

Parental and Health Professionals' Awareness and their Roles in Speech-Language Therapy for Effective Intervention among Children with Communication Disorders in Selected Hospitals, Mwanza City, Tanzania



Obunge Leonard Emmanue¹, Dr. Tom Abuom², Dr. Jessina Jessica Muthee³

^{1,2,3} Department of Early Childhood and Special Needs Education, Kenyatta University

ABSTRACT: The study aimed to assess parental and health professionals' awareness and their roles in speech and language therapy services in selected hospitals, Mwanza City, Tanzania. A study used both qualitative and quantitative approach with descriptive survey design. The study used sample size of 85 parents of children with communication disorders and 15 health professionals with total of 100 respondents. The study used closed ended questionnaires for parents, semi-structure interview for health professionals and document analysis to get respondents parents and their children in the selected hospitals. the study was conducted at Bugando Medical Center and Sekou-toure Regional Referral Hospital in Mwanza, city, Tanzania. The findings of the study revealed that the majority of parents in the selected hospitals were not aware of speech and language therapy services in the country and majority of them have very limited awareness of their roles in intervention process. Many of them don't know individual professional concern with speech-language therapy and many parents raise awareness about speech-language problem when it is very late. It also revealed that many health professionals have limited awareness of the roles they play in speech and language intervention process.

KEY WORDS: Parental & Health Professionals' Awareness and roles of Speech-language Therapy for Effective Intervention

1.0 BACKGROUND TO THE STUDY

1.1 Introduction

Children with cleft palate/lip, with Autism Spectrum Disorders, with Cerebral palsy, with hearing loss and with Down Syndrome are at risk of speech and language impairments (NID, 2018; Samwel et al, 2015). They have challenges with either receptive language, expressive or both. Early intervention is very important for speech-language development among them and it is done by multidisciplinary team including parents, speech-language therapists and allied health professionals. To have effective participation for implementation of early speech-language intervention program, parents of children with communication disorders and health professionals must have awareness of speech –language therapy services and know roles they play in intervention process as one of the important team. Parental awareness of speech and language therapy are crucial points for parental participation in early identification, diagnosis process, participating in home treatment program, advocating for intervention program, choosing communication skills needed to enhance speech and language to their children and providing evaluation and progress of child's speech-language development (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 evaluation, monitoring, providing referral system, advocating the child's speech-language needs and providing rehabilitation and habilitation of the children with communication disorders (Mostafa, 2017 & Intezar et al, 2018).

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).

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In East Africa, 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 (Kinyua & Ndugu, 2009).

Tanzania is among the Sub-Sahara and East Africa countries which have very few speech-language therapists while having many children with communication disorders who need speech-language intervention. However, the study has not been done to assess parental and health professionals' awareness of speech-language therapy services for effective intervention process thought they very significant group required for implementation of the services.

1.2 Statement of the problem

Speech and language impairments are among the common challenges facing children with communication disorders in the aspects of receptive and expressive language. Parents and health care providers are essential participants in child's speech-language development 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 whereas health care professionals' advocates for children's speech-language needs and provide referrals for speech-language therapy. In Tanzania there are many hospitals and rehabilitative health centers which receive children with communication disorders Bugando Lack Zone Referral Hospital, Sekou-toure Regional Referral Hospital and Mabatini Community Rehabilitative Center are among them. However, the level of awareness and roles of parents and health professionals in speech and language therapy services is still unknown in those hospitals. But again, how those children with communication challenges are helped in the areas of speech and language development remaining the big question because there are no studies that have been done in this area. Therefore, there was need to conduct a study in this are for effective speech-language intervention among children with communication disorders.

1.3 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.

1.4 aim of the study

The study aimed to asses parental and health professionals' awareness of speech-language therapy for effective intervention among children with communication disorders. An attempt was done to answer the following 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 To what extent are parents and health professionals 'aware of their roles in speech and language development for intervention of children with communication disorders in selected hospital?

1.5 Hypotheses of the study

It was hypothesized that parents and health professionals were aware of speech therapy services which going on in the country and were also aware of their roles in enhancing speech-language development for children with communication disorders.

2.0 LITERATURE REVIEW

2.1 Awareness creation techniques

In developed countries, it has been found that 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 also has been used to create awareness among parents and health professionals about speech-language therapy (Bishop, 2012).

Parental awareness is also raised through training, dissemination of professional information, referrals 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) Speech and language pathologists have great role play in to creating awareness among parents, health professionals and community about the speech and language development for children with communication difficulties.

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2.2 Level of awareness about speech and language therapy among parents and health professionals

The level of awareness about speech and language therapy among parents, health professionals and community in general has been reported as significantly very low or high in some developed countries while very low in many developing countries. Some literature review demonstrate that parents and health professionals are aware of speech and language therapy services while many literatures report the limited awareness about speech and language therapy among parents, health professionals and public in general.

Due to guidelines and policies from international organizations, international laws and United Nations about 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 informed about communication disorders and there are guidelines for assessment and treatment of speech-language disorders. speech and language pathology is taught as a course in first year program for other medical disciplines like physiotherapy, occupational therapy and audiology.

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 & Cleave 2003).

A study of Health Professionals' Awareness of Language Delay in Sohag, Upper Egypt (Mostafa, 2017), has reported that many health professionals who participated in the study demonstrated having awareness and were able to advise parents not to wait but should seek medical advice.

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).

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 and revealed that some parents were neither aware of the roles of speech-language pathologist, nor their roles in intervention process.

A study by Paily (2020) on public awareness of speech-language therapy services and the communication support needs of New Zealanders, has reported that majority of public had never heard anything about speech-language therapist, had never meet with speech therapist and majority of the participants reflected low or moderate level of understanding about roles and factors involved in speech and language therapy.

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 (Saimons, 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 i 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 (Marshal 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 n intervention process (Bultman & Svarstad, 2002).

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).

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).

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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, 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).

The statistical level of awareness and knowledge among parents of children with communication disorders and health professionals in Tanzania is currently not known since the 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.

A study 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).

A study on the area of Parental Perspective pre- and post- cochlear implantation in Tanzania reported that parents still rise concern on the need of speech and language development following the surgery (Hassuji, 2019).

2.3. Parental and health professionals' roles in speech and language development

2.3.1 Parental' roles in speech-language intervention

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). Other responsibilities of parents include monitoring, evaluation and reporting their child's progress to speech-language therapist.

Parents' awareness of their roles in home treatment program through parent-implemented intervention has been found to significantly enhance speech-language development of children with communication disorders (Lowry, 2016). Home treatment is one of the therapeutic intervention approach which integrate parents or families of children with communication disorders in provision of speech-language therapy in naturalistic environment where the child's linguistic and cultural context have influence on the child's language development (Lowry, 2016; Lowry, 2017).

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 speech- 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 et al, 2016). The findings from a national review in England (Bercow, 2008) show that parents struggled to be

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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.

2.3.2 Health professionals' roles in speech-language intervention

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.

Health professionals such as occupational therapists, physiotherapists, audiologists, pediatricians, nurses and other health care providers play significant roles in helping children with communication disorders (Peranich et al. 2010). 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. ported 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).

Even though 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.

3. 0 METHODOLOGY

The study used both qualitative and quantitative approach. The researcher used descriptive survey design. The targeted population were parents of children with communication disorders with total number of 244 and health professional with total number of 60. The researcher used purposive sampling techniques to get the respondents both parents and health professionals. The sample size selected by the researcher were 85 parents of children with communication disorders including 20 with hearing loss, 33 with cerebral palsy, 14 with autism, 12 with down syndromes and 6 with cleft palate/lip and 15 health professionals including: 1 neurologist, 2 ENT, 1 plastic surgeon, 2 pediatricians, 4 physiotherapists, 2 occupational therapists and 2 audiologists. The researcher utilized the all available targeted population due to the limited number of population for survey study. The research instruments were closed ended questionnaires for parents, semi-structure interview with health professionals and document analysis for obtaining participants. The research procedure started by asking permission from ministry of health and from the selected hospitals. A pilot study was done in one hospital with the same characteristic to test the questionnaires and interview guides for validity. 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. Every time the instrument was administered. A correlation coefficient (r) of about 0.75 and above was considered high enough to judge the reliability of the instruments as reliable for the study. The reliability on the parental questionnaire was 0.7.

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3.1 Demographic information of the respondents

3.1.1 Gender

The gender in this study was categorized into two groups that included parents and health professionals who were both males and females. The gender of parents is summarized in the table below

Table 3.1.1 Gender basing on parents

Gender	Frequency	Percent
Valid Male	17	20.0
Valid Female	68	80.0
Total	85	100.0

Table 3.1.1 above indicates clearly that majority of the parents who participated in the study were females while males were very few. Females were 68 (80%) while males were 17 (20%) of the sample size. Females were found to participate in rehabilitation of their children and are eager to take their children to the hospitals than males. This may be attributed to socio-cultural perspective that views women as having responsibility to look after their children and care for their children while men are dealing with economic issues in the family. The majority of the parents 73 (85.9%), were from urban areas, while only few, 12 (14.1%), were from rural areas. This may be attributed to the fact that all the selected hospitals were located in the town and thus there is larger population attending the hospitals than those from rural areas.

3.1.2 Education level of parents

The table below shows the summary of education level of the parents of children with communication disorders who participated in this study.

Table 3.1.2 Education level of parents/ caregivers

Level of education	Frequency	Percentage
Primary level	30	35.2
Secondary level	40	47.1
Diploma	8	9.4
Bachelor	5	5.9
More than one degree	0	
Informal education	2	2.4
Total	85	100.0

Table 3.1.2 above shows that the highest education level of parents who participated in this study was secondary education attended by 47.1% followed by primary education level attended by 35.2% of the parent population. However, a few parent participants, (2.4%), had informal education, (5.9%) bachelor degree and (9.4%) diploma education, while none of them had more than one degree. Though the level of education of parents could be a major reason for limited awareness, it was expected that level of education could contribute more in speech-language therapy practices and involvement but any one at any level of education can be aware of speech-language therapy services if they are effectively informed and involved. The study involved only parents who have been attending clinics in the hospital for some time and not those who had the first visit. Therefore, duration they had attended clinic was enough for them to be aware of speech-language therapy if they were informed despite their education level.

3.1.3 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 3.1.3 Categories of Parents of Children with Communication Disorders who participated in the study

Communication disorders	Frequency	Percent
Hearing disorder	20	23.5
Cerebral Palsy	33	38.8

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Autism	14	16.5
Down syndrome	12	14.1
Cleft Palate Lip	6	7.1
Total	85	100.0

The table 4.3.3 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.

3.1.4 Age categories of children

The age of the children whose parents participated in the study have been summarized in the pie chart below

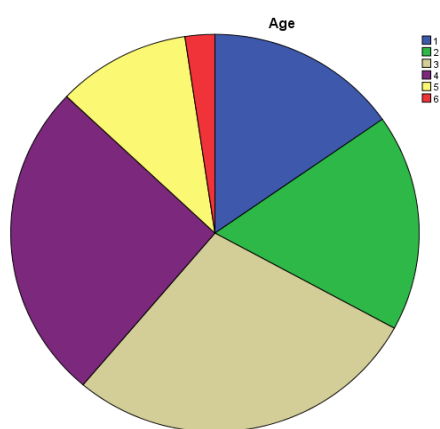


Figure 3.1.4 The age category of the children whose parents participated in the study

The Figure 4.1 shows the age groups of the children whose parents were involved in the study. The age range from 1 year to 6years. Majority of the children, a total of 24 (28.2%) were 3years of age, followed by age 4, a total of 22 (25.9%), age 2 a total 15 (17.6%), age1 a total of 13 (15.3%), age 5 a total of 9 (10.6%), and the least were aged 6, a total of 2 (2.4%). The age of the children whose parents were involved in the study was very significant because the age which range from 1-6 years is very critical for language acquisition. It is also during this age (1-6) that early speech-language intervention should be done among children with communication disorders.

3.1.5 Health Professionals level of education

The higher education level of the health professionals has been summarized in the table below:

Table 3.1.5 education level of health professionals

Education Level	Frequency	Percentage
Diploma	6	40
Bachelor	3	20
Masters	5	33.3
PhD	1	6.7
Total	15	100.0

The table 3.1.5 above presents the highest level of education of health professionals. Many of the participants had finished diploma followed by master's degree, bachelor and last PhD. Almost all health professionals' level of education was expected to contribute more to awareness on speech-language therapy services.

3.1.6 Health Professionals' occupations

Health Professionals' occupations are summarized on the table 4.7 below

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Table 3.1.6 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 3.1.6 gives the summary of the occupations of the 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.

3.1.7 Health Professionals' working experience

The summary of the health professionals' working experience has been shown in the table 4.8 below

Table 3.1.7 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 3.1.7 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.

4.0 RESULTS AND DISCUSSION

4.1 Parental and health professionals' awareness of speech-language therapy services

Table 4.1 parental awareness of availability of speech-language therapy

Question	Response	Frequency	percentage
Have you ever heard 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	Mass media (TV, radio, newspaper)	2	2.4

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is provided in that hospital?	Social media (watsapp, facebook, twiter)	2	2.4
	Readings	1	1.2
	Referral	3	3.5
	Informed by health professionals	4	4.7
	Not yet	73	85.9
	Total	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
Have you ever heard health professionals addressing the community or parents about speech-language intervention?	Yes	78	91.8
	No	7	8.2
	Total	85	100.0
Do you know the cause of speech-language impairment for your child?	Yes	10	11.8
	No	75	88.2
	total	85	100

From the table 4.1 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 8 (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, 73 (85.9), reported that they have not yet received information on speech therapy services from any source while a few of them have ever received information as follows: mass media 2 (2.4%), social media 2 (2.4%), reading 1(1.2%), referral 3 (3.5%), from health professionals 4 (4.7%). 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

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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. 50 (58.8%) admitted no, 5 (5.9) admitted yes while 30 (35.3%) reported that they have no information. If many parents are not aware of therapy services available they will have nothing to tell about it while on another hand when 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. When they were asked if they know the cause of speech and language impairment for their children, majority of them 75 (88.2%) admitted no while only 10 (11.8%) responded affirmatively.

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 concurs 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.

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 said that they are 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. None of the respondents mentioned CCBRT and Hear Well clinics in Dares- Salaam though these are also centers where speech therapy services are being provided.

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. The all 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 respondent 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 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 I have limited knowledge in such field"

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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 system about speech therapy. They don't have speech therapists to 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.

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."

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.

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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).

4.2 Parental and health professionals' awareness of their roles in speech-language therapy

Table 4.2.1 parental' awareness of their roles in speech-language therapy

Question	Response	Frequency	Percent
Do you know your responsibilities in helping your child 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	61	71.8
	No	24	28.2
	Total	85	100.00
do you know the communication skills that you can use to improve your child's language?	Yes	5	5.9
	No	80	94.1
	Total	85	100.0
Do you practice talking with your child at home?	Yes	43	50.6
	No	42	49.2
	Total	85	100.0
Do you take your child to any hospital for speech-language therapy?	Yes	2	2.4
	No	83	97.6
	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 4.2.1 gives a summary of parental awareness of their 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 know communication skills that they can use to enhance speech and language development for their children, majority of them 80 (94.1%) admitted no while only 5 (5.9%) replied yes. 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

From interviews with 15 health professionals, three questions were addressed to answer the objective concern with health professionals 'awareness of their roles in speech-language therapy process. 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 in speech and language development.

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

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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 parents 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 them 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 audiologist said,

“ Because it is not area of my specialization, I am disappointed to 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 hospitals 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”.

Physiotherapists reported that that in some cases, other health professionals refer children to them thinking that they are an expert in such field while 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. This is a case why parents fail to take their children to the hospitals to seek speech therapy services 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

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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.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Parental and health professionals' awareness of ongoing speech-language therapy services is a crucial point for effective participation in speech and language intervention process. According to finding of this study, it can be concluded that many parents of children with communication disorders were not aware of speech-language therapy services that is going on in the country. They were also un aware of the roles they are supposed to play to enhance speech and language development for their children. They don't know individual expert who concern with speech-language therapy. The study also concluded that some health professionals lack awareness about speech therapy, they are not informed about speech therapy and thus there is no effective referral and information system provided for speech-language intervention.

5.2 Recommendations

Basing on the finding of this study, the following recommendation are suggested:

- 1 since parental and health professionals are one of the multidisciplinary team required in speech-language therapy process, awareness should be created among parents and health professionals
- 2 parents and health professionals should be trained in orders to have knowledge required to enhance speech-language development
- 3 speech-language therapists from other hospitals should like Muhimbili should pay visits to the other hospitals where speech therapists are not available
- 4 speech-language therapists and other allied team should raise public awareness about speech and language intervention through different social medias and mass medias

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