy

The 3rd objective of the study sought to examine parental awareness of their roles in speech and language therapy for effective intervention. To address this objective the qualitative data were collected through interview with 15 health professionals. The first question sought to establish how health professionals help children with communication disorders who attend their hospitals to improve on speech and language development. Majority reported that they do help children with communication disorders to develop speech and language to some extent but the support they give is usually not effective because they lack expert knowledge in the area of speech therapy. They also added that many children with communication challenges attend clinics yet they don't have speech therapist to help them develop speech and language. One respondent had this to say:

“I am sure that children with communication disorders are not effectively helped in the aspect of speech and language development because many health professionals lack such knowledge; The children get other medication but left without speech-language therapy, this tell that children are not effectively helped in the hospital in areas of speech and language development”.

Few of the respondents reported that children with communication disorders are sometimes helped in the aspect of language because they do tell patents to talk with their children at home, advising them to allow children to interact with other children. This was captured by another respondent as follows:

“I can say that we do help those children by telling their parents to do talk with their children at home and I do advise parents to face their children when talking to them.

I think we are helping them according to what we know for, example I do give some parents home activities that target to help their children to acquire language and when speech therapists were available, I used to tell parents to seek speech therapists”.

When asked about the roles they play in helping children with communication disorders who attend clinics in areas of speech and language development, only occupational therapists reported that they sometimes instruct parents to keep talking with their children at home, they also give some basic activities that parents should give their children to support language development. Some of them reported that they tell parents to seek speech therapists when they are available while few of them said that they were providing referrals only when there was speech therapist who was volunteering.

One of the occupational therapists said,

“I do give some parents simple activities and tell them the ways to interact with their children at home”

One of the audiologists said,

” Because it is not area of my specialization, I do disappoint how can I help the children who come here with speech problem, so, I do tell parents that we don't have an expert in such field”.

When asked if they are satisfied with information and referral system they get in the hospital related to speech and language intervention, all of them reported that they are not satisfied with information and referral system because they have never heard of any speech therapist informing them about speech-language therapy. They also reported that even in the hospital there are no presentations or seminars on how to handle children with speech-language impairment.

One of the respondents said,

“I am not much satisfied with information about speech and language therapy because, I have never received any training or go to the workshop for that though I do meet with children who have communication challenges in this hospital”.

Respondents who are physiotherapists reported that that in some cases other health professionals refer children to them. However, other health professionals reported that they rarely get referral within the hospitals but they get some referrals from other hospitals.

“I rarely get referral from my colleagues that instruct the issue of speech and language impairment if not those who come from other provinces because they know that our hospital is the lake zone hospital that deals with many health issues. I can say that my colleagues do not effectively provide referrals may be due to lack of the awareness about speech therapy”.

One of the occupational therapists said,

“Many health professionals are not aware about speech and language therapy, that is why some of them refer children to us with notation that we are one who deal with any rehabilitation”.

These findings show that majority of the parents of children with communication disorders in the selected hospitals have little awareness of their roles in speech and language therapy than health professionals. Parents do raise concern about speech and language impairment for their children when it is too late, they have little awareness about their roles in helping their children to develop language and speech, hence they fail to take their children to the hospitals to seek speech therapy services for speech and language development of their children as major concern.

The findings concur with Ferigollo and Kessker (2017) study on physiotherapy, speech, language, hearing science and occupational therapy interdisciplinary practice in Brazil that aimed to identify the perception of physical therapists, speech therapists and occupational therapists how the theme of interdisciplinary in health and human communication disorders is developed reported that health professionals recognized the importance of working as interdisciplinary team but due to lack of awareness of their roles, some professionals had difficulties in Management of human communication disorders.

Over the last several years, the roles of speech-language therapists and parents have undergone changes. Parents are no longer observers in speech therapy services, but are now acting as speech-language pathologists through parent- implemented speech-

language intervention or parent- centered approach (Stephan, 2017; Hatcher & Page, 2019). Furthermore, health professionals like occupational therapists, physiotherapists, audiologists, pediatrician, nurses and other health providers, play significant roles in helping children with communication disorders (Ministry of Children and Family Development, 2009). They work as the advocates for children's communication needs, they are also concerned with identification, detection, diagnosis and provision of referrals for further assessment and treatment of speech-language impairment.

4.7 Parental and Health Professionals' Influence on Awareness Creation about Speech-Language Therapy

The 4th objective of the study sought to find out parental and health professionals' views on awareness creation about speech and language therapy. To address this objective, open-ended questionnaires were distributed to the parents while semi-structured interviews were done with health professionals. The parents' answers were generated, categorized into themes and then presented. Below are the responses of the parents from the open-ended.

4.7.1 Parental Influence on Awareness Creation

On what health professionals can do to create more awareness

When parents were asked their views on what should be done by health professionals to create more awareness about speech and language therapy, majority reported that health professionals should provide public education about speech and language therapy. They emphasized the need to speak about speech therapy to parents when they come to the

hospital. Other parents reported that they should be trained and given education on how they can provide speech-language therapy to their children at home.

Some of the parents reported that doctors should inform them early when they recognize that the child is born with risk factors for communication disorders during developmental milestone, they should inform parents that they need to take decision on speech and language development early.

One of the parents wrote that:

“If health professionals tell us to take decision immediately after birth, it will help many parents to deal with language very early, I gave the birth with complications that affected my child but I was not told if the child will have language delay”

on the need for awareness creation about speech-language therapy

When parents were asked to state their views on the need for awareness creation about speech-language therapy and communication disorders among parents of children with communication disorders, all of them reported that there is a great need of awareness creation among parents because many parents are no aware of speech and language therapy and other do not know even individual professionals who deal with speech-language therapy.

One of the parents wrote that:

“For me I see that there is a great need of awareness creation among us because many of us including myself I have little awareness on the ways I can help my child in language development”

Majority of the parents also reported that the awareness is not only needed among parents of children with communication disorders but also to the community in general because in the community many people do have negative thoughts toward their children. They also reported that awareness is needed in the community because many parents have been hiding their children not to be seen in the public.

One of the parents wrote that:

“There is needs of create awareness creation in our community because I have my neighbor with children who has autism, they always hide him in the gate since they don’t want him to appear after the public”

Another parents said:

“I request awareness to be created in the community because like me I get a lot of abuses from my families and our clan when they see my child right know is speaking unclear words, this gives me the hard time with my child”

On the need to establish Speech and language therapy services in the hospitals

When parents were asked to state their views on the need to establish speech-language therapy services in the hospitals, all parents responded that speech-language therapy is needed in the hospitals because there are many children with communication disorders who come to the hospitals but miss a professional who can help them.

One of the parents admitted that:

“I have been attending physiotherapy for two years and I do meet with many parents whose children are not yet able to speak. However, I have not seen doctor who deal with speech therapy coming to help my child”

Another parent reported that:

“Speech therapy is needed in this hospital because Muhimbili is very far to go for speech therapy serves, there should be therapy in this hospital too”

4.7.2 Health Professionals Influence on Awareness Creation about Speech and Language Therapy

During interview with 15 health professionals, 8 interview guides items were used to address the objective. The first item of interview guides sought to explore whether there is any need to create awareness among parents and health professionals about early speech and language intervention process. When health professionals were asked about their views on the need to create awareness among health professionals and parents of children with communication disorders, all of them reported that there is a great need to create awareness about speech and language therapy because majority have limited awareness about communication disorders and speech-language development. They reported that parents are the ones who communicate and interact with their children more frequently than other experts. Therefore, there is need to educate parents to understand both normal and abnormal language developmental milestones as well as how to deal with speech impairment for their children. They observed that many parents hide their children at home because they are not aware that speech and language problems can be resolved. They also noted that parents are also not aware of their roles which include taking children to the hospitals, seeking speech therapists, doing home therapy hence, there is need to create awareness among them.

One of the respondents said,

“that parents are one of the significant groups in enhancing language development in early life; parents should be trained and instructed on how to deal with speech-language impairment for their children in early childhood. Lack of awareness among parents’ cause delay in identification and diagnosis”.

Another respondent observed that,

Parents of children with cleft lips/palates do pay attention on physical repair than speech-language disorders, this is why they rarely come back to raise concern about speech disorders following surgery this may be due to lack of awareness, therefore, awareness is commonly needed”.

Another respondent added that:

“When some parents raise concern about language impairment for their children, I do ask them what have they been doing, and when you ask them such question they will tell you that they only talk to them because they are told that the child will talk later. This means that parents do not take it as the serious issue because they lack awareness about early speech intervention”.

When asked whether there is need to create awareness among health professionals, all of them reported that there is great demand for awareness creation among health professionals. They said that health professionals attend to children with communication challenges several times and provide some medical management for them but they fail to provide speech and language assistance because they have limited knowledge about speech therapy. They observed that, there is need to train, inform or give general knowledge to the health professionals about how to handle those children. Health professionals fail to provide support the children because they don’t know speech therapists they can refer a child with communication impairment and they also have little

knowledge about normal and abnormal language development milestone, hence the need to create awareness. They also reported that referrals systems are not effective among health professionals because they don't know to whom they can refer the clients. There is need to inform health professionals about speech and language therapy and even effectively involve them in the intervention process.

One of the respondents said,

“through some few parents raise concern about speech impairment for their children, health professionals can't help them effectively because even themselves have little aware about speech therapy services”.

Another respondent added that,

“Speech therapists in Tanzania are very few, and I think that if health professionals are trained, informed or given knowledge, they will have something to tell parents about intervention”.

Awareness is needed in the community at large because there are many children in our communities who have been hidden by parents at home because they are not aware if the intervention can be done to resolve speech impairment while others have negative socio-cultural perspectives toward children with communication disorders. Then there is need to create awareness not only to the parents but also in the community.

Parents encounter great challenges in communication with their children. They worry about their children's failure to talk, so, the need to create awareness of speech therapy to enable them find the best ways of communication and strategies to support children in early childhood cannot be overemphasized.

When health professionals were asked what do they think they should do to create awareness on speech and language therapy, majority pointed out the need to train many health professionals in the specific field. They also suggested that speech therapists from other hospitals need to create awareness among health professionals by conducting workshops or seminars with health professionals to discuss about speech and language intervention, and that they should also use mass medias to advertise the program and educate the community so that they can be ware about speech and language therapy services in the country.

Some of the respondents suggested that there is need to employ speech therapists in the hospitals in order to create a multidisciplinary team of professionals who can effectively work to manage the situation. Speech and language therapists will need to work with other health professionals in management of children with communication challenges and other related conditions.

When health professionals were asked what should be done by parents to create awareness among themselves and others about speech and language intervention, many of them respondent that parents should take speech and language impairment as a serious issue so that they can find speech therapists or advocate for early speech and language therapy for their children. They also suggested that parents who have heard about speech therapy should inform other parents in the community to help increase awareness.

When asked about the number of children with communication disorders who need speech and language therapy, they reported that they don't have the exact number but

added that children who need speech language therapy are many and keep increasing. They said that due to the increase of number of children with communication impairments, the community need awareness about speech and language therapy. They further observed that people generally have negative perception towards children with speech-language impairment in community around hence the need to create awareness among parents and community in general.

One respondent observed,

“I hope that there is need to create awareness among parents and community in general because the number of children with speech impairment is increasing while other many people have negative perception towards children with communication disabilities. As the number is increasing, health professionals should be informed about intervention as you know that our country has very few speech therapists”.

The findings of this study concur with Mostafa, (2017) study on health care professionals’ awareness of language delay in Sohag upper Egypt. The study reported that there is need to increase education among health care professionals by including a course in speech-language pathology field in the school curricula.

Even though health professionals are considered important in child’s communication management, studies in some developing countries indicate that there is limited awareness among health professionals on supporting children with communication needs (Rayes, 2014).

These findings are also in line with the findings of Shangase and Mophosho, (2018) which revealed that speech and language therapy in Africa is facing significant

challenges in provision of clinical services to patients due cultural and linguistic diversity.

The findings also concur with Ndungu and Kinyua, (2009) study on Cultural Perspective in Speech and Language disorders who found that people in East Africa have negative perspective towards children with communication disorders. People in East Africa were found to view families with children who have communication as having a curse or have been punished by supernatural power. Therefore, awareness is still low among parents, health professionals and public in general.

Both parents and health professionals should be aware of cause of speech-language disorders, normal language development milestones, diagnosis and treatment process. The level of awareness among parents of children with communication disorders and among health professionals has been established to be very important aspect of effective intervention. The findings of this study demonstrate that majority of the parents and health professionals in Mwanza, Tanzania have limited awareness about speech therapy, hence there is a significant need to create awareness about speech and language therapy among parents, health professionals and community at large.

Health professionals should provide education

When parents were asked what are their views on what should be done by health professionals to create more awareness about speech and language therapy. Majority of the parents reported that health professionals should provide public education about speech and language therapy. They should speak about speech therapy to the people

when they come to the hospital. other parents reported that they should be trained and given education on how they can provide speech-language therapy with their children at home.

Some of the parents reported that doctors should inform them early when they recognize that the child has born with risk factor for communication disorders, they should inform parents that they need to take decision on speech and language development early when they know that the child has born with risks factor that may cause speech-language impairment during developmental milestone.

One of the parents wrote that:

“If health professionals tell us to take decision immediately after birth, it will help many parents to deal with language very early, I gave the birth with complications that affected my child but I was not told if the child will have language delay”

On the need to establish Speech and language therapy services in the hospitals

When parents were asked to state their views on the need to establish speech-language therapy services in the hospitals, all parents responded that speech-language therapy is needed in the hospitals because there are many children with communication disorders who come to the hospitals but miss a professional who can help them.

One of the parents admitted that:

“I have been attending physiotherapy for two years and I do meet with many parents whose children are not yet able to speak. However, I have not seen doctor who deal with speech therapy coming to help my child”

Another parent reported that:

“Speech therapy is needed in this hospital because Muhimbili is very far to go for speech therapy serves, there should be therapy in this hospital too”

During interview with 15 health professionals, 8 interview guides items were used to address the objective. The first item of interview guides sought to explore whether there is any need to create awareness among parents and health professionals about early speech and language intervention process. When health professionals were asked about their views on the need to create awareness among health professionals and parents of children with communication disorders, all of them reported that there is a great need to create awareness about speech and language therapy because majority have limited awareness about communication disorders and speech-language development. They reported that parents are the ones who communicate and interact with their children more frequently than other experts. Therefore, there is need to educate parents to understand both normal and abnormal language developmental milestones as well as how to deal with speech impairment for their children. They observed that many parents hide their children at home because they are not aware that speech and language problems can be resolved. They also noted that parents are also not aware of their roles which include taking children to the hospitals, seeking speech therapists, doing home therapy hence, there is need to create awareness among them.

One of the respondents said,

“that parents are one of the significant groups in enhancing language development in early life; parents should be trained and instructed on how to deal with speech-language impairment for their children in early

childhood. Lack of awareness among parents' cause delay in identification and diagnosis".

Another respondent observed that,

Parents of children with cleft lips/palates do pay attention on physical repair than speech-language disorders, this is why they rarely come back to raise concern about speech disorders following surgery this may be due to lack of awareness, therefore, awareness is commonly needed".

Another respondent added that:

"When some parents raise concern about language impairment for their children, I do ask them what have they been doing, and when you ask them such question they will tell you that they only talk to them because they are told that the child will talk later. This means that parents do not take it as the serious issue because they lack awareness about early speech intervention".

When asked whether there is need to create awareness among health professionals, all of them reported that there is great demand for awareness creation among health professionals. They said that health professionals attend to children with communication challenges several times and provide some medical management for them but they fail to provide speech and language assistance because they have limited knowledge about speech therapy. They observed that, there is need to train, inform or give general knowledge to the health professionals about how to handle those children. Health professionals fail to provide support the children because they don't know speech therapists they can refer a child with communication impairment and they also have little knowledge about normal and abnormal language development milestone, hence the need to create awareness.

They also reported that referrals systems are not effective among health professionals because they don't know to whom they can refer the clients. There is need to inform health professionals about speech and language therapy and even effectively involve them in the intervention process.

One of the respondents said,

“through some few parents raise concern about speech impairment for their children, health professionals can't help them effectively because even themselves have little aware about speech therapy services”.

Another respondent added that,

“Speech therapists in Tanzania are very few, and I think that if health professionals are trained, informed or given knowledge, they will have something to tell parents about intervention”.

Awareness is needed in the community at large because there are many children in our communities who have been hidden by parents at home because they are not aware if the intervention can be done to resolve speech impairment while others have negative socio-cultural perspectives toward children with communication disorders. Then there is need to create awareness not only to the parents but also in the community.

Parents encounter great challenges in communication with their children. They worry about their children's failure to talk, so, the need to create awareness of speech therapy to enable them find the best ways of communication and strategies to support children in early childhood cannot be overemphasized.

When health professionals were asked what do they think they should do to create awareness on speech and language therapy, majority pointed out the need to train many

health professionals in the specific field. They also suggested that speech therapists from other hospitals need to create awareness among health professionals by conducting workshops or seminars with health professionals to discuss about speech and language intervention, and that they should also use mass medias to advertise the program and educate the community so that they can be ware about speech and language therapy services in the country.

Some of the respondents suggested that there is need to employ speech therapists in the hospitals in order to create a multidisciplinary team of professionals who can effectively work to manage the situation. Speech and language therapists will need to work with other health professionals in management of children with communication challenges and other related conditions.

When health professionals were asked what should be done by parents to create awareness among themselves and others about speech and language intervention, many of them respondent that parents should take speech and language impairment as a serious issue so that they can find speech therapists or advocate for early speech and language therapy for their children. They also suggested that parents who have heard about speech therapy should inform other parents in the community to help increase awareness.

When asked about the number of children with communication disorders who need speech and language therapy, they reported that they don't have the exact number but added that children who need speech language therapy are many and keep increasing. They said that due to the increase of number of children with communication

impairments, the community need awareness about speech and language therapy. They further observed that people generally have negative perception towards children with speech-language impairment in community around hence the need to create awareness among parents and community in general.

One respondent observed,

“I hope that there is need to create awareness among parents and community in general because the number of children with speech impairment is increasing while other many people have negative perception towards children with communication disabilities. As the number is increasing, health professionals should be informed about intervention as you know that our country has very few speech therapists”.

The findings of this study concur with Mostafa, (2017) study on health care professionals' awareness of language delay in Sohag upper Egypt. The study reported that there is need to increase education among health care professionals by including a course in speech-language pathology field in the school curricula.

Even though health professionals are considered important in child's communication management, studies in some developing countries indicate that there is limited awareness among health professionals on supporting children with communication needs (Rayes, 2014).

These findings are also in line with the findings of Shangase and Mophosho, (2018) which revealed that speech and language therapy in Africa is facing significant challenges in provision of clinical services to patients due cultural and linguistic diversity.

The findings also concur with Ndungu and Kinyua, (2009) study on Cultural Perspective in Speech and Language disorders who found that people in East Africa have negative perspective towards children with communication disorders. People in East Africa were found to view families with children who have communication as having a curse or have been punished by supernatural power. Therefore, awareness is still low among parents, health professionals and public in general.

Both parents and health professionals should be aware of cause of speech-language disorders, normal language development milestones, diagnosis and treatment process. The level of awareness among parents of children with communication disorders and among health professionals has been established to be very important aspect of effective intervention. The findings of this study demonstrate that majority of the parents and health professionals in Mwanza, Tanzania have limited awareness about speech therapy, hence there is a significant need to create awareness about speech and language therapy among parents, health professionals and community at large.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings, conclusions and recommendations from the findings, and finally the suggestions for further research.

5.2 Summary of the Findings

The study assessed parental and health professionals' awareness of speech-language therapy for effective intervention among children with communication disorders in three selected hospitals, Mwanza City, Tanzania. The study was guided by four objectives which are: to determine parental and health professionals level of awareness concerning speech-language therapy services for intervention of children with communication disorders in selected hospitals, to examine parental and health professionals' views on referral and information related to speech-language therapy for effective intervention in selected hospitals, to establish parental and health professionals' roles in speech and language development for intervention of children with communication disorders and to investigate parental and health professional influence on awareness creation about communication disorders and speech-language therapy for effective intervention among children with communication challenges.

5.2.1 Parental and Health Professionals' Awareness of Availability of Speech-Language Therapy Services

The first objective sought to determine parental and health professionals' level of awareness concerning speech-language therapy services for intervention of children with communication disorders in selected hospitals. The study found that majority of the parents had very low level of awareness of speech and language therapy services in the country since majority of them reported that they don't know health centers or hospitals that provide speech and language therapy in the country. Majority of them also reported that mass media like News Papers, radios, magazines, television broadcast have not been used to address topics to the parents about speech and language therapy services in the country and this is why accessing information about speech therapy services is very challenging factor in the selected hospitals.

The study found that health professionals were aware of speech and language therapy services that is going on in the country than the parents of children with communication disorders in the same selected hospitals. Almost more than half of the health professionals reported that they have heard that speech therapy service is provided in Muhimbili National Hospitals while a few of the respondents said that they have never heard the service. It was also found that health professionals are not aware of other hospitals that provide speech therapy apart from Muhimbili National hospital.

5.2.2 Parental and Health Professionals' Views on Information and Referral System

The second objective sought to examine parental and health professionals' views on referral and information related to speech-language therapy for effective intervention in

selected hospitals. The study found that the information and referral system for speech and language therapy among children with communication disorders were not effective. Majority of the parents and health professionals reported that they have limited sources of information about speech and language therapy and that referrals were not effectively given to the parents to seek speech and language therapists in any hospital.

5.2.3 Parental and Health Professionals' Awareness of Their Roles in Speech-Language Therapy

The third objective sought to establish parental and health professionals' roles in speech and language development for intervention of children with communication disorders. The study found that many parents have limited awareness of their roles as key members of the multidisciplinary team involved in speech and language therapy service provision. Most parents reported that they can't help their children with communication disorders in speech and language development. They also reported that they rarely take their children to the hospitals for speech and language Management and rarely raise concern about the child's speech and language impairment. It was also found that health professionals rarely tell parents the cause of speech-language impairment and the strategies to follow in order to help their children in speech and language development. The study found that some health professionals fail to know individual who concerns with speech therapy and that is why they sometime refer the clients to either occupational therapists or physiotherapists. The study found that majority of health professionals come to realize that the child needs speech therapy but they have limited knowledge related to speech and language intervention that they can use to help the child with language impairment.

5.2.4 Parental and Health Professionals' Influence on Awareness Creation

The fourth objective sought to investigate parental and health professional views on awareness creation about communication disorders and speech-language therapy for effective intervention among children with communication challenges. The study found that there is a great need of creating awareness of speech and language therapy among parents of children with communication disorders, among health professionals and in the community at large because many people have very limited awareness about speech-language therapy. It was also reported that there is a great number of children with communication disorders who need speech and language therapy though the hospitals have no speech therapists.

5.3 Conclusion

Based on the findings, it can be concluded that parents of children with communication disorders in the selected hospitals who participated in the study had very limited awareness of speech and language therapy services available some hospitals in the country. Parents were not effectively given referrals to seek speech-language therapists and majorities of them fail to help their children with communication disorders in speech and language development due to the lack of awareness of their roles. Due to the lack of awareness among parents, many parents of children with communication disorders requested awareness creation to make them to participate effectively in intervention process. parents requested that speech and language therapy should be provided in the selected hospitals since there are many children with communication disorders who need speech and language therapy services. Lack of parental awareness of speech and

language therapy affects their ability to participate in intervention process because parents who are ware of speech and language therapy and who are involved in therapy process play crucial roles in implementation of intervention process.

It can also be concluded that many health professionals who participated in the study have heard that speech and language therapy services are provided in some hospitals. However, they still have little awareness and knowledge on their roles in intervention process. Majority of health professional reported that other health professionals in the selected hospitals are not aware of speech and language therapy. Lack of speech and language pathologists in the hospitals was found one of the factors that affect the system of knowledge sharing, referrals system and speech and language therapy services. In addition, It can be concluded that management of communication disorders was not effective in the selected hospitals because majority of health professionals and parents have limited awareness of speech-language therapy process though they are the important team in field of speech and language therapy. Therefore, there is great need to create awareness among parents and health professionals for them to participate in intervention process.

5.4 Recommendations

5.4.1 Recommendations for Policy and Practice

Based on the findings of the study, the researcher recommends:

1. The government should provide public awareness creation and public education about speech and language intervention for children with communication challenges.
2. It was recommended that parents of children with communication disorders should be involved in early speech-language therapy process as they play crucial roles in enhancing speech and language development for their children with communication disorders.
3. Speech language therapists from other hospitals should share the knowledge with health professionals and parents of children with communication disorders on speech and language intervention in the selected hospitals.
4. The hospitals should prioritize training and employment of speech-language therapists in the hospitals for effective multidisciplinary management of children with communication challenges.

5.4.2 Recommendation for Further Studies

1. Further studies should focus on assessing public awareness of speech and language therapy for intervention of children with communication disorders.
2. A study should be done to investigate parental and health professionals' views on need of speech and language therapy for children communication disorders. With cleft palate/lip following the surgical intervention in the selected hospitals.

REFERENCE

- Abawi, K. (2014). Data Collection Instruments (Questionnaire and Interview). Training Course in Sexual and Reproduction Health, Geneva workshop
- Auert, E., Trembath, D., Arciul, J., & Thosa, D. (2012). Parental Expectations, Awareness and Experience of accessing Evidence-based Speech-language Pathology Services for their Children with Autism. *International Journal of Speech-language Pathology*. 14: (2), 109-118
- Ayşe, A. U; & Tura, G. (2019). The Views and Knowledge of Parents of Children with Speech/Language Disorders on Speech and Language Therapy in Turkey. *Examines Phy Med Rehab*. 2(2). *EPMR.000533*. 2019. DOI: 10.31031/EPMR.2019.02.000533
- Barbosa, M.R., & Fernandes, F.D. (2017). Remote Speech-Language Intervention, with the Participation of Parents of Children with Autism. DOI: 10.5772/intechopen.70106.
- Barlett, J., Kotrlik,, J., & Higgins, C. (2001). Organizational Research: Determining Appropriate Sample Size in Survey Research. *Journal of Information Technology. Learning, and Performance*, vol.19, No.1, Spring 2001 ,43-50
- Bercow, J. (2008). Review of Services for Children and young people (0-19) with speech, Language and Communication Needs. DCSF Publication: Crown copyright
- Bishop, D.V., Clark, B., Conti-Ramsden, G., & Norbury, C.F. (2012). RALLI: An Internet Campaign for Raising Awareness of Language learning impairment:

Children Language Learning and Therapy. 28 (3): 259-162. DOI: 10.1177/0265659012459467.

Bultman, D.C. & Svarstad. B.L., (2002). Effects of physical communication style on client

Burke, M., Meadan, H., & Patton, K. (2019). Advocacy of children with social-communication Needs: Perspectives from Parents and School Professionals. *The journal of Special Needs Education* 51(40):00224669177689. DOI: 10.1177/002246691776898.

Casteel, A., & Bridier, N. (2021). Describing Population and Samples in Doctoral Student Research. *International Journal of Doctoral Studies*, Vol, 16, 339-362. <https://doi.org/10.28945/4766>

Chiang, P., Bryan, T., Burstein, K., & Ergul, C. (2006). Family Centered Intervention for Young Children at risk for Language and Behavior Problem. *Journal of Early Childhood Education*. Vol 34.

Ching, T., Scarinci, N., & Whilfield, J. (2018). Factors Influencing Parents Decisions about Communication Choices during early education of their children with hearing loss: A Qualitative Study. *International Journal of Deafness Education*. 2081:20(3-4):154-181

Davies, K. E. (2014). Parents and speech therapists' roles in intervention for pre-school children with speech-language Needs (Doctoral dissertation, Manchester Metropolitan University)

- Erin, B. (2013). *Parent-Implemented Interventions for Young Children with Disabilities: Journal or Early Intervention. USA: SAGE Publication*
- Gangat, W.S., Shange, N., Wheeler, K.,Karrim, S., & Pahal, J. (2017). The View and Knowledge of Parents of Children with Autism Spectrum Disorder on a Range of Treatment. *The South Africa Journal of Child Health. Vol 11, No3 (2017).*
- Glogowska, M.& Campbell, R. (2000). Investigating Speech and Language Therapy. *International Journal of Language and Communication Disorders. 35(3) 391-405*
- Hassuji, R.M (2019). Parental Perspective pre- and post-cochlear Implantation in Tanzania: *Hear well Audiology Clinic, Tanzania. Vol3 (2). DOI: 10.32474/SJO.2019.03.000156.*
- Hatcher, A., Page, J. (2019). Parent-Implemented Language Intervention for Teaching Enhanced Milieu Teaching Strategies to Parents of Low Socioeconomic Status. *Journal of Early Intervention. DOI: 10.1177/1053815119873085*
- Hooker, L., Small, R., Humphreys, C., & Hegarty, K. (2015). Applying Normalization Process Theory to understand implementation of family violence screening and care model in maternal and child health nursing practice: *A mixed method process evaluation of randomized controlled trial. DOI: 10.1186/s13012-0150230-4*

- Ingber, S. (2018). Parental Involvement in Early Intervention for Children with Hearing loss. *Hand book of Communication Disorders*: De Gruyter Mouton: Tel Aviv University.
- Jacob, U.S., Olisaemeka, A.N., & Edozie, I.S. (2015). Developmental and Communication Disorders in Children with Intellectual Disability: *The place Early Intervention for Effective Inclusion. Department of Special Needs Education* Vol.6 No.36. University of Ilbadan, Oyo state, Ngeria.
- James, D.M. (2011). The applicability of normalization process theory to speech and language therapy: a review of qualitative research on speech and language intervention; *Implementation Science* 6, Article number: 95 (2011). [Doi.org/10.1186/1748-5908-6-95](https://doi.org/10.1186/1748-5908-6-95).
- Jantze, T. (2011). The Power of Sign: *Enhancing Oral Communication with Young Children Typical Hearing*. Southern Illinois University Carbondale.
- Kaiser, A., & Robert, M. (2011). Advanced in Early Communication and Language Intervention: *Journal of Early Interventio*, 33(4)298-309. <https://doi.org/10.1177/1053815111429968>
- Keng, P., & Shin, Y. (2021). Public Awareness of Communication Disorders and speech-language Therapy in Malaysia. *International Journal of Disability Development and Education*. DOI: 10.10880/1034912/1937956
- Kinyua, M., & Ndugu, R. (2009). Cultural Perspective in Speech and Language Disorders. *Jornal od Disability Studies Quarterly*: Vol29

- Kruszynski, K., Leeseberg, J., Loranger, T., O’Keeffe, C., Pfafman, H., & Wanka, E. (2018). Inter professional Collaboration between Occupational Therapists and Speech Language Pathologists with Children who have Sensory Processing Deficits. *Journal of Student Research*. <https://doi.org/10.47611/jsr.vi.595>
- Kothari, C. (2004). *Research Methodology: Methods and Techniques*. (2nd Ed)
- Law et al., (2017). Speech and Language Therapy Intervention for Children with Primary speech and /Language delay/or language disorders (protocol). *Cochrane Database of Systematic Reviews*. John Wiley & Sons
.Doi:10.1002/14651858.CD012490:
- Law et al., (2019). Working with the Parents and Families of Children with Developmental language disorders: An International Perspective. *Journal of Communication Disorders*. Vol 82, Nov, 2019,105922.
- Law, J., Leckis, P., Lyons, R., & Stankova, M. (2019). Working with the parents and families of Children with Developmental Language Disorders: *An International Perspective: Journal of Communication Disorders*/. Vol 82
- Logan, K., Lacono, T., Trembath, D. (2016). A Systematic Review or Research into aided AAC to increase social-communication functions in children with autism spectrum disorder. *Journal of Augmentative and Alternative Communication*, Vol 33,2017-issue1
- Lowry, S.J., Christakis, D., Goldberg, G., & Violette, H. (2016). Assessment of parent-child interaction for Language Development in Children.
DOI:10.1001/jamanenetworkopen.2019.5738

- Marshall, J., Golbart, J. & Philips, J. (2007). Parents and Speech and language therapists' explanatory models of language development, language delay and intervention. *International Journal of Language and Communication Disorders*, 42(5), 533-555.
- Marshall, J. (2006). Provision for Children with Speech and Language Difficulty in Tanzania. *International Journal of Disability, Development and Education*. Vol 44, 1997
- Marshall, J., Wylie, K., McAllister, L., & Davison, B. (2016). Communication Rehabilitation in Sub-Saharan Africa: A Workforce Profile of Speech and Language Therapists. *Africa Journal of Disability* 7(0), a338. [Http://doi.org/10.4102/ajod.v7i0.388](http://doi.org/10.4102/ajod.v7i0.388)
- Marshall, J., Wylie, K., McAllister, L., & Davison, B. (2016). Communication Rehabilitation in Sub-Saharan Africa: The Role of Speech and Language therapists. *Africa Journal of Disability* 7(0), a338. [Http://doi.org/10.4102/ajod.v7i0.388](http://doi.org/10.4102/ajod.v7i0.388)
- Marshall, J. (2006). Planning Services for Tanzania Children with Speech and Language Difficulties. *International Journal of Inclusive Education*, 1: 4,357-372, DOI: 10.1080/1360311970010405
- May, C.R., Cumming, A., Girling, M. et al., (2018). Using Normalization Process Theory in feasibility studies and process evaluation of complex healthcare interventions: a systematic review. *Implementation Science* 13, Article number: 80(2018). [Doi.org/10.1186/s13012-018-0758-1](http://doi.org/10.1186/s13012-018-0758-1)

- May, C.R., Mair, F., Finch, T. et al. (2009). Development of a theory of Implementation and Integration: Normalization Process Theory. *Implementation Sci* 4, 29 (2009).
Doi: org/10.1186/1748-5908-2-29
- Migrant & Seasonal Head Start Technical Assistant Center (2006). *Introduction to Data Analysis Handbook. Academy for Education Development.AED/TAC-12 Spring,2006.*
- Mohamoud, H., Aljaz, A., & Allchmra, R. (2014). A study of Public Awareness of Speech-language Pathology in Amman. *Journal of College Student Vol 48*
- Mohaney, G., & Wiggers, B. (2007). The Roles of Parents in Early Intervention: *Implication for social works. Children and schools, Vol. 29. No. 1, pp 1-15.*
- Mostafa, E.M. (2017). Health Care Professionals' Awareness of Language Delay in Sohag, Upper Egypt. *Doi.10.4172/2472-5005.1000125*
- National Institute of Deaf and Other Communication Disorders (2018). Speech and Communication Disorders. Department of Health and Human Services: U.S
- National Institute of Deaf and other Communication Disorders. (2012). Autism Spectrum Disorders: *Communication Problem in Children. 31 Center Drive, MSC 2320, Bethesda, MD USA 20892-2320*
- Nesmith Library. (2015). Definition of Parents, guardian and Caregiver.
www.nesmithlibrary.org
- O' Toole., Lee, A., Gibbon, F., & Bysterveldt, A. (2018). Parent-Implemented Intervention for Promoting Communication and Language Development in

- Young Children with Down Syndrome. *Cochrane database of systematic reviews (online)* 10 (2). DOI: 10.1002/14651858.CD012089.pub2
- Obure, S.K. (2017). Caregivers' Involvement for Effective Early Intervention for Children with Speech and Language Disorders: *Thesis for Master's Degree of Education (Speech and Language Pathology)* . Kenyatta University.
- Orodho, A .J. (2012). Techniques of writing research proposals and reports in education and social sciences. Nairobi: Kanezjahp enterprises.
- Paily, J. (2020). Public Awareness of Speech-Language Therapy Services and the Communication Support of New Zealanders: *A Thesis*; University of Centerbury: New Zealand
- Pamplona, M.C. (2000). Active Participation of mothers during speech therapy improved language development of children with cleft palate. *Scandinavian Journal of Plastic and Reconstructive Surgery and Hand Surgery*. 34 (3): 231-6
- Watts, W., McAllister, L., & McLeod, S. (2015). Parental Belief and Experience Regarding Involvement in Intervention for Their Children with Speech Sound Disorders. *SAGE Journal*. DOI. 101177/026659015615925.
- Rannard, A., Lyons, C., & Glenn, S. (2005). Parents concerns and professional response: the case of specific language impairment. *British Journal of General Practice*, 55(518); 710-714
- Reddy, M.S., Jayashree, R.B., & Shanban. C. (2010). Awareness on Communication Disorders in Hospet Taluk of Karnataki: Preliminary Survey Report. India

- Regina, D., Falarara, S., & Vieira, M. (2015). *Organization of the referral and counter-referral system in speech-language pathology and audiology clinic school*.
Doi.org//10.1590/2317-1782/20152014158
- Robert, M., & Kaiser, A. (2011). The Effectiveness of Parent-Implemented Language Interventions: A Meta-Analysis. *American Journal of Speech-Lanaguge Pathology: 20(3): 180-99*.
- Robert, M., & Kaiser, A. (2011). The Effectives of parent-implemented Language Interventions. A meta-analysis. *American Journal of Speech-language Pathology. DOI: 10.144/1058-0360 (2011)*.
- Robert, M., (2011). The Effectiveness of Parental-Implemented Language Intervention: meta-analysis: *American Journal of Speech-language Pathology. 20: 180-199*
- Rosenbaum, S., & Simon, P. (2016). *Child Speech and Language Disorders in general. Journal of Pediatrics: National Academy Press. Washington*
- Rosenbaum, S., & Simon, P. (2016). *Treatment and Persistence of Speech and Language Disorders in Children. The National Academy of Sciences. Washington (DC)*
- Safwat, R.F., & Sheekhany, A.R. (2014). Effects of Parent Interaction on Language Development in Children. *The Egyptian Journal of Otolaryngology. Vol 30 (3): 253-263*
- Salant, P., & Dillman, D.A. (1994). *How to Conduct your Own Survey: New York John Wiley and Sons.*

- Salmons, E.K (2015). Parental/ Caregivers Knowledge and Satisfactory of Information and Referral related to Speech-language Pathology Services for children with Down syndrome. *Thesis and Dissertation- Communication Science and Disorders.*
- Samuel, U., Olisaemeka, A., & Edozie, I. (2015). Developmental and Communication Disorders in Children with Intellectual Disability: The Place Early Intervention for Effective Inclusion: *Journal of Education and Practice. Vol6. No.36.2015. Nigeria*
- Samuel, A., & Mabuku, M. (2014). The Impact of Speech and Language Disorders on Pupils' Learning and Socialization in School. *Journal of European Education Science. Vol.1. No.2. Kalomo, Zambia.*
- Snodgrass, M.R., Chung, Y.M., & Biller, M. (2016). Tele practice in Speech-Language Therapy: The use of Online Technologies for Parents Training and Coaching. *Communication Disorders Quarterly: SAGE journal. Doi: 10.1177/1525740116680424*
- Spicko, M.A (2007). Perception of Speech-Language Pathologists. *Honors Theses.550.*
https://scholarworks.wmich.edu/honors_theses/550
- Stephens, J., Nicholas, D., & Jack, S. (2019). Coming to understand the child has autism: A process illustrating parents' evolving readiness for engaging in care. *SAGE Journal, Vol: 24 (2). University of Toronto. DOI; 101177/1362361319874647*

- Stephens, W. M. (2011). Effects of Parent Intervention on children with Communication Disorders: *Research paper 144*
- Stuckey, H. (2013). Three types of interviews: Qualitative research methods in social health. *Journal of Social Health and Diabetes 1(2):56. DOI: 10.4103/2321-0656.115294*
- Sudharshan, M. (2019). *A Preliminary Survey Report on Awareness of Communication Disorders among Nursing Trainees and Primary Teachers.*
- Taherdoost, H. (2016). Validity and Reliability of Research Instruments; How to Test the Validation of Questionnaire/ Survey in a Research. *Research Methodology; Method, Design & Tools: Electronic Journal (3): 28-36*
- Ukstins, C., & Welling, D.R. (2016). *The Speech-Language Pathologist in Audiology Services: An Inter Professionals Collaboration.* New York: Bartlett Learning, LLC.
- UNICEF (2007). Family and Parenting Support Policy and Provision in Global Context
- United Nations. (2018). Disability and Development Report: *Realizing the Sustainable Development Goals by, for and with person with disabilities.* New York
- Watts, N.P. (2010). Clinical Report Writing for Paediatric Clients: *A Tutorial. Acq vol,12 (2) issue.*
- Wetherby et al. (2003). Early Identification of Children with Communication Disorders: Concurrent and Evidence Validity of SBS Development Profile. *Infants & Young Children; April 2003-vol16-issue2-p161-174*

- Wolff, G.S., Niegia, B., & Goulart, B. (2013). Parents Perception of Communication Disorders in Childhood. [Http// doi.org:10.7322/jhgd.61293](http://doi.org:10.7322/jhgd.61293)
- Wood, A. S., Sutton, S., & Davis, C. (2015). Performance and Characteristics of the Newborn Hearing Screening Program in England: The first seven years. *International Journal of Audiology. England, UK.*
Doi:10.3109/1499207.2014.989548
- Wylie, K., McAllister, L., Davidson, B.& Marshall, J. (2016). Communication Rehabilitation in Sub-Sahara Africa: A workforce profile of speech and language therapists. *African Journal of Disability* 5(1), a227.
- World Health Organization. (2012). Developmental Difficulties in Early Childhood. Prevention

APPENDICES

APPENDIX1: INTRODUCTION LETTER

Dear Respondent,

Sorry for taking your time to ask you to be my respondent in this research. I am a master's student at Kenyatta University conducting study on parental awareness of speech-language therapy for effective intervention. Your input will be quite valuable to my research. I would like to assure you that all responses you give will be treated confidentially.

Please answer accurately and truthfully.

Many thanks to you.

APPENDIX II: QUESTIONNAIRE FOR PARENTS/CAREGIVERS

This questionnaire aims at collecting data on *parental awareness of speech-language therapy for effective speech-language intervention for children with communication disorders*. The data will be used for academic purpose and the information given will be confidential. You are kindly requested to participate in the study by providing your answers to the items in the sections as instructed.

SECTION A: Demographic information

Instruction: please, tick with your appropriate answer and fill the space provided.

1. What is your gender?

Male [] female []

2) Your resident

Rural [] urban []

3) What is your highest level of education?

Informal Education [], primary education [], Secondary Education [],
Certificate/Diploma [] First degree and above []

4) What is your current employment status? Please tick in the right box

Salaried [], Self-employed [], Housewife [], Retired [], Student []

5) What is the date of birth of your child?

Date----- month----- year-----

6) What is your child's disability?

Hearing loss [], cerebral palsy [], autism [], down syndrome [], cleft palate/lip []

SECTION B: MAIN QUESTIONS

Part i: Parental level of awareness on availability of speech-language therapy services

1. Have you ever heard about speech-language therapy service?
Yes, [], No []
2. Do you know any hospital in Tanzania where speech-language therapy service is provided?
Yes [], No []. If yes, which hospital is that? -----
3. How did you come to know that speech-language therapy service is provided in that hospitals?

4. Do you know professionals who provide speech-language therapy?
Yes [], No []
5. Are there parents of children with communication disorders in your surrounding who are not aware of speech-language therapy services?
Yes [] No [], I have no idea []
6. Have you ever heard parents of children with communication disorders whom you meet together explaining about availability speech-language therapy service anywhere?
Yes, [], No []
7. Have you ever heard health professionals raising awareness of speech-language therapy among parents of children with communication disorders in Bugando/ Sekou-Toure or Mabatini hospitals?
Yes [], No []

Part ii: Parental views on accessing referral and information related to speech-language therapy service

No	Questions	Yes	No
1	Are you given information related to speech-language therapy by health professionals?		
2	Do health professionals tell you the cause of speech-language disorders for your child?		
3	Do health professionals tell you the strategies to improve speech-language development for your child?		
4	Have you ever been given referral to seek speech therapist at any hospital in Tanzania?		
5	Are you satisfied with referrals and information given by health professionals about speech-language therapy ?		

Part iii: Parental awareness of their roles in speech-language development for their children with communication disorder.

Reply by ticking whenever is possible

	Questions	Yes	No
1	Do you know your responsibilities in helping your children with language impairment?		
2	Are you able to help your child in speech-language development?		
3	Do you practice talking with your child at home?		

4	Do you take your child to any hospital for speech-language therapy?		
5	Do you raise concerns to the health professionals about speech-language problems of your child?		

Part iv: Parental views on awareness creation about communication disorders and speech-language therapy among parents of children with communication disorders.

1. What is your view on the need to create awareness about speech and language therapy to the parents of children with communication disorders?

2. What is your view on need to establish speech-language therapy service at this hospital?

3. What are your views on what should be done by health professionals to create more awareness about speech and language therapy?

APPENDIX III: INTERVIEW GUIDE FOR HEALTH PROFESSIONALS

This interview guide intends to collect information from health professionals on their awareness of availability of speech-language therapy, their views on accessing referral and information related to speech-language therapy, their roles in speech-language therapy and their views on need to create awareness about speech-language therapy among parents and health professionals for effective intervention. Please, fill free to give your answers as you are assured that information you give will remain confidential issues

General Information:

Title-----

Date-----Time-----Gender: Female [] Male []

Education Level: Diploma [] Graduate [] Post-graduate []

Period of service: Below 2 yrs [], 2-5 yrs [], Above 5 []

Part i: Health professionals' awareness of speech and language therapy services

1. Have you ever heard any hospital in Tanzania where speech-language therapy service is provided? ----- where is that hospital? -----

2. Do you have knowledge about speech and language therapy?

3. How do you get information about speech-language therapy services?

4. What do you think about general awareness of health professionals about speech and language therapy services for children with communication disorders?

5. What do you think about general awareness of speech-language therapy services among parents of children with communication disorders and health professionals in your hospital?

Part ii: Health professionals' views on accessing referrals and information related to speech-language therapy

1. Do you think health professionals receive information related to speech-language intervention for children with communication disorders in this hospital?

2. Do speech-language therapists from your hospital or other hospitals informed you about speech-language management for children with communication disorders?

3. Do parents of children with communication disorders raise concern about speech-language therapy for their children?

4. Do you provide referrals to the parents of children with communication disorders to seek speech and language therapist in any hospital?

5. What is your views on referrals system and information given to the parents to seek speech-language therapy service for their children with communication disorders?

Part iii: Health professionals' roles in speech-language development of children with communication disorders

1. How many children with communication disorders are helped in area of speech-language development in your hospital?

2. What roles do you play as one of health professionals to help children with communication disorders in speech-language development?

3. How do you involve parents in intervention strategies to enhance speech-language development of their children with communication disorders?

Part iv: Health professionals' influence on awareness creation about communication disorders and speech therapy

1. Are you satisfied with the information you have about communication disorders/ speech and language challenges in children?

2. What do you think should be done by health professionals to create more awareness about Communication disorders

3. Are you satisfied with the information you have about speech therapy services?

4. What do you think should be done by health professionals to create more awareness about speech and language therapy?

5. What are your views on what should be done by parents to create more awareness about communication disorders?

6. What are your views on what should be done by parents to create more awareness about speech and language therapy?

7. What are your views on what should be done by health professionals to create awareness among parents of children with communication disorders?

APPENDIX IV: DOCUMENT ANALYSIS

Document Analysis intends collect information in the following areas:

- 1 Total number of patients with communication disorders attend the hospitals
- 2 Patients who need speech-language therapy
- 3 Referrals related to speech-language therapy

APPENDIX V: RESEARCH PLAN

Activities	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Nov	Dec
Literature review in area of interest														
Selection of topic														
Development of concept paper														
Concept paper presentation														
Correction on concept paper														
Development of research proposal														
Defence of proposal														
Corrections on proposal														
Data collection														
Data analysis and interpretation														
Writing thesis report														
Research defence														

APPENDIX VI: BUDGET

ACTIVITIES	REQUIREMENTS	COST (Ksh)
1. tools for data collection	Audio-Visual gadgets Video Camera	12,000 =
2. Transport to meet supervisors	From Mwanza to Nairobi and from Nairobi to Mwanza to and fro x 3	12000=
Transport during data collection and pilot study	Within Mwanza	4500
Accommodation when in Nairobi to meet supervisors	Researcher	36000=
Accommodation and transport costs	when in Mwanza for data collection	7500=
3. Meals during the research	The researcher	20000=
4. Cost of printing and photocopying of the proposal and thesis	Production of copies of the proposal and thesis.	29500=
5. Internet	Sourcing of information from the internet during proposal and thesis writing	4000=
Article publication	International journal	10,000
8. Miscellaneous cost		10,000=
Total		170500=

Appendix vii: Fomu ya idhini ya kukusanya taarifa za kiutafiti kwa mzazi

Habari? Mimi naitwa Emmanuel Leonard Obunge, mwanachuo mtanzania anayesoma shahada ya uzamini (master's degree) ya matibabu ya kuongea (speech-language pathology) katika chuo kikuu cha Kenyatta Nairobi Kenya. Namba yangu ya usajili ni E55EA/34503/2017. Utafiti ninaofanya unahusu *Uelewa wa wazazi na watalaam wa afya juu ya matibabu ya tiba ya kuongea kwa ufanisi wa mapema kwa watoto wenye matatizo ya kuongea katika hospitali 3 za halmashauri ya jiji la Mwanza*. Lengo kubwa la utafiti ni kupima uelewa wa wazazi na watalaam wa afya kuhusu matibabu ya kuongea kwa watoto wenye ulemavu wa kuongea. Matokeo ya uafiti utasaidia kujenga uelewa kwa wazazi na watalaam wa afya juu ya matibabu ya kuongea kwa watoto wenye ulemavu huo. Pia inaweza kusaidia kupata taarifa zitakazosaidia hospitali, serikali na mashirika mengine kupanaga mikakati ya kutoa huduma ya matibabu ya kuongea mapema kwa watoto wenye ulemavu huo.

Wahusika wa taarifa zinazokusanywa

Taarifa hizi zinatolewa na mzazi aliye na mtoto mwenye ulemavu wa kuongea kama wale waliyo na ulemavu wa kusiskia, usonji, utindio wa ubongo, down syndrome na midomo ya sungura. Watoto hawatahusika na kitu chochote bali ni mzazi wa mtoto tu ndiye anayepaswa kujaza maswali dodoso.

Athari za kushiriki katika utafiti huu.

Hakutakuwa na athari yoyote wakati wa kukusanya taarifa tofauti na muda utakaotumia mtoa taarifa.

Zawadi au malipo ya pesa au kitu chochote.

Mzazi anayetoa taarifa hatapewa kitu chochote kama zawadi au fedha ya kufidia muda wake au taarifa anazotoa. Hakuna rushwa yoyote itakayotolewa na mkusanyaji wa taarifa ili aweze kupata taarifa hizo kabla na baada ya kukusanya taarifa hizo.

Uhuru wa kushiriki katika utafiti

Mzazi anayo uhuru wa kushiriki katika utafiti bila kulazimishwa. Pia anayo uhuru wa kujiondoa katika kutoa taarifa husika na hakuna hatua yoyote itakayochukuliwa dhidi yake kwa kujitoka au kukataa kushiriki.

Idhini ya mshiriki (mzazi)

Nimesoma au kueleza juu ya utafiti huo nami baada ya kusoma na kufafanuliwa nimeelewa malengo ya utafiti na uitaji wangu wa kushiriki. Kwa maamuzi yangu mwenyewe bila kulazimishwa niko tayari kushiriki katika kutoa taarifa zinazoitajika. Hivyo nakubaliana kusahini fomu hii ili nitoe taarifa hizo

Jina----- sahini----- tarehe-----

Ushahidi ----- sahini----- tarehe-----

Mtafiti----- sahini ----- tarehe-----

Consent Form for Health Professionals

Hello, I am Emmanuel Leonard Obunge, a Tanzanian post graduate candidate pursuing master's degree in speech and language pathology at Kenyatta University in Nairobi-Kenya. I am conducting a research study on *Parental and Health Professionals' Awareness of Speech-Language Therapy for Effective Intervention among Children with Communication Disorders in Selected Hospitals, Mwanza City, Tanzania*. This study aims to assess parental and health professionals' awareness of speech-language therapy for effective intervention among children with communication disorders. The findings from the study may help to create awareness among parents and health professionals on speech and language therapy services among children with communication disorders. The findings may also help the institutions, government and other NGOs to plan early speech-language intervention among children with communication disorders.

Participants

The participants in this study will be health professional specifically, physiotherapists, occupational therapists, pediatricians, neurologists, physicians, Otolaryngologists, orthopedists, psychiatrists and audiologists.

Risk of participating in this study.

There will not be any risk during data collection since there is no any sample or specimens will be taken

Gift and monetary

There will not be any corruption, rewards in any form that will be given to the participants before and after giving the information. No any payment shall be done by parties as a compensation of giving information.

Voluntarily participation

Participants in this study will not be forced or punished to participate but they will opt freely to participate or not. They will have freedom to withdraw from this study any time for any reason.

Consent of participation

I have well understood this study after I read and get explanation of the consent and study objectives. Therefore, I am willing to be a part of study by giving information that are required by the study and thus I am fell free to sign this form.

Name of participant Dr. Sep /maka signature [Signature] date 11/11/2024
Participant's witness Mussa Baidi signature [Signature] date _____
Researcher Emmanuel Leonard signature [Signature] date 11/11/2024

APPENDIX VIII: APPROVAL LETTER FROM GRADUATE SCHOOL



KENYATTA UNIVERSITY GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School

DATE: 3rd September, 2020

TO: Obunge Leonard Emmanuel
C/o Early Childhood & Special
Needs Education Dept.

REF: E55EA/34503/2017

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting 25th August, 2021 approved your Research Project Proposal for the M.Ed Degree Entitled, "Parental and Health Professionals Awareness of Speech-Language Therapy for Effective Intervention among Children with Communication Disorders in Selected Hospitals, Mwanza City Tanzania".

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and Progress Report Forms per semester. The forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

HARRIET ISABOKE
FOR: DEAN, GRADUATE SCHOOL

c.c. Chairman, Early Childhood Studies & Special Needs Education Department.

Supervisors:

1. Dr. Tom Abuom
C/o Department of Early Childhood Studies & Special Needs Edu.
Kenyatta University
2. Dr. Jesicah Muthee
C/o Department of Early Childhood Studies & Special Needs Edu.
Kenyatta University

APPENDIX IX: AUTHORIZATION LETTER FROM GRADUATE SCHOOL



**KENYATTA UNIVERSITY
GRADUATE SCHOOL**

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: E55EA/34503/2017

DATE: 3rd September, 2021

Director General,
Bugando Medical Officer
Sekou-toure Regional Referral
P.O. Box 132
Mwanza, Tanzania

Dear Sir/Madam,

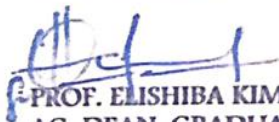
RE: RESEARCH AUTHORIZATION FOR OBUNGE LEONARD EMMANUEL – REG. NO. E55EA/34503/2017.

I write to introduce Obunge Leonard Emmanuel who is a Postgraduate Student of this University. The student is registered for M.Ed degree programme in the Department of Early Childhood and Special Needs Education.

Obunge intends to conduct research for a M.Ed Project Proposal entitled, “Parental and Health Professionals Awareness of Speech-Language Therapy for Effective Intervention among Children with Communication Disorders in Selected Hospitals, Mwanza City Tanzania”.

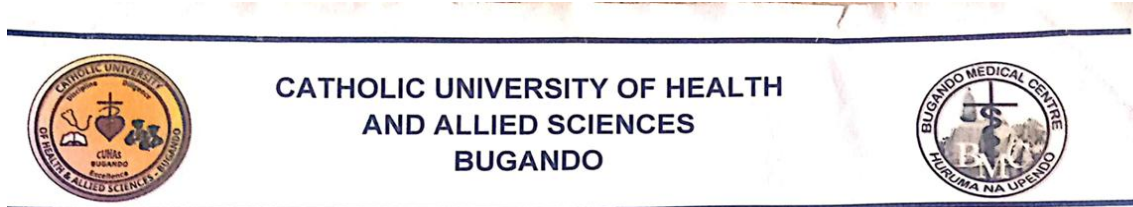
Any assistance given will be highly appreciated.

Yours faithfully,


**PROF. ELISHIBA KIMANI
AG. DEAN, GRADUATE SCHOOL**

111/1111

APPENDIX X: ETHICAL CLEARANCE FORM



CATHOLIC UNIVERSITY OF HEALTH AND ALLIED SCIENCES BUGANDO

P.O. Box 1464 Phone: (255) 28-250-0881 Email: vc@bugando.ac.tz
Mwanza, Tanzania Fax: (255) 28-250-2678 Website: www.bugando.ac.tz

CUHAS/BMC RESEARCH & ETHICAL COMMITTEE (CREC) ETHICAL CLEARANCE FORM

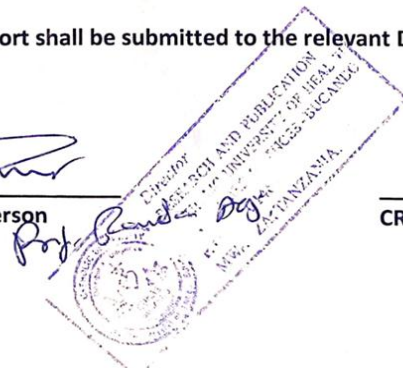
Date	28 th September, 2021
Research Clearance Certificate No	CREC/498/2021
Name of researchers/PI and Institution	<ul style="list-style-type: none"> ▪ Obunge Leonard Emmanuel ▪ REG.No. E55EA/34503/2017 ▪ Kenyatta University
Purpose of the research	Master of Speech and Language Pathology
Title of the Research	Parental and Health Professionals' awareness of speech-language therapy for effective intervention among children with communication disorders in selected hospitals, Mwanza City Tanzania
Budget and Sponsor (s)	<ul style="list-style-type: none"> ▪ 1,366,000/= ▪ Private
Research period	August 2021 to July 2022

Ethical clearance is hereby granted.

A progress report shall be submitted to the relevant Directorate every 6 months.

CREC Chairperson

CREC Secretary



**APPENDIX XI: PERMISSION LETTER FROM MINISTRY OF HEALTH,
COMMUNITY DEVELOPMENT, GENDER, ELDERLY AND CHILDREN**

THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF HEALTH, COMMUNITY DEVELOPMENT, GENDER, ELDERLY AND CHILDREN

Telegrams: "AFYA", DODOMA
Telephone: + 255 026 2323267
Email No. ps@health.go.tz
(All Letters should be addressed
to The Permanent Secretary)



Government City-Mtumba,
Health Road/Street,
P.O Box. 743,
40478 DODOMA.

Ref. No. DA 250/262/01/232

27th October, 2021

Medical Officer Incharge,
Budando Medical Hospital,
P.O.BOX 1370,
MWANZA.

Medical Officer Incharge,
Sekou Toure Regional Referral Hospital,
P.O.BOX 132
MWANZA.

*Imepukshwa
Beter 11/10/21
MCI*



**RE: PERMISSION FOR MR EMMANUEL L. OBUNGE TO CONDUCT RESEARCH
PROJECT AT SEKOU TOURE AND BUGANDO HOSPITAL.**

Refer to the heading above.

2. The Ministry of Health, Community Development, Gender, Elderly and Children received a letter from the above named person who is a post graduate student at Kenyatta University requesting to conduct a Research Project at Sekou Toure and Bugando Hospital.
3. I am writing this letter to introduce him to your Institution so that He can be able to conduct his research project entitled 'Parental and Health Professional's Awareness of Speech - Language Therapy for Effective Intervention among Children with Communication Disorders in Selected Hospitals for the period of August 2021 to July 2022.
4. However, all cost which will be incurred while conducting his project will not be covered by the Government. He is advised to abide in Government Rules and Regulations.
5. Attached herewith this letter, the request letter for Research project attachment and Ethical clearance form.
6. Thanks for your continued cooperation.

Vivian T. Wananji

Dr. Vivian T. Wananji

For: PERMANENT SECRETARY (HEALTH)

C.C: Emmanuel Léonard Obunge
Email: emmanuelleonard1987@gmail.com

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