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SELF-HELP BY PARENTS FOR CHILDREN WITH COMMUNICATION DISORDERS IN GHANA

BY

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DECLARATION

I, **CHRISTIANA ADEDE TOTIMEH** do hereby declare that this dissertation which is being submitted in fulfillment of the requirements for the Master of Science degree in Speech and Language Therapy is the result of my research performed under supervision, and that except where otherwise other sources are acknowledged and duly referenced, this work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

I hereby permit the Department of Audiology, Speech and Language Therapy to dissemination/publish the dissertation in any appropriate format. Authorship in such circumstances is to be jointly held between me as the first author, and the supervisors as subsequent authors.

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DEDICATION

I dedicate this work to God Almighty who has been my strength through it all. To my dear husband; Pastor Chris Andoh-Mensah and my children Christus Andoh Mensah, Christalyn Andoh- Mensah and Chriselda Andoh-Mensah. Also to my Parents Mr. William Totimeh and Mrs. Comfort Korkoi Totimeh as well as my siblings Mark, Joanna and Naomi Totimeh.

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God richly bless you all.

ABSTRACT

Parents who have children with communication disorders are likely to be key actors in taking independent actions to improve on the communication skills of their child. Studies in other countries have explored the self-help behaviors of parents with children with communication disorders (Tomasella, Maning & Dulmus, 2010). These studies concluded that parents play a leading role in helping children with communication disorders cope or improve upon their communication skills, provided the right parental intervention is given on time. There is limited information about self-help within the Ghanaian setting. Wylie, McAllister, Davidson, Marshall, Amponsah and Bampoe (2017), explored likely self-help behaviors in the general population using hypothetical scenarios. This study aimed to extend the work of Wylie, McAllister, Davidson, Marshall, Amponsah, & Bampoe, (2017) by asking parents who have directly experienced communication disorders with a child in their family to report on what they have done to help their children.

The objectives of this study were to describe self-help actions reportedly undertaken by families, to evaluate parental perceptions of the effectiveness of the self-help strategies used and describe how the self-help strategies were carried out to help children with communication disorders.

This research uses a descriptive survey, which incorporated both quantitative and qualitative data, to address the research questions.

All of the respondents indicated that they engaged and still engage in activities to help and support their children's communication needs.

Parents combined multiple self-help activities to support their child's development. This combination depends on what they feel best suited them and their children. The study also concludes that parents engaged in various ways of learning about their children and their

difficulties. The study recommends that since parents are willing to learn on their own to support their children with communication disorders, they should be provided with information on communication disorders and how to manage a child with one.

Keywords: Communication disorder, Self-help, Diagnosis, Family intervention.

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LIST OF ABBREVIATIONS

ASHA	American Speech and Hearing Association
HI	Hearing impairment
SLCN	Speech, language and communication needs
BCRP	Better Communication Research Programme
DFE	Department of Education
SLT	Speech and language therapist
KM	Keyhole Mode kit

CHAPTER ONE

1.0 Introduction

Communication skills are an important ability which enables people to have a fulfilled and productive life. Communication disorders may include difficulties in the understanding of language (receptive language difficulties) or the ability to express thoughts or ideas clearly and effectively (expressive language difficulties) (American Speech Language Hearing Association, 2001). Communication disorders can affect people across the lifespan and result from a wide range of health-related conditions such as cerebral palsy, Fragile X syndrome, cleft palate or may have no known causes (Rosetti, 2001). Children experiencing communication disorders may also experience behavioral difficulties that may affect social development, interpersonal relationships, the ability to learn, and development of independence (Owen, 2010).

Recently, there has been a shift in the way intervention services are delivered to children with communication disorders (Carnes, 2012). Previously, the primary focus of intervention was working directly on developmental skills of the child. Across recent years, the focus of intervention has shifted from working directly with children, to place more emphasis on supporting parents' participation in planning and implementing intervention (McBride & Carnes, 2012). Parental engagement in treatment is essential to effective therapy because parents play a vital role in the development of their children. Parents take a critical role when recognizing a possible problem in the development of their child, acting to address the problem. According to Cheslock and Kahn (2001), it is important to teach parents several strategies to help them guide children's language development. Some of these teaching strategies include, using natural reinforcement, arranging the environment, modeling, gestural/ visual cueing and timeliness of contingent responses. When parents are well educated to initiate and implement interventions

with their children, it helps young children with communication disorders in the development of communication skills. Kashinath, Woods and Goldstein (2006), indicated that the "carryover of teaching strategies helps to create generalization and transfer of knowledge with other family members as well as help to maintain a skill" (p. 482). The involvement of parents is essential as parents help to monitor the child at home to ensure that the right skills are being practiced in a correct manner.

Many studies have been conducted on the occurrence of communication disorders in other countries. In the United States, Powell, et al., (1989) conducted a mass screening of 847 children aged 6–10 years in rural schools in the United States. As many as 203 of these children were identified to have a voice disorders. Follow-up testing was conducted one and four years later and 39.9% and 38% respectively were found to have persisting voice disorders. In Australia, Craig, et al., (2002) determined the prevalence of communication disorders in the population to be 0.72%. A higher prevalence rates for younger children were reported (1.4%–1.44%); for adolescents, lowest rate was reported (0.53%). Though there exist children with communication disorders in Ghana, there are scanty figures. However, there is a need to study how these children cope and how families have helped them cope. As such, this study seeks to investigate the coping strategies adopted by parents with communication disorder children.

This study was based in Accra, Ghana and focused on exploring how parents respond to communication difficulties, using parent report. Specifically, this study considered the variety of ways in which parents attempt to help their own child when their children experiences significant issues with the development of communication skills.

1.1 Problem Statement

Children with communication disorders face a wide range of social, emotional, psychological, economic, and physical challenges (Owen, 2010; Rosetti, 2001). These challenges are likely to be further compounded in Ghana, due to the limited availability of rehabilitation services to provide support to individuals (Asare, Bentley, Aryeetey, Ackuaku, Mayer & Wegener, 2016; Wylie, McAllister, Davidson & Marshall ,2016). Parents who have children with communication disorders are likely to be key actors in taking independent actions to improve on the communication skills of their child.

Studies in other countries have explored the self-help behaviors of parents with children with communication disorders (Cheslock & Kahn, 2001; McConkey & Cassidy, 2010; Tomasella, Maning &Dulmus, 2010). These studies concluded that parents play a leading role in helping children with communication disorders cope or improve upon their communication skills, provided the right parental intervention is given on time. There is limited information about self-help within the Ghanaian setting. Wylie, McAllister, Davidson, Marshall, Amponsah and Bampoe (2017), explored likely self-help behaviors in the general population using hypothetical scenarios. This study aimed to extend the work of Wylie, McAllister, Davidson, Marshall, Amponsah, & Bampoe, (2017) by asking parents who have directly experienced communication disorders with a child in their family to report on what they have done to help their children.

1.2 Significance of the Study

The results of this study help describe the self-help activities undertaken by parents in Accra, Ghana to support their children with a communication disorder. It is expected that this information would begin to inform speech and language therapists in Ghana on the type of therapeutic approaches that are accepted and carried over by parents at home. It also provided

information for planning community education programmes which target communication disorders in Ghana.

1.3 Aim of the Study

The aim of the study was to describe and explore the self-help strategies and actions undertaken by families of children with a communication disorder, to support their child develop more effective or appropriate communication skills.

1.4 Research Questions

- What do parents of children with a communication disorder report they have done at home to help their child with the development of communication skills?
- How were the self-help strategies carried out to help children with communication disorders.
- How effective are the self-help strategies perceived to be by parents in supporting the development of communication skills in children?

1.5 Objectives of the Study

1. To identify any self-help actions reportedly undertaken by families to help their child who has a communication disorder.
2. To-describe-how-the-self-help-startegies-were-carried-out-to-help-children-with-communication-diosrder.
3. To evaluate parental perceptions of the effectiveness of the self-help strategies used in supporting the development of communication skills in their child

CHAPTER TWO

LITERATURE REVIEW

2.1 Understanding Communication Disorders

A communication disorder is a condition where an individual's "ability to communicate is affected by their response to an impairment and/or social and contextual factors which interrelate with each other and with the person themselves, resulting in impaired communication skills" (Hartley, 1998, p. 277). According to Gleason (2001), a communication disorder can be defined as any disorder that affects anyone's ability to communicate. This ranges from an inability to understand speech to simple sound substitution. The American Speech and Hearing Association-ASHA (1993) also defines a communication disorder as any impairment which makes it impossible to send, receive, process and understand concepts or verbal, non-verbal and graphic symbol systems. Communication disorders can range in severity, from mild to profound, and can be acquired or developmental. A child may experience one type of communication disorder or a combination of more than one. Communication disorders can be a primary disability or be secondary to other disabilities (ASHA, 1993).

The ability to hear is essential to the development of communication skills. Where hearing is significantly affected, it may become difficult for a child to develop appropriate communication skills. Prospects for children living with all degrees of hearing impairment (HI) have improved within the last decade due to advancement in sensory devices and universal newborn hearing screening programs (Moeller, Hoover, Putman, Arbataitis, Bohnenkamp & Peterson, 2007).

Communication disorders in children include issues related to language, speech and auditory processing. According to the American Speech and Hearing Association (ASHA, 2001), communication disorders may range from simple sound substitutions to the inability to use

language and speech. Young children experiencing communication disorders may exhibit delays or typical development in just one or more in the following areas:

- Fluency: Overall rhythm and flow of speech production. Speech is typically produced with few hesitations relatively, few repetition of words, and no sound or part-word repetition. Speech production and speech flow is without effort or exaggerated facial expression (ASHA, 2001).
- Articulation: Motor movements used in production of speech sounds. This term refers to phonology and articulation traditionally. A developing child may know phonology of the language and still make articulation errors in producing given speech sounds (ASHA, 2001).
- Language comprehension: The intermediate process and final result in the analysis and comprehension of speech. This includes several stages, starting from speech perception, sound identification, identification and access to words, morphological and syntactic analysis, and application of word knowledge (ASHA, 2001).
- Language production: Gestural or spoken expression of language. Ability to produce words, sounds, syllables and sentences to form a conversation (ASHA, 2001).
- Morphology: Smallest meaningful units in language. Words that can stand on their own and sounds or syllables that add meaning to words (ASHA, 2001).
- Phonology: Components of language that deals with sound features, syllables, syllable features, consonants and words, rules for combining sounds and syllables to arrive at phrases or words (ASHA, 2001).

- Pragmatics: Using language in context. This includes explicit and implicit communication intents, social parts of communication, discourse and non-verbal communication (ASHA, 2001).
- Semantics: Meaningful roles of words and meaning of words in sentences or phrases (ASHA, 2001).
- Syntax: Rules governing relationship and order between phrases or words in sentences (ASHA, 2001).
- Voice: Vocal pitch, quality and intensity of speech. Speech is produced with effortless and smooth production of voice (ASHA, 2001).

Communication disorders are often categorized into expressive language disorders, receptive language disorders, mixed receptive-expressive language disorders, stuttering and phonological disorders (Sices, Taylor, Freebairn, Hansen & Lewis, 2007). Communication disorders can be classified in many different ways. Rapin, Allen, & Dunn, (1992) classified children with communication disorders based on the way they express language, their ability to comprehend language as well as their ability to maintain a relevant conversation. The linguistic approach to classification is based on syntactic, semantic, phonologic and pragmatic skills (Korman, 1995). This classification can aid in planning intervention or interventions and prognoses of linguistic development. The first classification is phonologic-syntactic disorder, where speech is fluent but sentence structures are very simple. Here, difficulties are evident in oral motor skills but language comprehension is better. The second classification is phonologic production disorder. Here, the child has difficulties in self-expression, however, understanding is easier. Verbal auditory agnosia, the third classification finds children not understanding spoken language well. Thus, they acquire most of their knowledge visually from the environment; this is

common in children with Autism Spectrum Disorder. Verbal dyspraxia is another classification, where production and reception of speech are difficult. In lexical syntactic disorders, there is a deficiency seen in reproduction of words and difficulties in understanding inflectional forms and abstract things. Finally, semantic-pragmatic classification looks at disorders that appear in hyper verbal behavior. In this category, communication is poor and answers that children give to questions are often illogical (Hyytiainen-Ruokokoski, 1995, Korkman, 1995).

American Psychiatric Association (2012) simplified the classification of communication disorders in children as phonological disorder, mixed receptive-expressive disorder and expressive language disorder. Phonological disorder encompasses errors in phonological production that involves the failure to form sounds correctly and inability to categorize speech sounds. With expressive disorder, children have limited amount of speech and vocabulary range. Again, they find it very difficult to find words. Shortened sentences, vocabulary errors, use of unusual words, simplified grammatical structure and slow rate in language development are often present. In mixed receptive-expressive disorder, there are difficulties in expressive language and difficulty in comprehending words in sentences or deficiencies in areas of auditory processing (American Psychiatric Association, 2012).

Children with speech sound disorders have difficulty in producing intelligible speech. They can also have any combination of difficulties with production, perception and/or representation of speech. These may impact speech acceptability and intelligibility of both unknown and known origin (International Expert Panel of Multilingual Children's Speech, 2012).

Speech sound disorders refer widely to and cover the terms articulation impairment, speech delay/disorder, phonology impairment and childhood apraxia of speech (McLeod and

Baker, 2017). Law, Boyle, Harris, Harkness & Nye (2000) through an interventional meta-analysis revealed that between 2.3% and 24.6% of children are affected by speech delays. Compared to any typically developing child, a child with speech sound disorders has the tendency to reduced social and educational success (McCormack, McLeod, McAllister, & Harrison, 2009). Children with speech sound disorders experience the world in two different ways, being more reserved and withdrawn at public places and very much at ease when they are home (McLeod, Daniel and Barr, 2013). These children also find it difficult to read (McLeod & Baker, 2017).

The Better Communication Research Programme (BCRP, 2009-2012) extended its mandate to understanding the needs of and the support that is given to pupils with speech, language and communication needs (SLCN). In the past, there has been confusion with terminologies used to categorize children with SLCN. Over time, there have been changes in the labels used in describing communication and language difficulties (Bishop, 1992). Also, the concurrent use of different terms by Speech and Language therapists to apply to same children is also an issue (Dockrell, Lindsay, Letchford, & Mackie, 2006). BCRP discovered that 'speech, language and communication needs (SLCN) is used by different professional groups and in different ways. This makes the use of both terms confusing and serves as a major barrier between educationalists and different professionals in the health settings as well as parents and research community. For instance, in United Kingdom (UK), Bercow review (2008) used SLCN broadly, encompassing all children with communication and language difficulties. However, the Department of Education (DFE) in its code of practice (DFEs, 2001) used SLCN as limited to primary special educational need, separate from other primary needs like severe learning

difficulties and learning impairments. These differences will cause confusion over children's real needs and consequently affect planning of services with health and intervention (Dockrell, 2014)

2.2 Theoretical Framework

This study is situated within two theories: Ecological System Theory and the Theory of Planned Behavior. These theories are discussed below:

2.2.1 Ecological Systems Theory

Ecological systems theory was propounded by Urie Bronfenbrenner, a psychologist. He explains that different types of environmental systems influence human development. Human development occurs as part of a complex process involving a system of interactions within the individual. These interactions are between the individuals, and the environment in which they exist. Bronfenbrenner in a seminal work on ecological systems theory in 1979, described the child's ecology as a set of nested levels of the environment (Bronfenbrenner & Morris, 2006).

According to Ettekal & Mahoney (2017) four interrelated types of environmental systems are in Bronfenbrenner's classic rendition of ecological systems theory. These, are micro-, meso-, exo-, and macro systems. They are discussed below:

Microsystem

Microsystem is the most proximal ecological level. It includes the settings where individuals interact directly such as family, friends classmates, teachers and neighbours. In this system, we have direct social interactions with these social agents and are engaged in different kinds of activities, like service projects, sports and academic clubs. Individuals who participate in any of these activities show more positive, social, psychological, physical and emotional outcomes as compared to nonparticipating individuals.

Mesosystem

Mesosystem, the next level in Bronfenbrenner's ecological theory involves processes that occur between the multiple microsystems where individuals are embedded. There exist lots of microsystems that interact with activities to affect individual development. What happens in one microsystem turn to affect what happens in another microsystem. As such, it is important to understand a child's developmental settings beyond activities to be able to truly understand development within activities. The central microsystems interacting with a child's organized out-of-school activities are families and schools. Studies emphasize the need for family coordination across settings. Parents are very likely to encourage and support their children when the norms and goals of the activity in school are in line with that of the home. Coordination between schools and activities can be achieved more easily due to the fact that many activities are school based and are headed by school teachers. However, communication (clear) between parents and activity leaders and teachers is needed to foster alignment across settings.

Exosystem

With exosystem, it includes the microsystems in which individuals are involved. However, it is not directly embedded. The exosystem "trickles down" to influence development through the other people involved in an individuals' lives. Studies on the exosystem level are limited in out-of-school activities, but an example line of studies elucidates how parents affect their children's activities. Parents matter through their previous experiences with these activities. Often, parents expose their children to activities that are familiar to them, and as such the children are likely to participate in these same kinds of activities as their parents. However, children from families where parents are workers and are always away from home participate in

fewer activities as compared to children with at least one parent staying at home all the time to support the child.

Macrosystem

Macrosystem is the final level and is defined as the set of overarching values, norms and beliefs, as reflected in the religious, socioeconomic and culture of a society. Macrosystem influences development among and within all other systems. It also serves as a lens or filter through which individuals interpret future experiences. Studies on macrosystems provide understanding into what informs participation and why some individuals in the same activity have different experiences.

Figure 2.1 Model of the Micro-, Meso-, Exo-, and Macrosystems in Bronfenbrenner's Ecological Systems Theory

2.2.2 Theory of Planned Behaviour

The theory of planned behavior (TPB) is a social psychology theory widely used in the fields of marketing, communication, nursing and management etc (Zhang, 2018). According to Ajzen & Fishbein, (1973), theory of planned behaviour is a social-psychological theory that elucidates behavioral decision-making processes of human beings. The theory advocates that the successful completions of human behaviors are largely controlled by individuals which, is aimed at understanding and predicting the behavior of individuals. Two main factors according to TRA, determine the behavior intention of individuals: attitude and subjective norm. The subjective norm is influenced mainly by normative beliefs in the society. This can cause attitude to be divided into negative or positive aspects. According to Ajzen (1985) factors of external and objective circumstance often affect human behavior rather than being controlled completely by individual will.

2.2.3 Relevance of the theories to the study

These theories are relevant to this study because they are centered on the fact that individuals (in this case, children) can learn behaviors and other ways of life through needful associations. These associations could be friends and family. As such, family plays a major role in shaping the lives of children with communication disorders. Based on these theories, this study determined whether children with communication disorders receive the same social help from the family that helps is shaping their communication and life.

2.3 Prevalence

Around the world, many preschool children are being diagnosed with some form of developmental language delay. There are two common impairments associated with children

with communication disorders: difficulty interacting appropriately with people in the society and trouble understanding and using language to communicate (Carnes, 2009).

Studies on the prevalence of communication disorders in children tend to be country-specific. According to Law et al., (2000), the variability in communication disorder prevalence rates across studies can be attributed to a number of different factors, including the severity and type of disorders exhibited, whether different types of speech and/or language disorders are included, the nature of the population surveyed, and the methodological criteria used to define cases.

Existing rates of communication difficulties in young children ranges from 8-13% in high income countries. Studies indicate that approximately 10% of pre-school children in the United States have difficulties with communication (National Institute of Neurological Disorders and Strokes, 2011). Research from the United Kingdom estimates that approximately 8% of all young children have some form of communication difficulties (Law et al., 2000). In Australia, research suggests that the prevalence of communication disorder among children is approximately 13 % (McLeod & McKinnon, 2007).

Within the countries of Africa, studies have also been carried out on the prevalence of communication disorders among children. In a recent study by Sabir, Bouzekri and Moussetad (2015) in Morrocco, the prevalence rate of communication disorders among children was estimated to be 10%. Gad-Allah (2012) found an overall prevalence of communication disorders among children in Egypt of almost 8%, with the most commonly identified issues being language development, dyslexia, and voice disorders. In Nigeria, rates of communication disorders in children are estimated at 8.6%, with common conditions noted to be deaf-mutism

followed by delayed speech development (Aremu, Afolabi, Alabi, & Elemunkan, 2011). There are no current epidemiological studies on prevalence rates of communication disorders in children in Ghana.

2.4 Impacts Associated with Communication Disorders

Communication disorders may impact all aspects of an individual's life. The nature and severity of the disorder, as well as the time of onset, have a crucial influence on the intensity of the impact (Hintermair, 2007). Prior studies have highlighted that individuals with communication disorders may face significant difficulties/challenges relating to socio-emotional development (Hintermair, 2007; Meadow & Dyssegaard, 1983; Van Eldik, Treffers, Veerman, & Verhulst, 2004). Eistenberg (2007) asserts that difficulties in socio-emotional development may be linked to communication disorders. Early communication disorders have been associated with reduced academic achievement (Nation, Clarke, Marshall, & Durand, 2004; Snowling & Hayiou-Thomas, 2006). Young et al. (2002) found that, children with communication disorders continue to lag behind in all domains of academic achievement (spelling, reading comprehension, word identification, word attack and calculation).

Equally important, families with children with communication disorders may experience significant stress (Hintermair, 2006). In a study of mothers of toddlers with congenital hearing loss, increased maternal stress was predicted by the total number of behaviour problems exhibited by their child (Topol, Girard, St Pierre, Tucker, & Vohr, 2011). According to Pipp-Siegel, Sedey, & Yoshinaga-Itano, (2002), these experiences may occur because parents experience increased daily challenges related to child behaviour issues.

Parenting a developing child is stressful. It is estimated that two thirds of mothers of children with disorders experience increased stress levels (Tomanik Harris and Hawkins, 2004). According to Baker, Blacher, Crnic, & Edelbrock, (2002), parents of children with developmental delays, including communication delays suffer from high levels of child-related stress as compared to parents of children without any developmental delays.

Specifically, parental stress may stem from some characteristics in children with communication disorders, such as cognitive inconsistencies and verbal expressive difficulties (Moes, 1995). Baker et al, (2002) indicated that behavior problems and severity of the impairment are essential predictors for stress faced by parents with children having developmental delays. Adaptability, distraction and demandingness are other characteristics in children with disorders that can cause stress to parents (Tobing and Glenwichk, 2002; Cameron et al, 1991).

A number of care-taking duties are also likely to add to the sources of stress for parents who take care of children with communication disorders. Some parents may be concerned about their interaction with professionals and difficulties involved in obtaining intervention for their children (Todisk and Singer, 1991). After diagnoses are given and recommended intervention methods are outlined, families (parents) will have to gather to make sense of this information (Guralnick, 2000). Also, the energy and time required to understand what they are supposed to do in the intervention program, monitoring stress from loss of time at work or the additional cost of therapies and provision of care for the child facing the disorder and his/her siblings, places stress on existing family resources (Kelly and Booth, 1999). Parents also experience stress in relation to the prospect of providing their child with long-term cares and associated limits on

family opportunities (Koegel, Schreibman, Loos & Dirlich-Wilhelm, 1992). Increased stress could negatively affect the quality of life of families with a child with a communication disorder.

2.5 Early Intervention for Children with Communication Disorders

Early assessment and intervention is crucial to help children with communication disorders improve on their developmental trajectory (Camarata, 2014; Koegel, Koegel, Frea, & Green-Hopkins 2014). There are range of intervention measures for children with communication disorders. These programs can be both direct and indirect in nature. Direct interventions focus on the treatment of the child individually, or within a group, depending on the age and needs of the children requiring therapy and the facilities available (Camarata, 2014). Indirect interventions are more naturalistic, allowing adults that are already within the child's environment to work with the child to facilitate effective communication (Camarata, 2014). Indirect approaches focus on creating an optimum communicative environment for the child by promoting positive parent-child interaction (Law, Dennis & Charlton, 2017; Thunberg, 2013).

Commonly, early intervention programs for children with communication disorders include both direct and indirect aspects (Camarata, 2014). Indirect approaches are increasingly being employed within a range of settings where speech and language therapists train professionals and individuals who work with the children, and provide programmes or advice on how to maximize the child's communicative environment and enhance communicative attempts (Law et al., 2017; Thunberg, 2013).

Early intervention for children with communication disorders is very improtant to improve the developmental outcome for children (Malar, Sreedevi, & Suresh, 2013). For example, non-verbal children with delayed language who begin intervention at an early stage are more likely to become verbal than children who begin intervention later (Koegel, 2003). Early

intervention also helps in preventing secondary symptoms, such as aggression and tantrums. These behaviours are not factored in the diagnostic criteria for communication disorders, but are secondary symptoms that often occur when primary symptoms are not addressed early (Koegel et al., 2014). In the literature, almost all disruptive behaviours exhibited by children with communication disorders have a communicative function (Iwata et al., 1994) and may be prevented or reduced, with early intervention focusing on teaching functionally-equivalent replacement behaviours (Horner, et al., 2002). Furthermore, early intervention leads to fiscal savings (Koegel et al., 2013) and has been shown to reduce parental stress (Baker et al., 2005; Johnson & Myers, 2007). Given the importance of early intervention for children with a disorder, it must be noted that its efficacy has been argued among scholars such as Camarata (2014) and Warren, McPheeters, Sathe, Foss-Feig, Glasser, & Veenstra-VanderWeele, (2012).

Part of the early intervention team is a speech and language therapist (SLT). An SLT is an allied health professional with training in the assessment and treatment of communication disorders. SLTs typically assess children to consider the cause of delays and disorders, patterns of speech and language development and develop intervention strategies in conjunction with the family (Carnes, 2009). SLTs also educate the families on reporting important observations regarding atypical or typical behaviors as the child grows (Carnes, 2009).

Children with disorders have a greater chance of meeting their potential when they receive required interventions their early years. Early intervention has long lasting effects. Early intervention in children with special needs has been shown to address a range of outcomes including a sense of belonging, self-care and effective learning (Olisaemeka, Udeme, & Edozie, 2015).

2.6 Parent's Involvement in Early Intervention

Parents play a leading role in identifying and recognizing developmental delays in their own children. Within early intervention, the family of the child plays a major role in the intervention process. Essentially daily treatments needed for improving the child's life are carried out by the family, which influences the child's development (Kaiser, 2011). Parents provide information on the child's daily routines, interests, strengths, workable strategies and whether these strategies fit the values and culture of the family, which aids in developing ways to treat or help the child cope (Woods, Wilcox, Friedman & Murch, 2011).

Active involvement of parents is considered critical to the success of an intervention (Granlund, Bjorck-Akesson, Wilder, & Ylven, 2008; Marshall & Goldbart, 2008). Involvement of parents has been found to improve the development of the child (McConkey & Cassidy, 2010), produce a positive effect on children's physical, cognitive, social, and language skills, and tend to foster a sense of personal control as well as self-efficacy in parents, and increase parents' satisfaction with services (Chao, Bryan, Burstein, & Ergul, 2006). It is essential that parents are encouraged and taught ways to interact and engage with their children to make children confident. Parent actions need reinforcement to help children develop forms of communication in cases of communication disorders (Rossetti, 2001).

Families can begin intervention as early as at birth. The early identification of hearing disabilities at birth or shortly after may help improve early intervention outcomes (Center for Excellence and Outcomes in Children and Young People's Service, 2010).

One focus of parental involvement in an early intervention process is to enable parents to become more informed decision-makers, which allows them to advocate for their children during collaboration with professionals (Crais et al., 2006). This is because; parents of these children

experience emotional stress and face social isolation, along with the practical difficulties of managing their children (Malar, et al., 2013).

With limited access to rehabilitation services, especially in Africa, parents can play an important role in helping their children overcome their developmental challenges (Asare et al. 2016; Wylie et al, 2016). Yet, parental stress can affect the effectiveness of the intervention and can influence intervention outcomes. Educating parents on both managing stress and the specific intervention issues are simultaneously addressed to enhance parent's natural strategies to increase the child's communication and decrease their stress and depression levels (Dunlap and Plienis, 1991).

In recent times, the focus of early intervention has shifted to the family in providing and supporting interventions. The use of family members, as the agents of intervention, provides children with an opportunity to acquire skills through constant daily enrichment opportunities provided by family members (Cheslock and Kahn, 2011). In planning intervention, speech and language therapists priorities of the family, social or economic factors as well as reciprocal influences on family members. These factors differ from family to family based on each family's unique circumstances, experiences and culture (Cheslock and Kahn, 2011).

Chao et al (2006) defined family-centered services as those which treat families with respect, providing individualized intervention to their children and sharing information with parents. In many cases where parents sought education on how to treat and teach their children with communication disorders, they achieved positive results (Sass-Lehrer, 2011). Families who make use of intervention programs help in identifying and evaluating toddlers/infants who have communication disorders so they are able to receive appropriate intervention (Batshaw, 2002). In a study by Sass-Lehrer (2011), parents who enrolled in parent-infant programs prior to 11

months of age, and whose families are involved in the program, have children with better outcomes in verbal reasoning and vocabulary than children whose parents were less involved.

A survey by Woods, Wilcox, Friedman, & Murch, (2011) identified that families in rural areas around the world face barriers to accessing speech pathology services. Some of the challenges included a lack of knowledge of services, high cost of traveling long distance to undergo training and unavailable services. Some families, still trying to come to terms with the child's state, usually seek for interventions like physical therapy, occupational therapy and speech-language therapy. Parent's perception of the condition of the child can affect how well they participate in early interventions, or if they are willing to participate or the outcome of interventions (Romski, Sevcik, Adamson, Smith, Cheslock, & Bakeman, 2011). Children experience change in their communication skills when their families are involved in their daily lives (McConkey and Cassidy, 2010).

McConky and Cassidy (2010) described a parent-led multifaceted strategy known as Keyhole Early Intervention. A Keyhole Mode kit (KM) was developed to help parents make use of practical teaching and learning strategies to help their own children with development delays. KM developed a home-based early intervention for children with autism, making use of structured teaching, using visual learning. Parents who used the KM kit have reported positive improvements in the communication skills of their children and their interaction with others (McConkey and Cassidy, 2010). Home-based interventions may be more cost-effective, and may also offer an effective way of developing effective early communication skills of pre-school children.

For effective early communication intervention, it is important to teach parents several teaching strategies to help them guide children's activities (Cheslock & Kahn, 2001). Some of

these teaching strategies include, using natural reinforcement, arranging the environment, imitating contingently, modeling, gestural/ visual cueing and time delay. When parents are able to initiate and implement interventions, it is largely successful and helps young children with communication disorders to develop their communication skills. Kashinath, Woods and Goldstein (2006), indicated that the "carryover of teaching strategies helps to create generalization and transfer of knowledge with other family members as well as help to maintain a skill" p.482. The involvement of parents is essential as parents help monitor the child at home to ensure that the right skills are being practiced in a correct manner. However, Robert and Kaiser (2011) indicated that there are limitations with family-led interventions, mainly if parents do not have much of the training required and how often parents subsequently use the language support strategies. As such, it is very important to train the parents adequately during early intervention programs and ensure that parents effectively implement these strategies at home (Carnes, 2009).

2.7 Self-help for Individuals with Communication Disorders

People react differently to disorders or illness due to complex and multiple factors such as culture, personal, structural, geographical, and financial factors (Hopf & McLeod, 2015). The way individuals react to disorders may have a long-term impact on the outcome of the disorder as this reactions influence decisions about intervention.

Some parents in an attempt to help themselves and their children with communication disorders adopt some coping strategies to suit them. According to Donovan (1988) and Higgins, Bailey, & Pearce (2005), professional services and spousal support are very effective ways

parents adopt to support and cope with children with communication disorders. Other parents plan appropriate ways of coping by challenging child's behavior by ignoring the child sometimes. Some parents also prefer keeping the children from other siblings in other to prevent the children from disturbing their siblings (Gray, 2003). Another coping strategy adopted by parents is extended family support. Many parents rely on other members of the family to support them in the care and habilitation of their children with communication disorders. This, many parents indicated to have helped decrease stress related with living with children with communication disorders (Gray, 1994). There is enough stress associated with parents receiving the diagnosis of the children with communication disorders. As such, access to formal and informal forms of social support is a way of helping themselves to support the child. Formal coping mechanism/strategy includes professional guide or parent support groups. Informal mechanism/strategy also includes friends and families (Boyd, 2002).

Social withdrawal is also a strategy used by parents to support themselves and to cope with living with children with communication disorders. Parents explained that it is less stressful and easier to keep to themselves than endure embarrassing incidents; which normally attract unpleasant comments from others (Gray, 1994). These comments are likely to have negative effects on children with communication disorders when said in their presence especially if they have very well developed receptive language skills. The effectiveness of some of these coping strategies is a concern. For instance, separating child from other siblings and total withdrawal from the society seem to be temporal strategies (Beck, 1995). Also, social withdrawal and separation from siblings may not help in improving the social communication skills of the children with communication disorders (Quil, 1995).

Parent support groups and parent education are very effective ways parents can help themselves and learn to support and cope with their children according to Minnes and Woodford (2005). However, there are growing concerns as some parents reported limited or quality access to these support groups. In relation to education, the role of medical professionals who in most cases are the first point of call for parents who have children with communication disorders is to provide counseling and support to families. Some of these professionals have very little knowledge on communication disorders. And this may lead to ill-conceived advice given to parents or damage the parent-provider relationship which is supposed to educate and support the parents and their children (Mancil, Boyd & Bedesem 2009).

Parents are also likely to take long term steps to ensure that their children with communication disorders are able to survive even in their old age and when the parents are no more. Their self –help actions may not only be limited to helping the children communicate effectively but also to support every aspect of their existence across their lifespan. In light of this, parents make sure they keep their children in school and as the children age, they get them to learn some profession or vocation. According to Gray (2002), in a longitudinal study in Australia, as children with communication disorders age, the number of support and treatment options available for them reduces. For some parents however, this adds to their stress (Mancil et al., 2009). In that, as parents age, they turn to worry about the lack of services for their older children with communication disorders (Minnes and Woodford, 2005). Parents' anxiety comes from the fact that they need assurance for the continuous treatment services, possible residential placement and income for their children. This helps to reduce pessimism about children's future if they are provided (Gray, 2002). As parents age they become less involved in their children's recreational and sporting activities. As such, providing care services or programs,

accommodation as well as income for children with communication disorders as they age becomes very relevant to them. Where parents are able to achieve these, it will give them peace of mind and some satisfaction (Dun et al., 2001; Luther, Canham, & Cureton, 2005).

A study by Wylie, McAllister, Davidson, Marshall, Amponsah and Bampoe, (2017) highlighted that people engage in various self-help strategies in response to communication disorders. These include but not limited to seeking for help across a range of sectors, including western healthcare, religious, and traditional sectors. Furthermore, education, attitudinal change, prayers etc were identified as some self-help strategies. In addition to this, McConkey and Cassidy (2010) reported that individuals seek for professional advice as a way to help people with communication disorders. Given this, understanding what parent's will do to improve on their child's communication disorder is important to know since it will inform speech and language therapists on what therapy approaches are likely to be well accepted and carried over by parents at home.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This section considers the research design, study site, study population, sample size, sampling technique, data collection tool, data management plan, data analysis, ethics consideration and dissemination of the results of the study.

3.2 Research Design

This study used descriptive research to investigate and describe the self-help strategies and actions undertaken by families of children with a communication disorder. Descriptive research aims to explore particular phenomena by gathering information on them at a single point in time (Kelley, Clark, Brown & Sitzia, 2003). This design is inspired by the ecological theory as it offers the best strategy to investigate this study. A mixed methods survey (Creswell & Plano-Clark, 2011), incorporating both quantitative and qualitative data was employed for this study to address the research questions. The incorporation of both quantitative and qualitative data provided a better understanding of the research problem than either approach alone (Creswell & Plano-Clark, 2011; Leech & Onwuegbuzie, 2011) and provided an opportunity for presenting a greater diversity of divergent views and to maximize the strength of the enquiry (Andrews & Halcomb, 2006).

3.3 Study Site

The study was conducted at AwaaWaa2 in Accra, Ghana. AwaaWaa2 was chosen because it is one of the few early intervention centers for children with communication disabilities in Ghana. As such, it offers a good case study site for this study. The center is located in Haatso and runs targeted intervention groups for children with a range of speech and

language/communication difficulties. Children attended sessions at AwaaWaa2 in addition to attending their regular schools.

3.4 Participants

Approximately, there are about forty-five (45) parents with children assessing services at the Awa Waa2. Given the total number of parents, the mathematical formula for calculating sample size by Miller and Brewer (2003) was employed as follows:

$$n = \frac{N}{1+Ne^2}$$

Where;

n = the sample size,

N = Total number of parents seeking service for their children at Awa Waa 2, 45

e = margin of error of 0.05percent.

Based on the calculation the total sample size for this study is 40.

A convenience sampling method was used in this study to select participants (Etikan et al., 2015). Convenience sampling is inexpensive and does not require extensive time to sample, however limitation of convenience sampling is that it is subject to bias (Mackey & Gass, 2005). The potential for bias is considered when discussing the limitations of the study.

Participants consisted of 32 parents/caregivers who have children with identified communication disorders and access services at AwaaWaa2 in Accra, Ghana. This site was selected because the subjects are readily available. There are few centers offering early intervention for communication difficulties in Accra, Ghana. There are central registers from which participants can be randomly sampled.

3.4.1 Selection criteria included:

Inclusion criteria were employed to select participants in the study. The study's selection criteria were as follows:

- Participants were parents/primary caregivers.
- Children of participants were identified as having a communication disorder.
- Children of participants were attending early intervention services at AwaaWaa2 at the time of the data collection

3.4.2 Exclusion criteria included

Parents/caregivers were excluded from the study if:

- their children did not experience communication disorders.
- their children did not attend early intervention at AwaaWaa2.
- they were under 18 years or they are unable to give informed consent to participate.

3.5 Procedure for Data Collection

Prior to data collection, the questionnaire was piloted with 3 parents who had children with communication delays or disabilities and are known personally to the researcher. The aim of piloting was to test the content, structure and readability of the questionnaire and allow for the evaluation of the questions for relevance, comprehension, meaning and clarity (Strydom & Delport, 2011). The questionnaire was further refined to collect both qualitative and quantitative data, following feedback from pilot participants.

Prior to data collection, consent was sought from the management of AwaaWaa2 for permission to promote the research to parents whose children access the facility (See Appendix I). Data collection was undertaken within the premises of Awaawaa2 during one of the regular training / parent meeting days held by the center. On the day of data collection, parents attending

the centre were briefed about the purpose of the study and its significance. Participant information sheets (Appendix II) was distributed. The importance of candid responses were be emphasized. Immediately after the briefing and distribution of participant information sheets, the researcher distributed the questionnaires to any parent who indicated their willingness to be involved in the study.

3.6 Data Management Plan

Quantitative data was analyzed using the Statistical Package for Social Sciences (SPSS) software. To analyze the quantitative data, data were entered into a purpose-designed excel spreadsheet. Descriptive statistics and frequency histograms were used to interrogate quantitative data. Qualitative data was analyzed manually and infused into the write up (Elo & Kyngäs, 2008). Softcopy data was stored securely using passwords to protect the excel document. Hard copy data of the data collected was kept under lock and key, with only the research student and supervisors given access.

3.6.1 Analysis

Quantitative data were analyzed descriptively using the Statistical Package for Service Solutions (SPSS). Descriptive statistical analysis such as frequency, standard deviation, and mean were compute to generate meaningful analysis for better clarification or explanation. Qualitative data were managed by firstly transcribing all open-ended questions and infused into the results through verbatim quotation. Data were coded, described, and explained for further meaning.

Both quantitative and qualitative data were stored in a personal computer. After analyzing both quantitative and qualitative data, the next stage of the analysis was data integration. At this stage, data were integrated to bring out meaning to the research findings.

3.7 Ethical Considerations

The ethical guidelines for health research were adequately applied and followed. The rights of the participants were carefully protected. The study was reviewed by the Ethics and Protocol Review Committee (EPRC) of the School of Biomedical and Allied Health Sciences (SBAHS) and gained the University of Ghana approval. The participants were made aware of the study purpose, expectations, significance and contact information to access the investigator and to express interest in participation. In addition, participants were made aware of the study procedures, benefits, risks, and duration. Confidentiality of the information obtained was assured by assigning an identification number to the participants. Permission were sorted from AwaaWaa2 center administration to allow the researcher inform parents of the intended study. Parents were assured that the study is purposely for academic consumption and as such, information given was accorded the needed protection and confidentiality. Parents were further informed of the anonymity of participants. After clear explanations are given to the parents on the need for the study, the researcher finally sought their consent to use them for the study. Parents were made aware of their ability to withdraw from the study at any point. Each participant was served a bottle of soft drink as refreshment after participation. No other inducements or enticements were offered.

3.8 Dissemination of Results

Findings from this study was submitted to the department of Audiology, Speech and Language Therapy department and the College of Health Sciences, School of Biomedical and

Allied Health Sciences, University of Ghana in Partial fulfillment of a Master of Science degree in Speech and Language Therapy. It is hoped that the completed work will be published in local and international peer reviewed journals and be made available for academic use.

CHAPTER FOUR

RESULTS

4.1 Participant characteristics

The study included parents and caregivers of children with communication disorders. This section describes the characteristics of the children as reported by their parents. The majority (81%) of the respondents reported having children with communication disorders who were males while females constituted nineteen percent (19%) of the sample (Table 4.1).

Table 4. 1 Gender distribution

Gender	**Frequency**	**% Respondents** (N =32)
Male	26	81
Female	6	19
Total	32	100

Source: Field survey (2018)

Children varied widely in age (Range 2 years – 17 years), with the majority of children referred to in the sample between the ages of two (2) and five (5) years (n= 17, 53%). The least frequent age grouping was fourteen (14) to seventeen (17) years (n= 1, 3%). The mean age for the children was 8 years whiles the mode age was 5 years (Table 4.2).

Table 4. 2 Age distribution

Age range	Frequency	% Respondents
2-5 years	17	53
6-9 years	12	38
10-13 years	2	6
14-17 years	1	3
Total	32	100

Source: Field survey (2018)

All respondents indicated that their children attend school. A majority of children were in Crèche (n= 9, 28%). The least frequency noted educational level of the children was Kindergarten (n= 3, 9%) (Figure 4.1).

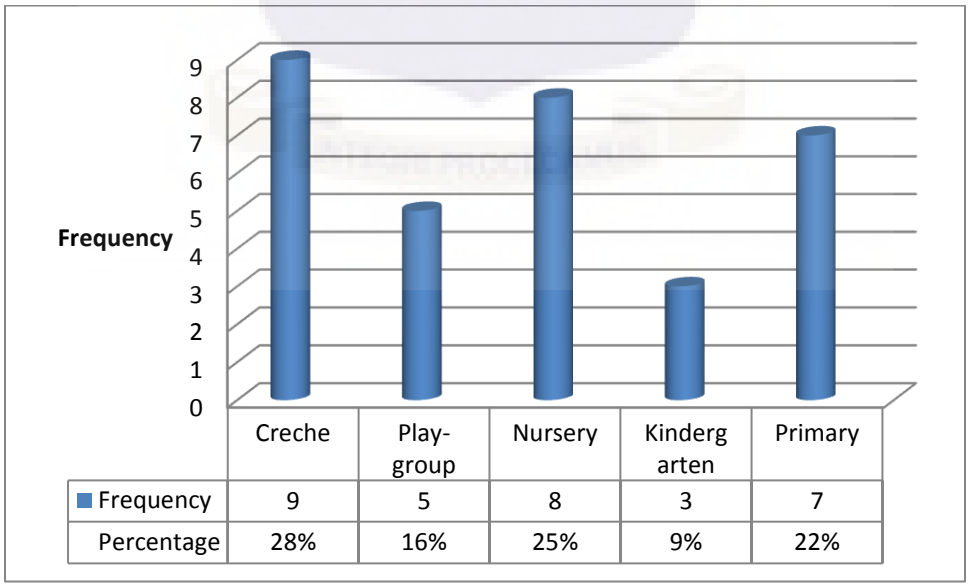


Figure 4.1 Level of education of children

In relation to the level of education of the parents, the majority (n=24, 73%) of parents in the sample indicated that they have attained tertiary level qualifications. The least frequently reported educational level for the parents was basic education, representing ten percent of the sample (n=4, 10%) (Figure 4.2).

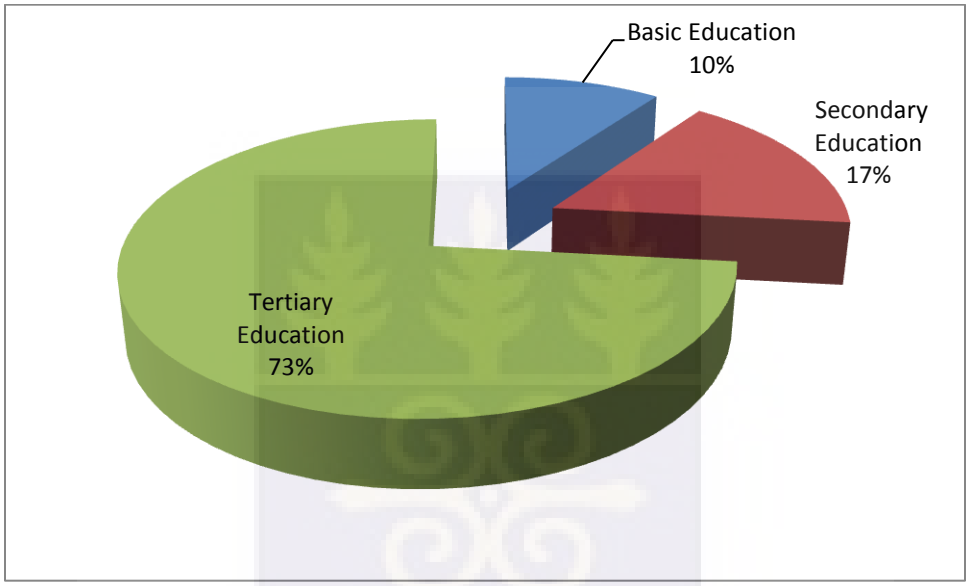
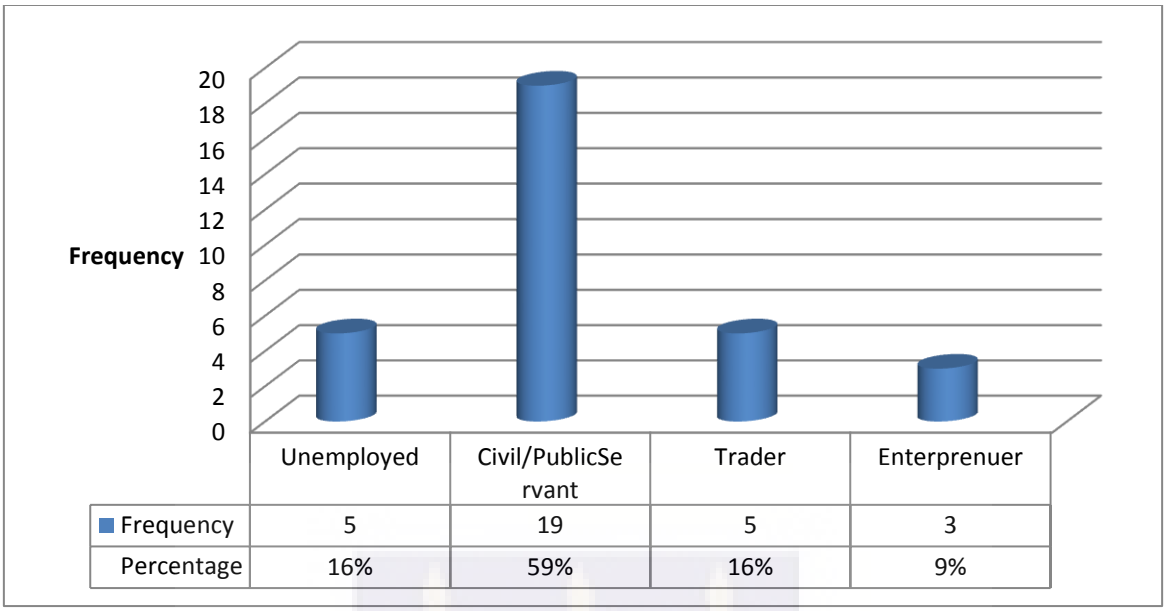


Figure 4.2 Level of education of parents

The majority of the parents reported their occupational group as were civil/public servants (n=19, 59%). The least frequently noted occupational group (n=3, 9%) of the parents are entrepreneurs (Figure 4.3).



	Unemployed	Civil/PublicServant	Trader	Enterprenuer
Frequency	5	19	5	3
Percentage	16%	59%	16%	9%

Figure 4.3 Occupation of parents

Parents reported speaking a range of different languages to their children at home. All parents spoke more than one language to their children. However, the most commonly reported primary language spoken at home was English (n=19, 40%). Twi (n=15, 31%) was also spoken frequently. Other languages used with children at home are represented in figure 4.4).

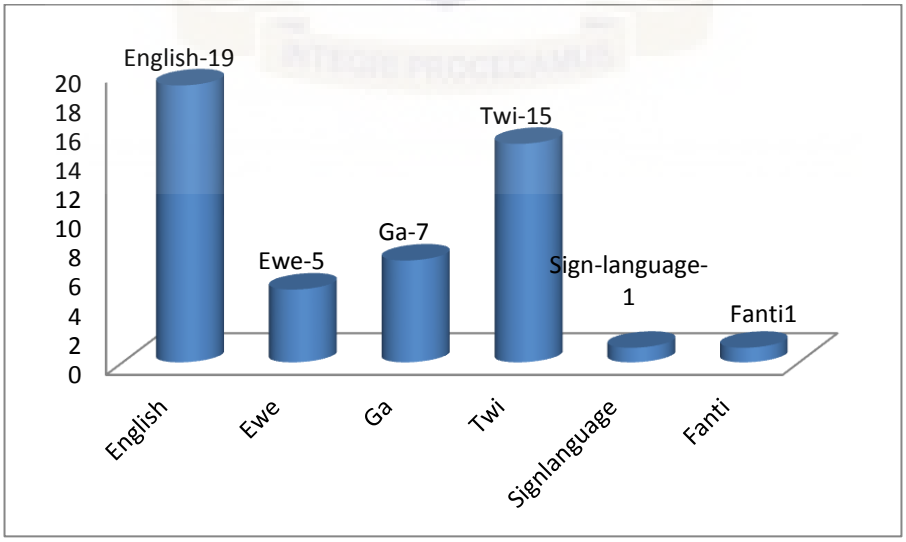


Figure 4.4 Languages spoken at home

4.2 Family and social life

Sixty-nine percent (69%, n=22), of the children were reported to spend the majority of their time with their mothers. Sixteen percent (16%, n=5) were reported spending more time with their house helps. Three percent (3%, n=1) of the children were reported to spend the majority of time with their fathers (Table 4.3).

Table 4. 3 Showing who the child spends most time with

Person	Number	% Respondents
Mother	22	69
Father	1	3
Grandparent (s)	2	6
Other Siblings	2	6
House help	5	16
Total	32	100

Source: Field survey (2018)

Child diagnosis

Seventy-two percent (n=23, 72%) of families in the study reported that their child had a specific diagnosis relating to their communication disorder whiles twenty-eight (n=9, 28%) were undiagnosed (Table 4.4). All (100%) of the respondents who had their children diagnosed indicated that diagnosis was done between 1 and 2 years of age. Before diagnosis however, respondents were asked if they examined or tested the children themselves to find out why the

children were not communicating. The majority (n=31, 97%) of the parents did some sort of self-assessment on their child which centered on examining the tongue and ears of the children.

Table 4. 4 Diagnosis relating to communication

	Frequency	**% Respondents** (N =32)
Diagnosis	23	72
No diagnosis	9	28
Total	32	100

Source: Field survey (2018)

The diagnoses reported by parents are given in table 4.5 below. The most frequently reported diagnosis was autism spectrum disorder (n = 31, 55%).

Table 4. 5 Showing children's cause of communication disorder

Diagnosis	**Number**	**% Respondents**
Autism	18	56
Speech delays	6	19
Ear infection	5	16
Cerebral Palsy	3	9
Total	32	100

Source: Field survey (2018)

Parents were asked about their observations of their child prior to diagnosis. Parents were able to provide multiple responses to this question. The majority (n=32, 53%) of participants indicated that they noticed the inability of their child to speak prior to diagnosis. Nine percent (n=7, 12%) of respondents indicated that their children only used gestures. Only six percent (n=4, 6%) of respondents indicated that their children's speech was not clear. (figure 4.5). This is evident by a statement from a respondent below:

"My son only used gestures in communication at the early stage. That was the first observation I saw"- Respondent 10 (2018)

Another respondent stated:

"He only made sounds. My son was not able to speak out. It was only sounds"- Respondent 13 (2018)

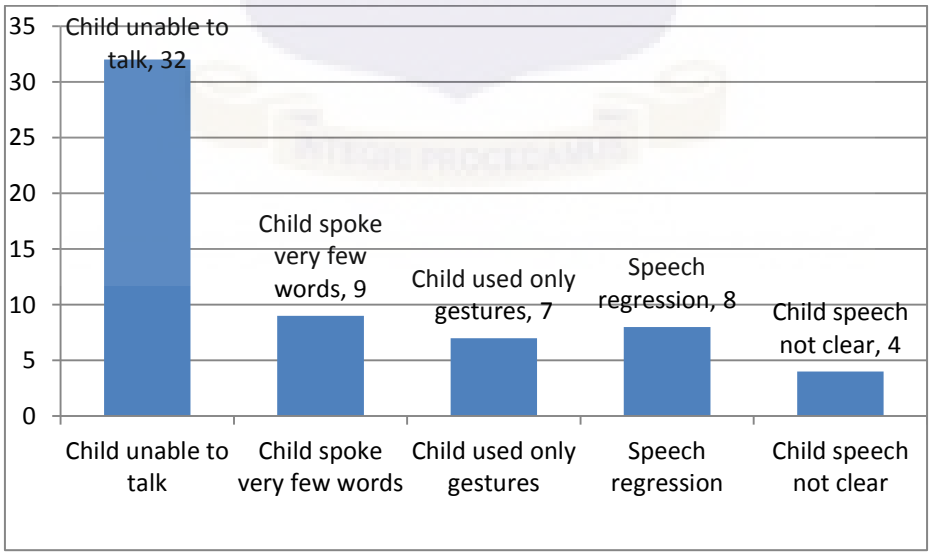


Figure 4.5 Observations of parents/caregivers prior to diagnosis

4.3 Specific actions taken by parents to promote talking and communication

Following diagnosis or referral to early intervention of the children, the majority (n=15, 47%) of the parents/caregivers indicated that their interactions with their children have changed in some way. Thirty-four percent (n=11, 34%) of all parents in the study indicated that they did not believe their actions and interactions have not changed (Table 4.6).

Table 4. 6 Parental report: how parents changed in the way they talked to their children

	Frequency	**% Respondents** (N =32)
Yes	15	47
No	11	34
Unsure	6	19
Total	32	100

Source: Field survey (2018)

The parents and caregivers who reported a change is interaction with their children most frequently noted that they used gestures more to communicate with their children to aid understanding (n= 12, 38%). Twenty-six percent (n=9, 28%) indicated that they used more of eye contact. Thirteen percent (n=4, 13%) indicated that they engaged the children more in talking in other to help the child develop more speaking skills (Figure 4.6). This is evident by a statement from a respondent below:

"I tried to be more gentle with him so he can try understand me"- Respondent 2 (2018)

Another respondent indicated:

"I changed. I because extra patient and I talk slowly to she can understand me" – Respondent 11 (2018)

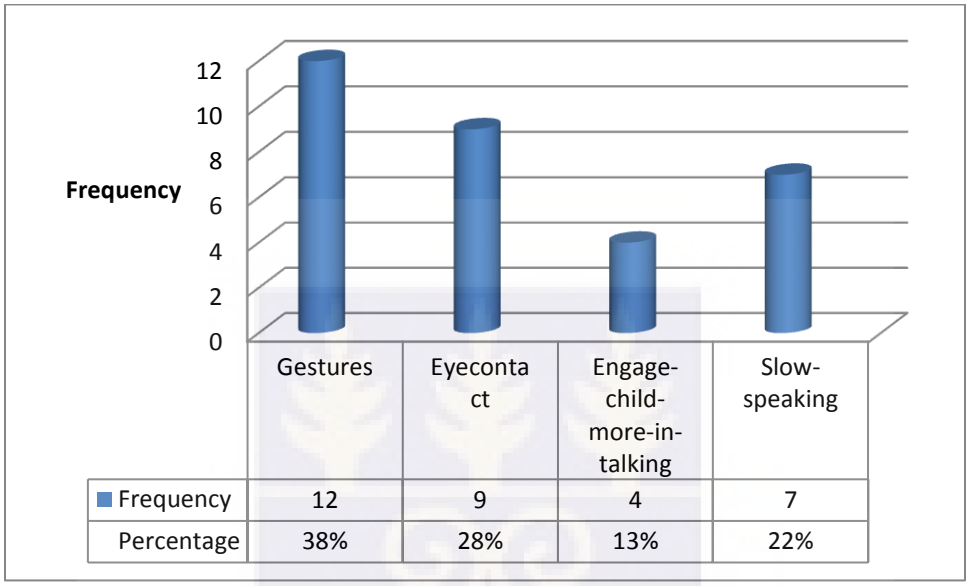


Figure 4.6 Changes in interaction with their child with a communication disorder, reported by parents and caregivers

The majority (n=24, 75%) of the parents indicated that they engaged their children and explicitly taught them. Only twenty-five percent (n=8, 25%) of the parents indicated they did not teach their children (Table 4.7). This evident in the statements below:

"I teach my child. He says after me what every I say repeatedly"- Respondent 4 (2018)

Another respondent indicated:

"I purchased so toys and carton learning movies to help her learn."-Respondent 8 (2018)

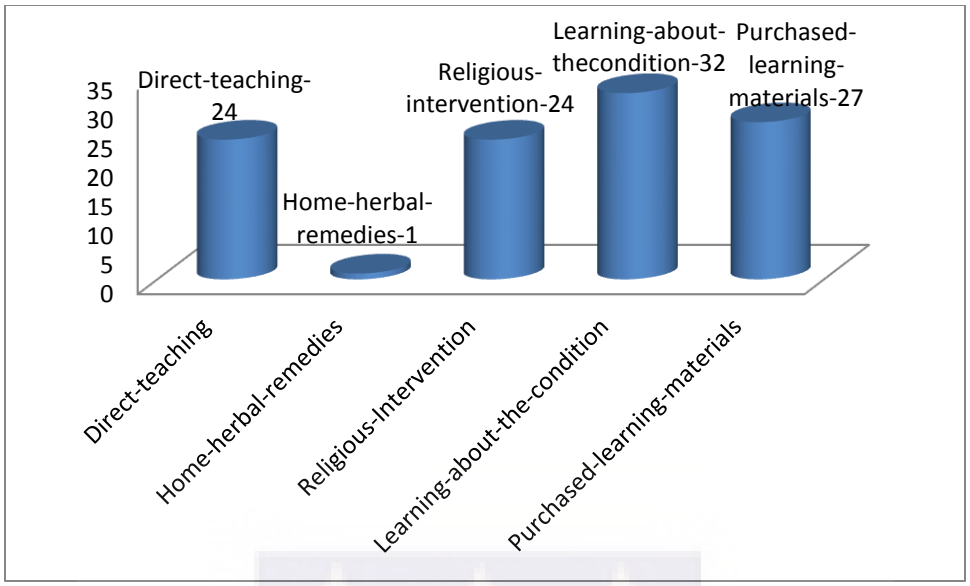


Figure 4.7 Summary of interventions used by parents.

Parents indicated that they combine various self-help strategies to help cater for their children. Majority (n=32, 100%) of the parents learning about their children's condition to help them cope whiles only (n=1, 3%) a parent indicated that home herbal remedies to help the child was used.

Table 4. 7 Use of direct teaching

	Frequency	**% Respondents** (N =32)
Used direct teaching	24	75
Did not use direct teaching	8	25
Total	32	100

Source: Field survey (2018)

The range of things taught by parents and caregivers to their child (based on a multiple choice item in the questionnaire) included teaching of the alphabet (n=14, 30%), pronunciations of words (n=12, 25%) and pointing and naming (n=5, 11%) (Figure 4.7). A respondent stated:

"I taught my son pronunciations, alphabets in song format and song general Christian songs"- Respondent 9 (2018)

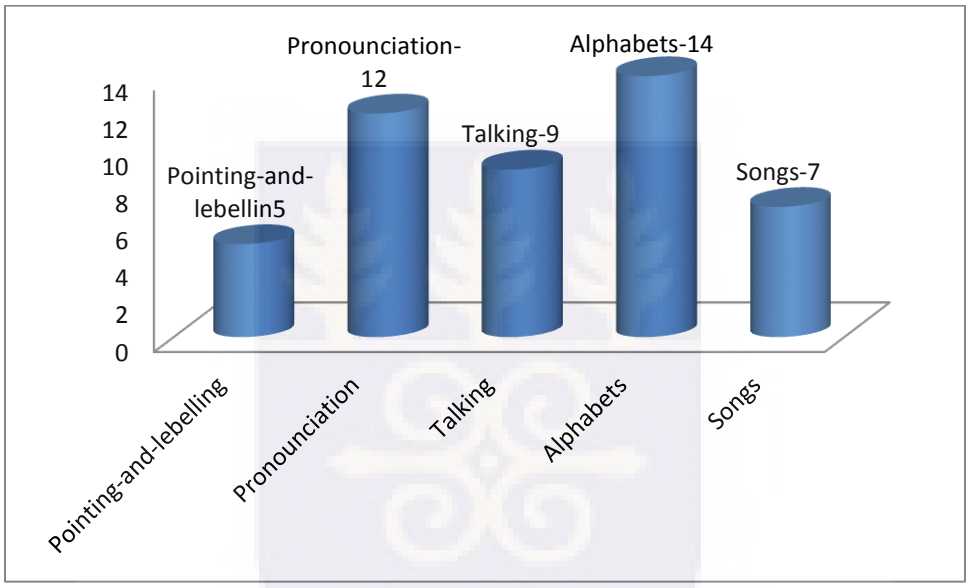


Figure 4.8 Specific things parents taught children

Teaching-Specific exercises

Eighty-seven percent (n=13, 87%) of the parents indicated that they took the children through various exercises. Only six percent (n=18, 6%) of the parents did not take their children through specific exercises. (Table 4.8).

Table 4. 8 Showing whether parents took their children through specific exercises

Sex	**Frequency**	**% Respondents** (N =32)
Yes	13	87
No	18	6
Unsure	1	3
Total	32	100

Source: Field survey (2018)

Specifically, majority (n=11, 33%) of the exercises parents undertook to help their children with communication disorders was repetition exercises, where the child is constantly asked to repeat several words spoken by the parent; in an attempt to make the words stick in the minds and on the lips of the child. Only four percent (n=1, 4%) reported taking the children through sign language exercise (Figure 4.8). This is evident below in statements from respondent:

"I take her through singing, sound and picture exercises"- Respondent 3 (2018)

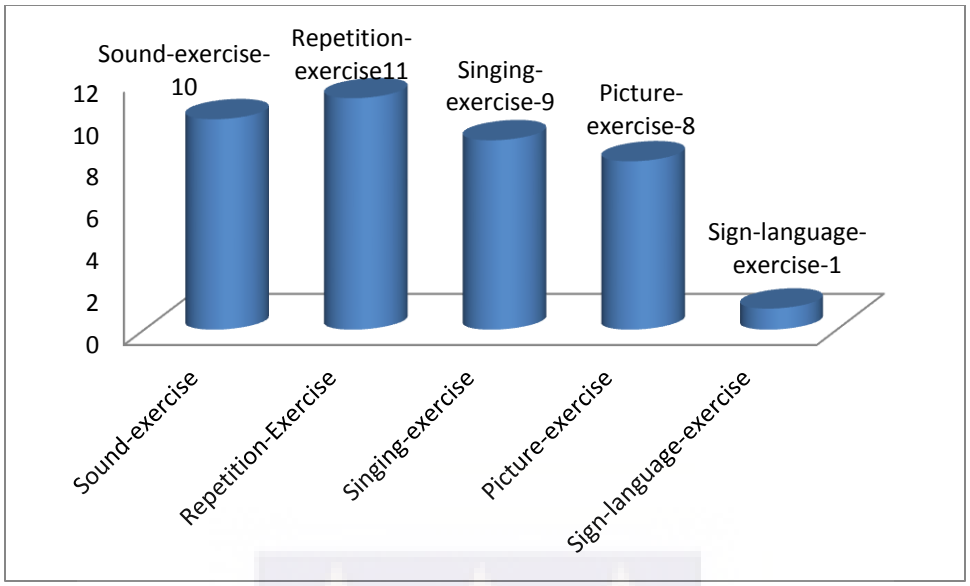


Figure 4.9 Type of exercise

Home herbal remedies

Parents were asked whether they used home herbal remedies aside the usual orthodox medical remedy in other to help the children's communication disorder. Only three percent (n=1, 3%) indicated that home herbal remedy was used. A majority of ninety-seven percent (n=31, 97%) indicated that they did not seek any home herbal remedy The parent that made use of home herbal remedy indicated that herbal drops where used to try in curing the ear infection of the child. This is evident in a statement below:

> *"I used herbal medicine once. The product was recommended to use for his ear infection problem. –Respondent 7 (2018)*

How parents learn and help their children

Respondents were asked whether they tried to teach themselves about the communication problem their children face. All (n=32, 100%) of the respondents indicated that they engaged and still engage in learning about their children's condition and they use multiple sources. This

allows them to know more about the condition and strategies in coping with the children's needs. Specifically, the majority (n=29, 63%) of the respondents indicated that they use the internet as their source information whiles eighteen percent (18%) learn from their doctors. The least frequency of source of information and education recorded were books (n=5, 12%). (Figure 4.9). This evident below:

> *"I use the internet. It has been very helpful in learn about my child's condition have how to carry myself around him. My doctor also helped to teach me more about the condition and how to treat my son"- Respondent 1 (2018)*

Another respondent added:

> *"My doctor and friend have been very helpful. They taught me about my daughter's condition and encouraged me to handle her with patience. They advised I enroll her in a special school."- Respondent 2 (2018)*

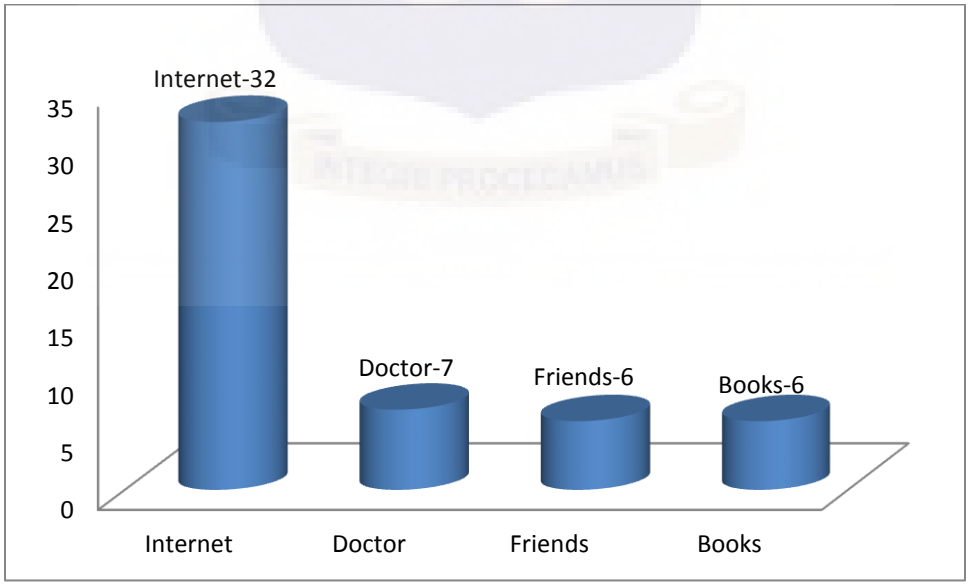


Figure 4.10 How parents/caregivers continue to learn more about their child's condition

Respondents were asked whether they bought or acquired anything to help their children communicate. The majority (n=27, 84%) of the respondents indicated that they purchased or acquired things to help their children. The remaining sixteen percent (n=5, 16%) of the respondents did not acquire anything to help their children communicate. Items purchased to help the children communicate included books, puzzles, IPAD, toys, cartoon movies and rattles.

Spiritual action

The majority (n=24, 75%) of respondents indicated that they used spiritual actions to help cure the communication disorders of their children (Table 4.9). For those who resorted to spiritual actions, all (n=24, 100%) of them indicated that they fasted and prayed to their God to help cure their children. They also asked friends and family to pray to intercede on their behalf. This is evident by a statement below:

"I have been praying to God for spiritual interventions. I also asked friends and family to support me in prayers"- Respondent 4 (2018)

Table 4. 9 Showing if parents sort for spiritual help

Sex	**Frequency**	**% Respondents** (N =32)
Yes	24	75
No	7	22
Unsure	1	3
Total	32	100

Source: Field survey (2018)

4.4 Parent/career perception of actions that was most effective in helping children

Teaching the child

Parents were asked to rate how effective interventions they had tried were in helping their child on a 1 to 5-point scale. A bimodal distribution was evident when parents were asked to rate how effective teaching their child was, with 37% (n=19) of parents rating teaching as most helpful and 37% (n=19) of parents rating teaching as not helpful (figure 4.11).

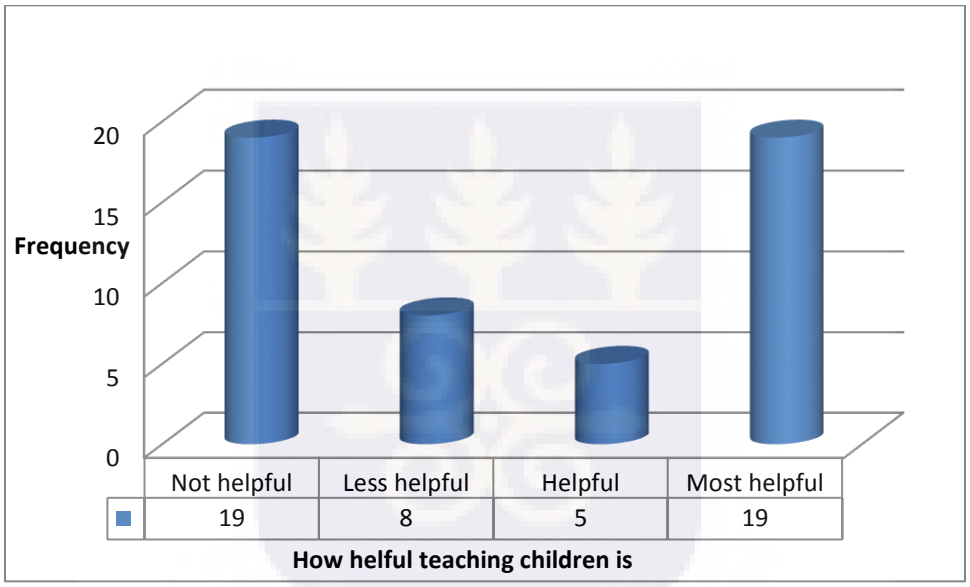


Figure 4.11 Effectiveness of teaching children

Religious intervention

Again a bimodal distribution was evident when parents were asked to rate the effectiveness of religious intervention. Forty-one percent (n=21, 41%) of the respondents indicated that religious interventions have been very helpful, whereas thirty-seven percent (n=19, 37%) indicated that religious intervention was not helpful (Figure 4.11).

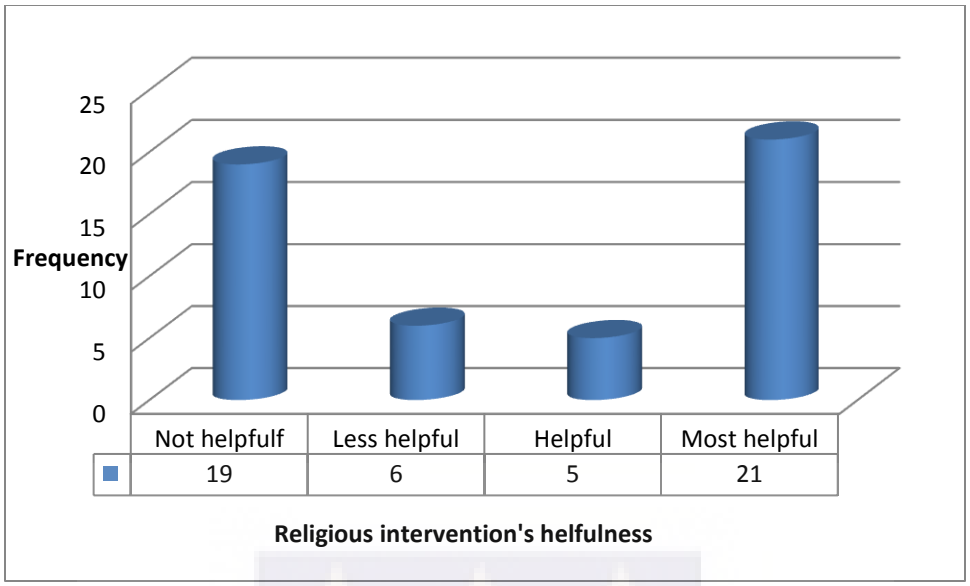


Figure 4.12 Religious intervention was helpful

Home herbal remedy

In relation to how helpful home herbal remedies were, only one (n=1, 3%) respondent was recorded to have tried home herbal remedies. The respondent however, indicated that the home herbal remedies used were not helpful.

Specific exercise

With regards to how helpful specific exercises had been, fifty-nine percent (n=19, 59%) of the respondents indicated that specific exercises were most helpful to the children with communication disorders. Only thirteen percent (n=9, 28%) of the respondents indicated that specific exercises were less helpful (Figure 4.12).

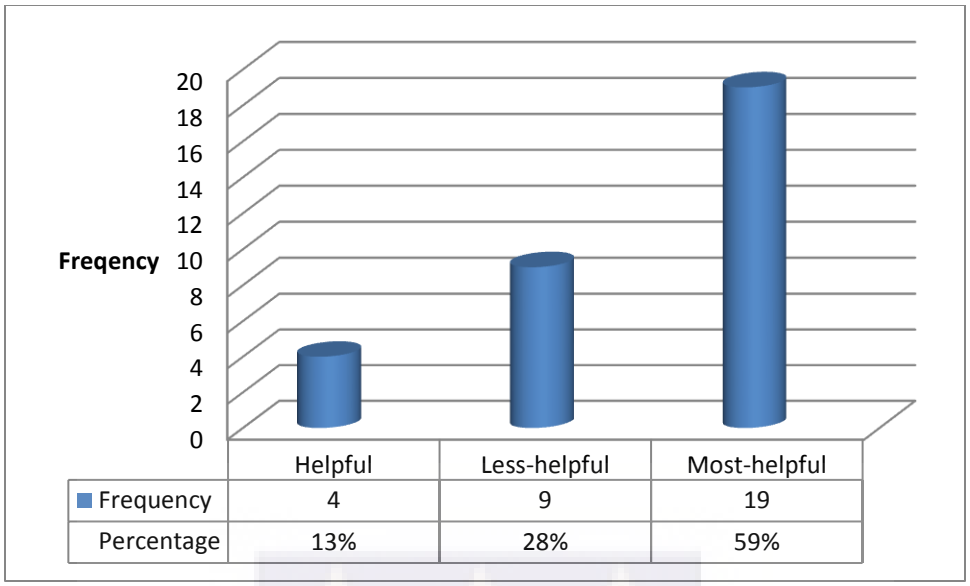


Figure 4.13 Specific exercises were helpful

Pressure on child

Putting pressure on children was rated as not helpful by (n=19, 59%) of the respondents. Only thirteen percent (n=4, 13%) of the respondents rated putting pressure on children as helpful (Figure 4.13).

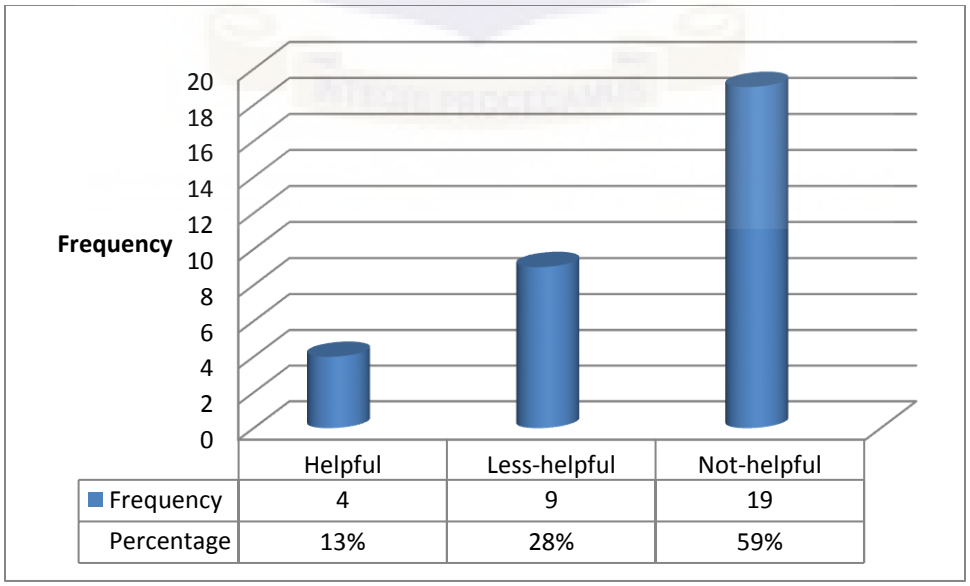


Figure 4.14 Whether pressure on children was helpful

Learning to cope with child

All respondents supported the usefulness of learning more about communication disorders and strategies to support the child. The majority of the respondents seventy-nine percent (n=24, 75%) indicated that further learning was most helpful in living with children with communication disorders. Additionally, twenty-one percent (n=8, 25%) indicated that further learning was helpful (Figure 4.15).

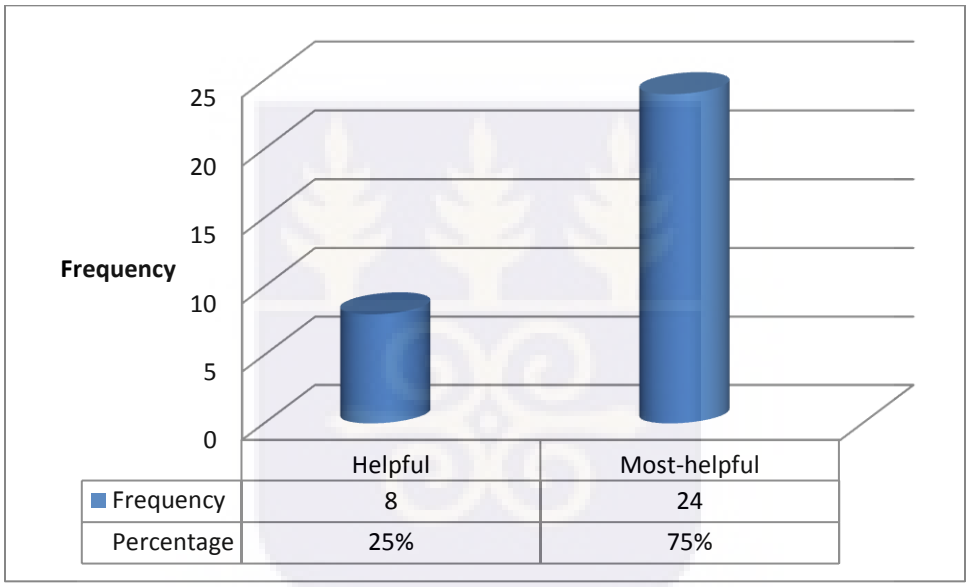


Figure 4.15 Learning to cope with children was helpful

Interacting with the child

Interacting with children was considered an effective strategy by respondents in helping their child with development of communication skills. Parents/careers rated constant interaction as most helpful (n=19, 59%) or helpful (n=4, 13%) (Figure 4.15).

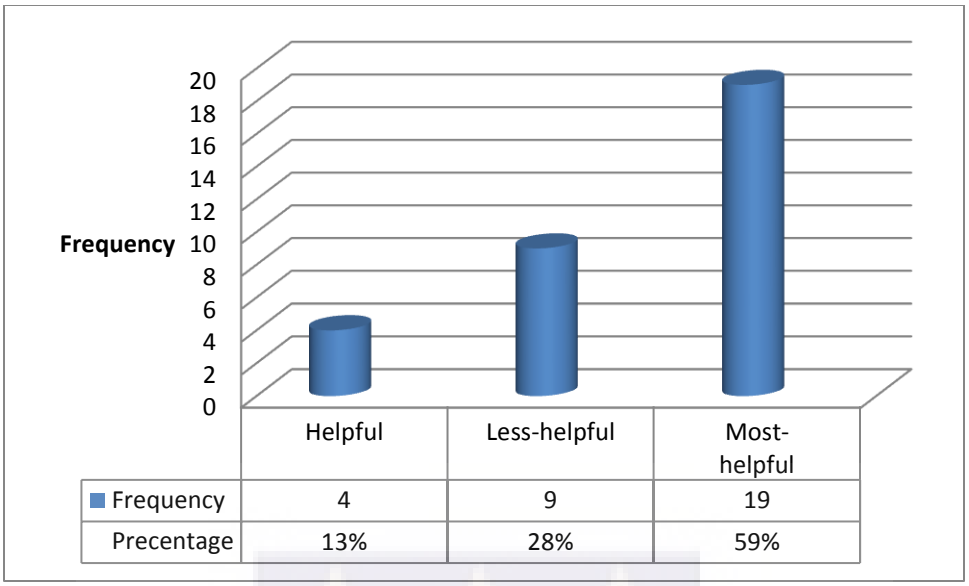


Figure 4.16 Whether interaction with children was helpful

What parent might do differently in same situation next time

Parents indicated that they would be likely to respond differently to having a child with a communication disorder. Parents indicated that they would do more of some things and less of others. These are evident in statements below and categorized below in table 4.10.

"I won't put pressure on child to talk and I will be very calm with them"-Respondent 10 (2018)

Another respondent stated:

"I will see early home therapy and interact more with my child"-Respondent 8 (2018)

Table 4.10 Actions or behaviours that parents would engage in less or more

More action	Frequency	Percentage	Less action	Frequency	Percentage
Home therapy	2	6	Pressure on child to talk	12	38
Interact more with child	8	25			
Encourage child	7	22			
Special need school	2	6			
Family learn sign language	1	3			
Total	20			12	100

Source: Field survey (2018)

Thirty-eight percent (n=12, 38%) of the respondents indicated that they will never put pressure on their children to talk. Twenty-five percent (n=8, 25%) said they shall interact more with their children. Only three percent (n=1, 3%) of the respondents indicated that they shall task the whole family to learn sign language so they can help the child communicate more with family members (Table 4.10).

CHAPTER FIVE

DISCUSSIONS

In this chapter, the results are discussed. The discussions are linked to some key findings of the literature review.

5.1 Diagnosis, Family and social life

The abilities to hear and talk are essential communication skills needed for all human existence (Moeller, Hoover, Putman, Arbataitis, Bohnenkamp, Peterson, 2007). The absence of these is however not the end of life. The results for this study revealed that majority of the children with communication disorders have had medical diagnosis. Diagnosis is the first step to determine the real form of whatever communication disorder the child is facing. This will help both professionals and parents to know the required intervention to design for the child. This affirms the findings of Camarata (2014) and Koegel et al., (2014) which emphasised the importance of early diagnosis which aids in intervention.

The results revealed the encouraging result, that all the children with communication disorders who underwent diagnosis did so at an early age (less than 3 years). Diagnosis at an early age is likely to facilitate entry into early intervention (Camarata, 2014; Koegel et al., 2014). This corroborates the findings of Malar et al., (2013) which indicates that early intervention improves the development of communication outcomes of children with communication disorders.

Parents and health workers are able to design needed interventions to help children and families develop ways of coping. This will also improve the quality of life of these children and their families. As results from the study indicated that diagnosis for most children was done prior

to three years, it was likely to assist the parents to finding the support they needed. This can help many children with communication disorders to achieve their potentials as parents are able to plan the type of education and skill the children should acquire (Olisaemeka et al, 2015).

5.2 Actions of parents used to help their children with communication

The study confirmed previous research (Gray, 2003) that parents engage in specific actions to assist their child. The majority of the parents indicated that the way they interacted with their children changed after diagnosis, which provides evidence that parents understand the importance of their communication with children (Kaiser, 2011). Parents interacted more with their children by speaking slowly or using other forms of communication such as gestures to accompany what they say to the children. Other parents also engaged in teaching their children basic and necessary ways of communicating, using techniques such as pronunciations, labeling and pointing etc. These according to the parents, have helped their children in various ways to improve and cope with their communication disorder. This authenticates Law et al, (2017) findings that specific actions through indirect intervention by adults or parents in the natural environment of children with communication disorder helps to facilitate communication.

However, these specific actions differ from family to family as suggested by the results. Based on the family's preference, different items (books, puzzles etc) or acts (exercise etc) are employed to aid communication development. This supports the finding of Cheslock and Kahn (2011) that family therapy for communication disorders differs between families. This implies that in cases of developing interventions or planning to cater for children with communication disorders in a family setting, the best and most effective way is to use things that are norms or culturally accepted by the family. Intervention for communication disorders must be individualized and family centered in order to achieve the desired results. This also resonates

with the ecological theory which discussed the family setting as a major circle of learning and development.

5.3 How parents learn and help their children

The results revealed that children with communication disorders spend majority of their time with their parents. It is thus, important for parents to have enough information about their children and the condition affecting them. This will help parents in terms of coping and in effect reduce or eliminate the stress associated with catering for children with communication disorders. This research also indicated that paid home help workers also have an important role in child development, as they were the main careers in a range of families.

All the parents reported they engaged in various ways of learning about their children's conditions. They read from the internet and books. Others also learned from friends who equally have children with communication disorders and from health professionals such as doctors. This, according to the parents has helped them to learn to cope with their children. This authenticates Sass-Lehrer (2011) finding that in cases where parents sought appropriate education on how to teach and treat their children with communication disorders, the results were positive.

Prudent learning about communication disorders is a factor for reducing stress associated with parenting children with communication disorders. As such, it is encouraging that parents are very much interested in learning about their children's condition. This will not only enable them in learning how to cope with the children but also help parents in planning the children's daily activities including what and where the child should receive the necessary help and education (Rossetti, 2001).

5.4 Actions perceived by parents to be most beneficial in their child's communication development

The results revealed that there are a range of actions undertaken by parents to help their children. No particular action was identified as the only way to help children with communication disorders, rather parents combined multiple actions. Teaching the child (including specific exercise), religious intervention, learning to cope and interacting with the child were the best actions parents adopted in helping their children. This confirms the findings of Wylie et al., (2017) that parents are likely to engage in various self-help actions to support their children with communication disorders.

However, home herbal remedy and pressure on child were perceived to be less helpful ways of supporting the child with a communication disorder. They are not used by parents and are not regarded by parents as effective actions. Only one parent indicated trying home herbal remedy and could not attest to its potency or its positive effect on the child. However this finding may be subject to response bias. The samples of parents in this study were highly educated therefore their trust in the orthodox medical system is strong as compared home herbal remedy. Additionally, social response bias an issue in this question with parents possibly reluctant to indicate the use of herbal medicine to a SLT student who is typically associated with western biomedical interventions. Pressuring on children with communication disorders according to the results is not effective. Wylie et al., (2017) also indicated that some parents may employ traditional herbal means to help children; however, this study did not support this finding.

CHAPTER SIX

CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

6.1 Conclusion

Parents with children with communication disorders engage in a range of actions to support their children. The aim of the study was to describe and explore the self-help strategies and actions undertaken by families of children with a communication disorders to support their children develop more effective or appropriate communication skills. The study also described how the self-help strategies were carried out to help children with communication disorders. Finally, the study evaluated parental perceptions of the effectiveness of the self-help strategies used in supporting the development of communication skills in their children. The findings of the study are important because they establish the fact that parent who cater for children with communication disorders adopt self-help strategies to cope. The study also importantly, outlines the various self-help strategies by parent and how effective they are.

In conclusion, the study found that majority of parents with children with communication disorders received a diagnosis for their children as early as before the age of 3years. Diagnosis is the first step to determine the nature and type of communication disorder the child has and once this is established, intervention is planned given to support the child. Early diagnosis is very important for early intervention and this will help improve the development outcomes of the child as well as improve their quality of life and that of their families.

Parents take specific actions with the hope of supporting their children. These actions according to them have helped in managing and developing the communication skills of their children. Parents indicated that they interacted more with their children by speaking slowly or used gestures to support what they said to their children. Other parents also engaged in teaching

their children basic communication skills which included pronunciations, labeling and pointing. Most parents also resorted to religious ways, like constant prayer and fasting to appeal for divine help.

The study also concludes that parents engaged in various ways of learning about their children's condition. They use the internet, books, friends who have same children and doctors. Learning about communication disorders helps to reduce stress associated with parenting children with communicating disorders.

Again, the study concludes parents take a combination of various actions to help their children. No particular action can be identified as the sole or best way to help children with communication disorders. Parents combined multiple actions, including teaching the child, religious intervention, specific exercises, learning to cope with child and interacting with the child according to what the feel best suits them and their children. However, home herbal remedy and pressure on child were actions that parents least resorted to and those who tried them reported that those were least helpful in supporting the child in any way.

6.2 Recommendations

Parents adopt various specific actions to help children with communication disorders. Based on the findings of the study, it is being recommended that,

- Since parents are willing to learn on their own to support their children with communication disorders, they should be provided with information on communication disorders and how to manage a child with one. They should also know more about what interventions are available for them and their children, where to get such interventions and who are responsible for supporting them and their children. This will help parents do

more to support the children and also reduce the stress that comes with parenting a child with a communication disorder.

- Professionals such as health workers, teachers and religious leaders who come into contact with parents and children with communication disorders should receive professional education on communication disorders so that they can better help parents who will resort to them for help. From the study, it was observed that all the children have had some diagnosis from the medical field which indicates that health workers have been involved with them at an early age. All children are in school which also shows that teachers have been a part of their lives at an early age and many of the parents also reported that they have been engaged in some religious interventions for their children which brings religious leaders into the picture. If these professionals are well equipped with information on communication disorders and available intervention services, they will be in a better position to give parents the best information they need whilst in their quest to help themselves and their children; they may go to them for assistance. These professionals can assist in giving early referrals which will lead to early speech and language therapy diagnosis and early intervention.
- Parents should ensure that the whole family including siblings and grandparents are involved in the self-help actions adopted to support the child with a communication disorder. Family members should also be encouraged to learn about the condition and adapt to the needs of the children. When this happens, the burden of supporting the child is moved from one person and shared by all. It makes learning also come natural to the child since he receives input from all family members who are part of his natural environment and daily life. The family is the first place of learning for the child. Once

they feel valued and treated well by all members, it will be easy for them to relate to all and to others outside the family.

6.3 Limitations

The study faced a few challenges. A non-probability sampling technique was used to collect the data because it was difficult to get a list of the population of parents with children with communication disorders. As at the present, there is no information on this data in Ghana hence; AwaaAwaa2 which is an early intervention centre for children with communication disorders in Accra, Ghana was chosen as a study site. Finally, the sample size as calculated for the study was forty (40) participants but only thirty two (32) respondents were included in the results. This is because some parents were reluctant to be part of the study. Some questionnaires were returned unfilled and others were returned partially filled which made them unqualified to be included in the study. The parents used for the study was mostly educated. Also, the only one site was used for data collection. Therefore, the results are limited and cannot be generalized.

Future research will be expanded to include other centres within the country which provide services for children with communication disorders and where possible include parents who do not access any of these centers so that the findings can be well generalized to represent the entire country.

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APPENDIX I

PERMISSION LETTER

UNIVERSITY OF GHANA

Christiana Adede Totimeh
University of Ghana
School of Biomedical and Allied Health Science
Department of Audiology and Speech and Language Therapy

20th November, 2017

The Director
Awaawaa2
Accra – Ghana

Dear Sir/Madam,

PERMISSION TO CONDUCT RESEARCH AT YOUR FACILITY

I humbly write to seek your permission to conduct a research at your facility for my dissertation in partial fulfilment of my MSc degree in Speech and Language Therapy on the topic **"Self-help by parents for children with communication disability in Ghana".**

I would be glad if am permitted to use parent who access your facility as participants in the study. It is assured that this study is solely for academic purpose and any information obtained will be held in high confidentiality.

Please find attached a copy of a consent form which will be signed by parents who wish to participate and a sample of the questionnaire to be filled by participants.

Hope my request is given a kind consideration.

Yours sincerely

……..

Christiana Adede Totimeh
(Speech and language therapy student

APPENDIX II

CONSENT FORM

UNIVERSITY OF GHANA

Department of Audiology, Speech and Language Therapy

School of Allied Health Sciences

College of Health Sciences

The University of Ghana

PO Box KB 143

Korle Bu

Dear parent/care giver

This form is to seek your consent to involve you as a participant in an academic research. The research is being conducted by Christiana Adede Totimeh, a speech and language therapy student of the University of Ghana School of Biomedical and Allied Health Sciences.

You are assured that any information you give will be held confidentiality. No identifying information, including names or address are required for the purpose of this study. Participation in the study is completely optional and you are free to opt out at any point within the study period if you feel like doing so.

It is please requested of you to answer a few questions which will take 10 – 15 minutes of your time. The purpose of the study is to find out what people do or change at home in order to support their child who has a communication disability. It also seeks to find out how they feel about their actions and what they may do differently. This knowledge is expected to aid the emerging speech and language therapy profession in Ghana in planning intervention approaches and public health education programmes that will be culturally appropriate and accepted by the Ghanaian community.

Please indicate consent by signing below.

…… ……

Signature Date

APPENDIX III

PARTICIPANT INFORMATION STATEMENT

UNIVERSITY OF GHANA

School of Allied Health Sciences
College of Health Sciences
The University of Ghana
PO Box KB52
Korle Bu
Accra, GHANA

Christiana Adede Totimeh
University of Ghana
School of Biomedical and Allied Health Science
Department of Audiology and Speech and Language Therapy

20th November, 2017

Self-help actions of Parents with children with communication disorder

This research project is about communication disorder. A communication disorder literally means a person's difficulty with speaking, understanding or interacting in an appropriate way.

The research is trying to find out the self-help actions of parents with communication disorder in Ghana. That is to say what do parents with children with communication disorder do to improve the communication skill of their child?

We hope that understanding more about parent's self-help actions will help inform speech and language therapists in Ghana on what therapy approaches are likely to be well accepted and carried over by parents at home.

The research is being done by academics from the University of Ghana.

This research will ask you to spend 10 – 20 minutes answering a few questions about what you will do to improve the communication skill of your child.

I will not take any information such as your name, address or date of birth that could identify you.

Being in this study is completely voluntary. You do not have to participate. You can stop the questions at any time during the interview without any ill feeling. If you do not wish to finish answering the questions, please tell the interviewer that you wish to stop. The information that you have given will then not be included in the study and you will be free to go.

Once you have finished answering the questions and left the place of interview, your results will be placed into a sealed box. No-one other than the research team will see them. The information collected from individuals in the study will remain confidential. A report of the study may be published, but no person who has participated in the study will be able to be identified.

You will be offered a cool drink whilst completing the survey. You will not receive payment or anything else for participating.

I would appreciate your time and hope that understanding more about communication disorder in Ghana will assist to eventually improve services and information.

If you would like to know more about the study or about communication disorder, please ask the researcher. If you would like to know more after you have finished the survey, please feel free to contact:

School of Allied Health Sciences
College of Health Sciences
The University of Ghana
PO Box KB52
Korle Bu
Accra, GHANA

If you have a complaint or concern about the conduct of a research study can contact the researchers listed above.

APPENDIX IV

QUESTIONNAIRE

Dear Respondent,

I am currently carrying out a study to explore and describe the self-help strategies and actions undertaken by families of children with a communication disorder to support their child develop more effective or appropriate communication skills**.** The study is a thesis requirement for the award of a Master of Science degree in Speech and Language Therapy at the University of Ghana, College of Health Sciences, School of Biomedical and Allied Health Sciences.

You have been selected to participate in this study due to the fact that you have a child that is with a communication disorder. As such, you will be able to provide important information on what families in Ghana do to help children with communication disorders. The information will be treated with utmost confidentiality. Please feel free and answer all the questions truthfully.

Do you consent to be part of this study? Yes { } No { }

Thank you very much.

Part A: Child information

1. Date of birth of child:……
2. Gender: male/female: ……
3. No. of siblings: ……
4. Birth position: ……

5. Is child in school? Yes [ ] No [ ] 6. If yes to Q5, what grade?

Crèche [ ] Play group [ ] Nursery [ ] Kindergarten [ ] Primary [ ]

Part B: Parent Information

7. Parent: Mother { } Father { }

8. Level of education: Basic [ ] Secondary [ ] Tertiary [ ]

9. Occupation: ……

10. Home language: ……..

Other languages: ……

Part C: Family and social life

11. Who spends most time with the child?

Mother [ ] Father [ ] House help [ ] Grandparents [ ] Neighbor [ ] Aunties { } Uncles { } others, please specify ……

12. At what age did you notice your child had a communication difficulty?

…….....

13. Have your child been given a diagnosis? Yes { } No { }

14. If Yes to Q13 , what diagnosis does your child have? …….

In this study we are trying to find out what families do to help themselves when they are concerned about their child's communication.

15. I would like you to think back to when you were first concerned about your child's talking or communicating. What did you notice about their communication?

……
……
……

We understand that people often do a range of things to help their child communicate. I will now ask you to think about whether you remember doing any of these specific things to help your child with talking and communication

16. Did the way you talk to your child change	YES	NO	UNSURE

at all?			
17. If yes Q16, In what way did it change?			
18. Did you try to TEACH your child anything in particular?	YES	NO	UNSURE
19. What did you teach them and how? 20. How many times did you teach the child in a week?.....			
21. Did you try any home herbal remedies or anything similar?	YES	NO	UNSURE
22. If Yes to Q21, What did you try? 23. How many times did you use herbal remedies?			
24. Did you do any specific exercises for your child to help with the talking?	YES	NO	UNSURE
25. If Yes to Q24, What exercise did you do? 26. How often did you do these specific exercises?			
27. Did you pressure your child to speak?	YES	NO	UNSURE
If Yes to Q27, How did you apply pressure? (what did you do or say to pressure them to talk?)			
28. Did you try to teach yourself more about this type of communication problem?	YES	NO	UNSURE
29. How?			

30. Did you examine the mouth of the child?	YES	NO	UNSURE
31. What were you looking for? …….			
32. Did you "test" the child to see what they knew or could do?	YES	NO	UNSURE
33. What sort of things did you try to test?			
34. Did you buy things that you thought may help your child learn to communicated?	YES	NO	UNSURE
35. What things did you buy?			
36. Did you fast or pray, or take any other spiritual action?	YES	NO	UNSURE
37. What did you do?			
38. Did the way you interact with your child change?	YES	NO	UNSURE
39. How did the way you interact with your child change?			

40. Rank the things you did that help your child most. "1" being the least helpful and "5" being the most helpful.

	1	2	3	4	5
Teaching the child					
Religious intervention					
Home herbal remedy					

Specific exercise					
Pressure on child					
Learning to cope with child					
Interacting with the child					
None of the above					

41. You have been coming to the center for some time now, and have learned more about communication issues in children. Is there something you might do differently to help your child when you were worried about a child with communication problems **now**? Yes { } No { }

What would you do differently?

……

……

……

Thanks for taking part in the survey. Kindly submit the completed document.

APPENDIX

ETHICAL CLEARANCE