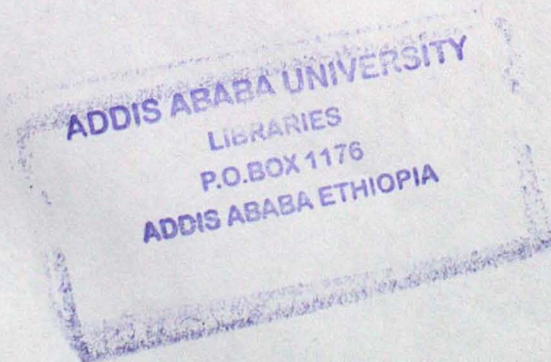


**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

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DEAF CHILDREN IN ADDIS ABABA.**



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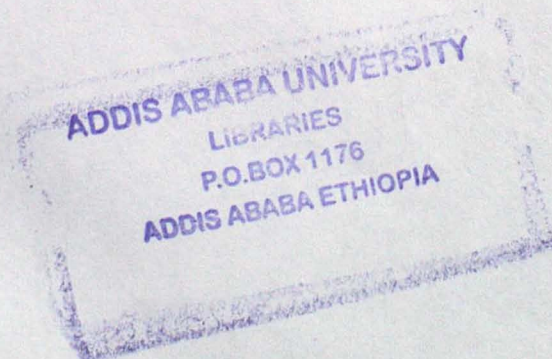


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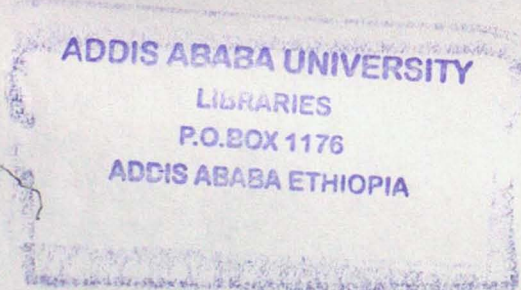


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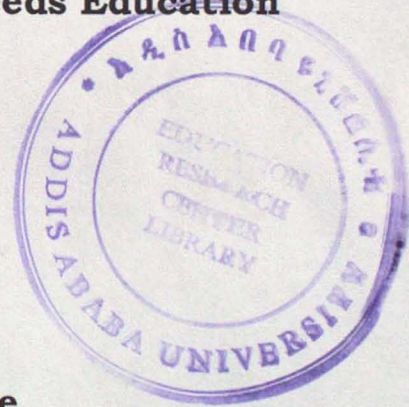
**Mother-Child Interaction: The Case of Deaf Children
in Addis Ababa**

**A Thesis Submitted to the School of Graduate Studies
Addis Ababa University**

**In Partial Fulfillment of the Requirements for the Degree of
Master of Arts in Special Needs Education**



**By
Asmerom Tekle**



**July, 2007
Addis Ababa**

DEDICATION

This is dedicated to my Father Tekse Hagos.

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I would like to express my gratitude to Dr. Mohan Raju, my advisor, for his unlimited support and insightful comments during the research work. He has been cooperative and concerned.

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ABSTRACT

The study investigates the effect of deafness on communicative interaction: the methods of communication used and the challenges the dyads experience. In addition, the study focused on investigating the relationship between parenting style, communication and psycho-emotional feelings of hearing mothers of deaf children in Addis Ababa. The study used both qualitative and quantitative methods. The data were collected through observation of the dyad's communicative interaction, semi-structured interview and questionnaire. Accordingly, a sample group consisted of 6 hearing-mother deaf-child dyads and 40 hearing mothers of deaf children other than the dyads attending at CoAction pre-school, Mechanisa and VICKtory schools for the deaf were selected using incidental sampling method. The children were between the ages of 5-9. Video recording was carried out at the dyad's home for three days, for 15 minutes each day. In-depth interview was also conducted with hearing mothers. The data were analyzed qualitatively case by case. The result shows that deaf children lack the provision of early identification, linguistic stimulation and optimal communicative environment at home. They had also impoverished their natural language, signing, and verbal input as well. There is a mismatch of communication modality between the dyads. Consequently, they are deprived of adequate information from the surrounding environment and exchange of ideas, thoughts and feelings, etc. On the other hand, because of the inability to use signs for interactive communication, hearing mothers experience different psycho-emotional feelings. All these appeared to be related with lack of adequate information/knowledge on the part of the mothers and family members about deafness, its causes, characteristics and lack of early and appropriate support service in any form for the dyads. The analysis of the questionnaire using Kruskal-Wallis Test showed no significant difference between loving and demanding dimensions on communication and psycho-emotional feelings of hearing mothers of deaf children.

"I don't care what means deaf children are thought in. The important thing is to develop a range of expertise to meet the needs of any particular child so they can communicate comfortably..... there is no right way for all deaf children...." Mobel Davis, The teachers', (September, 1992 cited in Webster and Webster, 1993:119)

CHAPTER ONE

Introduction

1.1 Background of the Study.

The child's first contact is with his/her mother and the rest of the family members. In the development of children the most important relationship is children's selective attachment with their parents. Later a child's interaction and relationships with members of the family and others highly depend on the child's attachment and early relationship with the caregivers. According to Rolf et al. (1990), the experience of secure early attachments does make it more likely that children will grow up with feelings of high self esteem and self-efficacy. Moreover, they indicated that, secure harmonies parent-child relationship provides a degree of protection against later risk environment.

Mother-child interaction is important in the child's development process. The mother plays a critical role in the optimal development of the child by providing him/her appropriate activities and stimulation. As Hodapp (1998) indicated, even today mothers are usually the main caretakers of children. However, any disturbance in the development of such relationships between the mother and the child, as in the case of severe impairment like hearing impairment (deafness) which arrests the child's speech, language, and communication development could pose a threat to the development and interaction process. Moreover, Hymovich and Chamberlin (1980) state that severely disturbed parent-child relationships may result in physical abuse or neglect of the child.

It is a fact that a deaf child presents a family with a variety of problems and many challenges. As a result of the presence of a deaf child, there will inevitably be changes in relationships, interaction and activities in the family. As Nolan and Tucker (1983) state, parents of handicapped children tend to suffer from a reaction called "Chronic Sorrow" particularly if the child is severely impaired.

The way parents care for their children determine how the child will develop as a child and as an adult too (Tiruwork, 2005). Children depend on parents to meet their needs. A

child with disability, as in case of deafness which hinders communication, requires the understanding and provision of special assistance and support from their parents especially from their mothers. Mothers of deaf children have a vital and direct effect on the interaction between her and the deaf child and the interaction the child have with the outside world.

It is not surprising that deaf children are deprived of linguistic environment in their home which has a direct influence on mother-child communicative interaction. The communication skill between a deaf child and a deaf mother is similar to those of a hearing mother and a hearing child as they are born in signing families, the mode of communication used by the child matches with the parents. But in the mismatch group in which deaf children born in hearing families, language acquisition and communication skill is in jeopardy. Children who are born deaf or experience a significant hearing loss in the first several years of life usually do not develop normal speech and language. A study conducted by Evans (1975, cited by Oberbeck, 1984) indicated that 90% of the surveyed population of hearing impaired children who have hearing parents have no system of communication other than primitive iconic home-made gestures (Tibebu, 1991).

The limited communication system and opportunities for social interaction with the mother and the rest of the family has a negative impact on the social, language and communication development of a deaf child. This leads, according to Meadow (1981, in Tibebu, 1991), to feelings of others about aborted attempt at communication to be negative and frustrated, creating a spiral leading the hearing impaired children to seek increasing isolation from the fabric of social interaction.

Compared with mothers of non-impaired children, mothers of deaf children seem to show some differences in the amount and type of communication and in the situations under which they communicate with their children. According to Tirussew (2005), unfortunately many parents of hearing impairment children stop talking to their children as soon as they are told that their children are hearing impaired. This adversely affects the parent-child interaction as well as the overall development of the child.

The home environment as a social context is important in early development of young children. The environment is characterized by the interaction children have with their parents especially with their mother. Rees (1978, in Alemayehu, 2002) illustrated that in the socio-linguistic model of language acquisition, the primary communication context of interest is the child-mother or child-caregiver pair. The interactions that occur within this context are thought to be “the originating force as well as the conditions for learning language.” Early and positive interaction of the mother with her child has a significant and irreplaceable role in different areas of the child’s development, such as physical, cognitive, emotional, communication etc. particularly when the child is deaf. It is a fact that if a deaf child learns and is trained in effective communication skill and exposed to sign language early in life, communication will be possible.

In Ethiopia the situation, however, is probably quite different in the case of deaf children with hearing mother especially in the great majority cases, where the mother doesn’t recognize or even imagine that her child is deaf. Hence, the child will not receive early diagnosis and early intervention. Moreover, still most mothers do not understand the importance of effective early communication for young deaf children and frequently do not know what sign language is all about. As a result, deaf children are not exposed to linguistic environment at home and they are deprived of effective communicative interaction with their mother due to the mismatch of communication modality. According to Alemayehu (2002), among other things, the challenges mothers face, such as emotional disturbances, aggravate the deprivations (Adams 1997; Chiswanda, 1997). He further noted this weakness may have negative effects on language and communication, and on the social, psychological, academic and holistic development of deaf children.

2.2 Statement of the Problem

A child who is deaf may experience difficulty in communicating with hearing mother and other family members and may also have a problem in developing relationships and accessing the social interactions that are vital to cognitive, emotional growth and development.

It is obvious that there are differences in the interaction between hearing mothers with hearing children and hearing mothers with deaf children. Gallaway and Woll (1994, in Dikkenbers & Vanderstelt, 2001) noted that the interaction between hearing mother and deaf children probably proceeds less smoothly. Beyond the effect of development on the child, deafness has an influence on communication skill which is critical for socio-emotional interaction between the mother and a deaf child.

The problem in developing countries like Ethiopia however will have a greater magnitude. The communicative interaction between a hearing mother and deaf child is under difficulty due to many reasons, such as most mothers have no information about deafness, lack of knowledge how to communicate with a deaf child, lack of support for mothers to mediate their interaction with the child etc. Therefore, this study tried to explore the effect of deafness on communicative interaction between the hearing mother and deaf child based on the following questions.

1. How do hearing mothers and deaf children communicate?
2. What communication modalities do they use in their communication?
3. What communication difficulty do hearing-mother and their deaf children experience in their communicative interaction?
4. Is parenting style related to communicative interaction hearings mothers have with their deaf children and the mothers' psycho-emotional feelings?

1.3 Objectives of the Study

The main purpose of the study is to assess the communication process of hearing mother and her deaf children in their relationship. Based on this, the study has set the following specific objectives:-

1. To explore communicative interaction between hearing-mother deaf-child dyad
2. To describe the main communication methods used by the dyads.
3. To investigate communication challenges the dyads encounter during the interaction.

4. To investigate the relationship of parenting style, communicative interaction and psycho-emotional feelings of the mother due to having a deaf child.

1.4 Significance of the Study

The impact of any degree of deafness affects children and all members of the family. It has also a potential for becoming a stressful event. This threatens the family's sense of psychological and social integrity which may precipitate a poor quality of mother-child interaction. According to Hymovich and Chamberlin (1980), a disability condition interferes with bonding process between a mother and the child.

Mother of disabled children tend to be much more directive and exhibit greater over-protective behavior. It is also possible to assume that hearing mothers of deaf children do not assist their young deaf children in communication domain. This is true especially in countries like Ethiopia where most mothers are less educated. On the other end, the home is the place where any young child should be able to feel safe, understood and loved. It is the place that should provide deaf children with the utmost communicative environment and emotional strength. Researchers indicate that most deaf children can communicate efficiently as hearing children, but they need a linguistic environment as early as possible. To achieve this, parents especially the mother will have to adjust the quantity and quality of interaction they have with their young deaf child.

Based on the above assumptions, the results of this study may:-

1. Indicate the importance of early communicative and linguistic stimulation to deaf children
2. Contribute to the understanding of communication barriers and its effect on mother-child interaction.
3. It will be useful to families of deaf children to understand the impact of deafness and to create interactive and communicative environment.

4. Be helpful to show the situation of communicative interaction between hearing mothers and deaf children to professionals, social support service providers, and different organizations working in this area.
5. Help as a reference for other researchers who would like to conduct studies in this area.

1.5 Delimitation of the Study

The purpose of the study is to investigate the communicative interaction including methods and challenges of communication between hearing mothers and deaf children in their dyadic interaction. The study is delimited to profoundly deaf children in the age range 5-9 years, who are attending CoAction pre-school, Mechanisa and VICKtory School for the deaf, and their hearing mothers in Addis Ababa.

1.6 Definition of terms

Communication: - A process by which individuals exchange information and convey ideas. It is an active process requiring a sender who encodes a message and also requires a receiver who decodes, or comprehends the message.

Deafness: - A condition in which the auditory sense is not the primary means for the processing of speech and language. He/She can not function as a hearing person and needs exposure and training in a systematic use of physical gestures and signing (Vergason, 1990 in Tirussew, 2000).

Mother-child interaction: - For the purpose of this study mother-child interaction is defined as hearing-mother deaf-child communicative interaction including the methods of communication used and communication challenges they experience in their dyadic interaction.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Understanding Deafness

The mechanism for hearing is a beautifully designed and complex system. It is divided into a peripheral auditory mechanism, which starts at the outer ear and ends at the auditory nerve, and a central auditory system, which runs from the auditory nerve to a brain. Moreover, among the senses, hearing is equaled by vision in its importance to our understanding of the world around us (Batshaw & Perret, 1992). According to Gearheart et. al. (1992) listening is an important tool for the child to learn and acquire information from his/her environment through the auditory channel. It is through hearing that the child learns to discriminate between hard and soft, high and low, and distressing and pleasant sound. In addition hearing is an instrument for the child to determine the direction, distance and meaning of sound by analyzing the human voice.

A defect in the peripheral system, results in a hearing loss while a central auditory problem interferes with the interpretation of what is heard. A hearing defect, therefore, is a major disability (Batshaw and Perret, 1992). They further noted when some part of the hearing apparatus is malformed or malfunctions, hearing loss results. Not only does this affect hearing, it often hinders, a child's ability to speak, especially if the damage occurs prior to 2 years of age (Pre-lingual period).

According to Yesseldykke and Algozzine (1995, cited in Azalech, 2005) deafness is a severe disability. People who are deaf have a hearing loss that prevents understanding speech through the ear. They have little functional hearing, even with a hearing aid, and they do not use hearing as their primary sense of gaining information. Smith et. al. (1995) also said that people with deafness have a hearing disability so severe that they have little useful hearing even if they use hearing aids. According to Schulze, Carpenter and Ann (1991) a term used to describe persons whose sense of hearing is non functional for

ordinary use in communication with or without a hearing aid. The hearing loss is usually above 70 dB.

As Quigley and Paul (1984, in Alemayehu, 2000) state, a person is considered deaf if Hearing Impairment is so great, even with good amplification, that vision becomes the individual's main link to the world and main channel of communication.

Children who are born severely, or profoundly hearing impaired or become deafened soon after birth have great difficulties in acquiring speech. Older children and adults who become deafened after speech acquisition also experience deterioration in their speech, because they can no longer adequately hear what they are saying (Bench 1992).

According to Webster and Wood (1981), deafness does not merely restrict what the child can hear. It is also likely to disrupt some of the social-interactive process which lay the foundation for communication. Therefore deafness is a disruption in communication system. Moores (1996) noted the handicap of deafness is the extent to which a person's overall functioning is limited by the disability of deafness. Heward and Orlansky (1988), also noted that our ability to hear and respond to various sounds have an impact on virtually every aspect of our lives. If hearing is severely limited, there can be far-reaching effects on an individual's capability to interact with the environment.

The disability of deaf people can not usually attract public sympathy because deafness is not visible and can not be seen by naked eye. The deaf are usually segregated in their social lives and even in the streets. Some times due to the invisibility of their deafness they may be subjected to violence (Alemayehu, 2003).

2.1.1 Types of Deafness (Hearing Loss)

The ear is a complex structure and it functions in a complex way (Azalech, 2005). Although many problems can occur to our hearing system, they can be classified into three types.

2.1.1.1 Conductive Deafness (Hearing Loss)

According to Tirussew (2000), to reach the inner ear, sound waves in the air must pass through the external canal of the outer ear to the ear drum, where the vibrations are picked up by series of bone like structures in the middle ear and passed on to the inner ear.

Conductive hearing loss occurs when there is a barrier or damage on the outer ear or middle ear. When the problem arises from this part of the ear, it prevents sound waves from traveling into the inner ear and causes a problem with hearing. As noted by Nolan and Tucker (1981), this type of deafness is caused by a 'blockage' or abnormal hindrance to vibration and hence to transmission of sound in the outer or middle ear. It generally results in a partial rather than severe degree of hearing loss, however, if left untreated early and present for a longer period of time, it seriously affects the child's language acquisition and communication skill. In general:-

- It is an interruption or blockage of sound conduction to the Cochlea that accounts for the hearing loss.
- Accumulation of excessive fluid and wax in the ear canal or interruptions in the ossicular chain (middle ear bones) are examples of conditions that restrict the flow of sound energy from the outer ear and middle ear to the inner ear.

2.1.1.2 Sensory neural Deafness (Hearing Loss)

Sensory neural or nerve deafness results when damage or disease occurs along the auditory pathway of the inner ear. It involves damage to the fine structures in the inner ear or auditory nerve transmitting the impulse to the brain (Tirussew, 2000). The condition is usually permanent as a result of irreversible damage to the nerve endings of the inner ear (Moss, 1995).

This type of deafness usually can not be improved medically or surgically and it may range in degree of severity from mild to total hearing loss. It is therefore, according to Nolan and Tucker (1981), considered permanent and must be managed accordingly. For

example, it is necessary to fit children with suitable hearing aids if a significant sensory hearing loss exists. Otherwise language acquisition (talking and understanding) will certainly be severely impaired.

In contrast to conductive hearing loss, sensory neural hearing loss does not involve only a loss in hearing sensitivity; typically there is a reduced ability to discriminate speech (Alemayehu, 1996). Therefore, a child with this type of hearing loss (deafness) face difficulties in understanding speech sounds even the sounds have high tone.

2.1.1.3 Mixed Hearing Loss

It is a combination of both conductive and sensory neural hearing loss. Children may experience both types simultaneously. Alemayehu (1996) entails a child with sensory neural hearing loss can experience an ear infection or other ear disease. As noted by Tirussew (2000), many persons with mixed losses can benefit from amplification although some have problems similar to those of persons with sensor neural losses.

2.1.2 Causes of Deafness

Determining the causes of deafness in children remains a difficult process in many cases. Even today "etiology unknown" characterizes a sizable portion of the deaf school-age population (Moores, 1996).

2.1.2.1 Causes of Conductive Deafness

Of all acquired hearing loss in children, 95% is conductive in nature and attributable to middle ear infections (Northern and Downs, 1991 cited in Batshaw and Perret, 1992). Otitismedia malformation of outer ear, excessive build up of ear wax, and perforation of the ear drum due to the excessive pressure are some common causes of conductive hearing loss (Hallahan and Kauffman, 1991).

2.1.2.2 Causes of Sensory neural Deafness

According to Gearheart, et. al. (1992) the type of hearing loss that affects frequently intelligibility and clarity of the sounds that a person hears is known as sensory neural hearing loss. As Nolan and Tucker (1981) noted the causes of congenital sensory neural deafness fall into three main groups: - **The hereditary group**-due to the genetic factors, **the prenatal group**, resulting from damage to the inner ear of the baby as it develops in the womb, and **the perinatal group**, due to one or more of a number of possibility damaging factors that may affect the baby at or around the time of birth.

The genetic causes of hearing loss include some in which deafness is the sole disability and others in which the hearing loss is but part of a spectrum of abnormalities. Among acquired conditions, causes of hearing loss include both prenatal and postnatal infections, anoxia, prematurity, certain antibiotics and Trauma (Batshaw & Perret, 1992). In general according to Moores (1996) for the known causes, the most common presently identified causes of childhood deafness are heredity, maternal rubella, cytomegalovirus, mother child blood incompatibility, meningitis and complications of prematurity.

2.2 Communication and Language Behavior of Deaf Children

As Lahey (1988, cited in Alemayehu, 2000) explained, people use language to establish and maintain contact, to gain and give information, and in general, to influence the beliefs and the actions of themselves and other persons. Children learn language for the purposes that it serves, they learn to communicate.

Hearing children typically acquire different aspects of verbal expression by listening to others and to themselves from early infancy. Deaf children, however, have a difficulty of verbal communication. According to Sims, et. al. (1982, Clarke and Kendall, 1976 cited in Bench 1992), hearing children use their hearing for speech to acquire. Impaired speech perception leads to the problems with language acquisition and cognition, which become evident in their communication. Alemayehu (2003) also noted the presence of hearing

loss means that the child's intake of spoken language may not reach the minimum level required for the child to acquire the spoken language comfortably.

According to Alemayehu (2003), most deaf children are born in a hearing family. As a result they lack competent language model at home. The acquisition of language requires fluent communicative interaction between children and mature language user. McAnally, et. al. (1994) added normal development of language seems to depend, above all else, on fluent and intelligible communication interactions between children and competent users of the language. As Nolan and Tucker (1981) noted for a deaf children with severe to profound hearing loss, experiencing enough language to activate their natural language acquisition can be a problem if parents are hearing.

Communication problems can seriously interfere with interpersonal relationships deaf children have with their caregiver. Their inability to communicate with members of the family and other people can delay their language development. Children who are deaf are often passive participants in communication, as their parents or caregivers tend to deprive them from any type of interpersonal relationships. As noted by Alemayehu (2003) for a deaf child born into a hearing family, effective communication may not be present in the child's home environment, except the exposure to inaccessible speech. Gunilla (1983, in Alemayehu 2003) state, if the hearing families continue to use only speech as their primary means of communication, deaf children may lack the opportunity for spontaneous language development.

Tirussew (2000) defines language as a system of symbols that greatly enhances the ability of humans to represent aspects of the world, to think, and to communicate with each other. And the hearing impairment greatest effect on the developing child occurs with regard to language, both with the receptive and expressive systems. Deafness can negatively affect the normal pattern of speech and language development there by arresting the child's ability to develop such as communication skills.

As McAnally (1994) noted the acquisition of a verbal or spoken language is based typically on auditory- articulatory mechanism. Thus, hearing plays an essential role in the internalization, storage, and retrieval of spoken-language structure for cognitive and language functions. But, according to Webster (1998), the fundamental problem for the deaf child is one of being cut off from the ordinary speech environment. For the child who can not hear speech, even with the provision of powerful hearing aids, there are bound to be enormous difficulties in acquiring basic language skills because of the limited and distorted nature of the child's auditory experience. Grewel (1963, Liberman, 1974, cited in McAnally, et.al.,1994) said despite the use of amplification, manual communication, and written language, the linguistic intake of the deaf child remains impoverished and incomplete. Therefore, it is important that parents provide a stimulus and opportunity for interaction, through which the child organizes and makes sense of the language experience.

2.3 Methods of Communication

Communication is about the transmission of information. Effective human communication relies heavily on language, a system of verbal and/or gestural symbols governed by rules in a sophisticated code (Bench, 1992). It is a reciprocal act which requires a sender and receiver. Hearing peoples communicate verbally using language and non-verbally using different modalities such as gestures, facial expression, body position, body posture, movement of body parts i.e. hands, head, crying etc.

Bench (1992) asserted, human communication allows people to describe events, to teach and learn and to share experiences and ideas. Communication through speech, with its great flexibility, efficiency and variety, clearly excels where people need to relate closely and immediately to one another.

It is a fact that failure to communicate through verbal means with other peoples has a huge impact on daily activities and social interactions. Deaf children are deprived of such

interpersonal communication with hearing peoples as they can not process verbal modalities. According to Azalech (2005), for the deaf children, normal language development and fluent communicative interaction may be a problem due to the absence of the usual intact sensory organ i.e. auditory channel. Therefore, for a deaf child speaking and listening is difficult indicating the primary impact of deafness is on language development and communication skill.

It is suggested that the whole family particularly the mother need to encourage the child to communicate as early as possible so that the child's linguistic development and communicative interaction with the parents, other members of the family and his/her social interaction outside home will be positive. As a result the child will have higher self-esteem and emotional strength.

There has been considerable controversy (debate) concerning the most effective and efficient method of communication for deaf children. According to Silverman et al. (1978, cited in Azalech, 2005), common to all method supporters, is the premise that early years are optimal for establishing the foundation for the child's acquisition and his emotional and affective maturation. Three basic communication methods (manual, oral, total) are advocated (Gearheart, et. al., 1992, 1996; Smith and Lucksson 1995; Schulze, Carpenter and Ann 1991).

2.3.1 Manual Communication

Manual communication may be divided into two main categories; sign language and sign systems. Bench (1992), indicated the manual form of communication used by profoundly deaf people amongst themselves is deaf sign language. Based on Smith & Luckasson (1995, Gearheart, et. al. 1992, 1996), the most common language is American Sign Language [ASL]. It is a set of gestures representing words or concepts. It is generally used by adult deaf population and has been the mother tongue. Finger spelling or manual alphabet is another form of manual communication. In finger spelling or various finger positions represent individual letters or the alphabet and are used to spell out words.

2.3.2 Oral Communication

The oral method of communication makes use of oral and auditory training and speech reading. The method do not use or encourage the use of sign language or finger spelling, believing that manual communication impede the child's adjustment to the hearing world (Anstasiow,1993 cited in Azalech, 2005). Rather, according to Gearheart, et. al. (1992), this method encourages the use of residual hearing and involves auditory training teaching the child to listen to sounds and to discriminate among different sounds.

2.3.3 Total Communication

The total method of communication is based on a philosophy of flexibility allowing deaf children to use a combination of manual and oral communication methods together and a system which is most appropriate for them. It encourages the child to speak but allows him/her more options for receiving and sending messages including the use of residual hearing, amplification, speech reading, etc. (Smith and Luckasson 1995; Tesfaye, 2004). The purpose of this method is to give the maximum amount of language to the deaf. According to Webster and Webster (1993), the effects of a more sensory neural hearing loss on individual development can be devastating. However, it is a mistake to assume that all severely hearing impaired children will experience the same problems, or will inevitably have limited achievements. Similarly a particular method of teaching or communication may be more effective with one child than another, irrespective of severity of hearing loss.

2.4 Parents of Deaf Children

A hearing impaired child presents a family with a variety of problems and many challenges. Discovering that one's child is deaf or handicapped in some way is not an easy situation for many parents to accept. According to Bollard (1984, cited in Tibebu 1991), every family expects a healthy child and the discovery of a hearing impaired child is a traumatic event in any parent's life. It is followed by feelings of anger, disappointment, shock, disbelief, sadness and confusion.

Hearing losses in children of hearing parents typically are not diagnosed until the third or fourth year of life. Most deaf mothers of deaf children, in contrast, may recognize when their children are deaf by at least 6 months of age simply by the way their infants behave and react to them. For hearing parents, of course, it takes much longer (<http://www.astalvista.com>). Parents usually complain and blame others including pediatricians after receiving a diagnosis of deafness in their child. Unlike parents in developed countries, parents in developing countries such complaints are common and they retain distorted or simply mistaken ideas about being deaf, sign language, and deaf education. For many parents adjusting to having is not an easy experience. Therefore, Parents have a very difficult time adapting to the idea of having a child who is labeled "handicapped" (<http://www.astalvita.com>)

It is understood that most of the parents have no knowledge about deafness and how to provide the optimum environment for a holistic development of a child. As noted by Moores (1986, cited in Tibebu, 1991), the parents may be uncertain about whether the child will be self sufficient and eventually assumes a productive role in society or whether he/she will be a life long burden emotionally and financially draining the families resources. However, a deaf child and the members of the family have enormous amount of information to learn. According to Smith, et. al. (1995), the family must first learn how to provide an optimum learning environment that can facilitate the development of many different types of skills including, manual communication in deaf children's early language development experiences capitalizes on their typical developmental process.

Research shows that children who are deaf communicate in a different way from their parents. The parents' 90% of whom are hearing parents (Meadow, 1980), find that there is a break in the natural pattern of communication (Tibebu, 1991).

Nolan and Tucker (1981) said due to the psychosocial impact of deafness, parents worry about explaining the handicap to family and friends.

The most important factor in the lives of deaf children is acceptance by their families. Some parents and other family members may adjust quickly to the demands presented by

a deaf child, but many others face a difficulty and experience a wide range of emotions like grief, guilt, anger etc. and it takes time before the parents adjust with the situation. The adjustment of hearing families to the arrival of a deaf child will have a variety of practical, emotional, financial ramifications, and such changes have an effect on the relationships among the member of the immediate and extended family. Moreover, the problem of adjustment to the presence a hearing impaired child would be even greater in families of developing countries (<http://www.astalvista.com>).

Instead, according to Tibebu (1991), in societies where modern education is not wide spread, there is always a tendency for parents to attach problems to some uncontrollable power and to have constant feeling of guilt for it has happened as a punishment for their wrong deeds. Hearing parents of deaf children, in fact, generally do report more stress than do parents without deaf children only after the child's hearing loss is truly accepted can parents start to appreciate their child for who she is perhaps the most significant factor in their adjustment is the amount of social support they receive from others. The way parents interact with their deaf children had direct effect on communication and social development. As power et al. (1995, cited in Alemayehu, 1996), family is one area in which the social impact of deafness is felt. The degree to which a family copes with one of its deaf members has influence on his or her adjustment in a society. Schlesinger and meadow (1972, in H oddap,1998) observed in their study that deaf parents of deaf children cope with the crises of diagnosis easily and quickly, while their hearing counterparts prolong and intensify it.

Parents hoping for 'cures' that do not exist, parents may take their deaf children from one specialist to another, or as a last resort, visiting quacks or faith healers. There can be a pain and worry about the child's welfare and future, together with concerns about the stability of the marriage and of the family. When all hopes seems lost, the interactions with in the family and especially with the child become more strained. Therefore, it is difficult for parents to care for children when normal life has become disrupted by the presence of deaf child and affects the course of family interaction. Parents feel quality,

irritable, impatient and angry and they will not give adequate care and stimulating environment to their deaf children (<http://www.astalvista.com>). Richman (1993) state, sometimes tension and disagreements inside families make it difficult to help a child. We have to accept that most families have disagreements and that negative feelings about children are common. These eventually give way to the deprivation of early language and communication development of the child. Due to this according to Alemayehu (2003), in their family they are ignored and grow up without adequate information about the surrounding world.

2.5 Communication of a Hearing Mother and her Deaf Child

According to Bench (1992), communication is about the transmission of information. Effective human communication relies heavily on language, a system of verbal and/or gesture symbols governed by rules in a sophisticated code.

It is obvious that the limitation posed by deafness on language and communication have a great impact on mother-child communicative interaction and the interaction the child have with other members of the family. A deaf child presents the greatest challenge to mother-child communicative interaction though the mother is motivated and enthusiastic with the child. The quality of interaction that mothers have with their disabled children depends on the nature and degree of the condition. Hymovich and Chamberlin (1980) noted deafness as a severe impairment that restricts the child's speech, language and communication skills, it have a chronic effect on the usual socialization process between the dyads and other family members. The hearing child socializes him/herself by imitating a model usually a mother. But, according to Tibebe (1991), a hearing impaired child is rarely exposed to enough appropriate role models or to the quantity and quality of communication necessary for social maturity. It is a fact that where a child suffers a more severe hearing loss (deafness) socio-emotional and communicative interactions between the mother and child disrupted. As Webster (1998) entails hearing impaired children may

be exposed to less nurturing experiences which interfere with the social context in which language is learned.

Communication between the mother and children should also include mutual and loving interaction. Compared with mothers of hearing children, mothers with deaf children show some difference in the amount and type of communication. According to McAnally et.al. (1994), researches of children with hearing impairment suggests that, when parents learn about their child's deafness, communication interaction patterns between parent and child often change to less favorable patterns and many subsequently have a deleterious effect on language growth of the deaf child.

Gross (1970 cited in Meadow, 1980) indicate that the communication of mothers with their deaf children differs from that of hearing mothers with their hearing children. As Tibebu (1991) parents of hearing impaired children are likely to over protect their deaf children, thus reducing the children's range of experiences and objects available for manipulation. This has a strong negative effect on the social maturing of hearing impaired children. Schlesinger and Meadow (1971, 1972, cited by Meadow, 1980), reported that in comparisons with mothers of younger hearing children, mothers of young deaf children are rated as more controlling, more intrusive, more didactic less, flexible, and less approving or encouraging. Moreover the study of Collins (1969, cited in Meadow, 1980) reported that 40% the behaviors of mothers of deaf children was directing: 13 out of 15 mothers could communicate with their children only about things or events that were present in time and space.

Therefore, controlling and overprotective behaviors on the part of a hearing mother are likely to affect their deaf children's communicative interactions with themselves and other peoples. Mothers who have a good communication with their deaf children tend to have stable and warm relationships with them. Similarly children who have better social relationships with their mother also tend to be those who develop good social interactions with peers and higher self-esteem. But mothers who have less efficient communication with their deaf children will probably have less securely attached children.

For hearing mothers of deaf children, there is also the possibility that difference in the way they interact with their children. Mothers may not play active role in day to day activities of their child. Meadow (1980) noted that the basic deprivation of deafness is not the loss of sound; it is the deprivation of language. The acquisition of language requires fluent communicative interaction between children and mature language users. Moreover, according to Tafesse (1998) a deaf child of hearing parents doesn't have a competent sign language model at home; perhaps she/he has no model at all. The awareness and acceptance of sign language by mothers and members of the family and the community is so low that deaf children loss reciprocal communicative interaction through their natural means of communication. Due to this it becomes difficult for the mother to use sign language and most often she may concentrate on spoken language the result of which is that deaf children are merely passive participants in mother child interaction with little communication opportunity.

Dilka (1984 in Tafesse,1998) suggested the following for effective communication between a parent and a child with hearing impairment.

- A) Be patient, encouraging, understanding and supportive
- B) Explain all relevant situation and events
- C) Provide the child with his/her own reasonability's
- D) Use the child's preferred mode of communication
- E) Set behavioral limits and use consistent discipline
- F) Utilize the child's residual hearing
- G) Assist with academic assignments.

2.5.1 The need for Communicating with a Deaf Child

Communication is a two way process which involves trying to understand thoughts and feelings that the other person is expressing and responding in a way that is helpful. This means that to communicate well you need skills in listening to and observing others and understand their message and skills in getting your own ideas and feelings across so that

they can be helpful (Richman, 1993). These skills are part of the ordinary everyday life, but when there is a child who is deaf in the family, parents have to think carefully how to support, respond and communicate in the best way possible so that the child can communicate and express him/her self.

According to Richman (1993), the life of a very young child is centered in the family and in the people who care for her. Her development depends on the attention and care they give. Through talking and playing, watching others and taking part in household life, she develops physically and emotionally. As she grows, so does her understating of language and her capacity to express her thoughts and feelings.

Deaf children like any other children need love, attention, emotional attachments and education; if these children are not helped or supported they will face a difficulty to learn language because they can not hear. Without language they can not communicate, express them, or can not learn easily like their hearing age mates (Mekonnen, 2005)

Richman (1993) further noted, besides the immediate family they learn to communicate with the extended family, friends and neighbors. They need these rich social opportunities as well as the care and guidance of intimate adults in order to develop emotionally and intellectually. As Moores (1996) entails quite simply, a deaf child is an integral member of a complex system- a family- and any thing that affects one member of the family affects all members. In essence, the family represents the first social system to which most children belong, and for these children the family is the first and most important means for socialization and enculturation. Thus, among other things, clear and consistent communication is mandatory.

The quality of communicative interaction that deaf children receive has a powerful effect on their survival, growth, and development. However, according to Webster and Webster (1993) many parents of hearing impaired children, particularly in families with no prior experience of deafness, no longer trust their own natural abilities. They may feel that a deaf child requires something different from the approach they have taken with other

siblings, or that because of the child's hearing loss, language will have to be 'worked at' in order to happen. What may transpire is that by deliberately trying to change how they interact with a deaf child, parents unwittingly create less facilitative learning environment for language development. Moreover Koester (1994, in Dikkinberg and Stelt, 2001), described the problems in the communication between hearing parents and deaf children have their influence on more aspects than only the child's language development. Also the coordination and timing of interactions is influenced by the deafness of the child. In addition, often parents and caregivers have misconceptions that if a child is deaf, he/she will lack the ability to develop language and communication skill. As Webster and Wood (1981) noted that parents may feel it is not worth talking to the child, if the child can not hear. As a result parents and deaf child have unrewarding and frustrating interaction and the child is left alone without any opportunity of linguistic and communicative environment. According to Webster and Webster (1993), children and adults talk naturally about a lot of things. Conversation is very important in developing children's speech and language. It is also important that the child takes an active part in talk, and that parents know how helpful their talking with children at home can be. Otherwise based on Webster and Wood (1981), if children have not established the foundation skills for conversational interaction at home, they are likely to do so in the interactive encounters they will probably meet with in school.

Based on Mekonnen (2005), if parents provide the appropriate help in appropriate time to their deaf child, they can learn language and their strength will be recognized and get acceptance within the family and the society. They will also make friends, learn and can lead a happy life. In addition, if a child learn and practice language and communication skill in his/her early ages (from birth to 7 years), the child can perform better and widen his/her knowledge because as the child's language and communication skill increases the thinking ability also increases. That is why it is important and necessary that parents should support their deaf child to learn language as early as possible. Hoddap (1998) also noted indeed, particularly during the first few years of the baby's life, hearing parents can

effectively communicate with their child. Moreover, other aspects of development including social and emotional aspects can be enhanced through various interventions during the school years. Batshaw and Perret (1992) also suggested that elementary school is a time when parents start to allow their child more autonomy in learning to live with the disability. At home, children should be expected to perform chores and adhere to behaviors that are appropriate for their development and abilities. Richman (1993) state, as children grow up we expect them to grow in capacities to communicate, solve problems, and take responsibility, do school work and so on. For deaf children, this development is often interrupted; children may even go backwards in their achievements. In addition these children face a difficulty in communicating freely and this is frustrating because it may make them feel useless or rejected. Therefore, according to Richman (1993), special efforts have to be made to communicate with those who suffer from hearing problem, to make sure you have been understood and that you have understood what they are trying to communicate. Moreover, parents have to adapt their ways of communication with these children.

Webster and Webster (1993) indicated the importance of contingent interactions with a responsive adult, who has the time and awareness to engage in shared activities, leading to eye-contact, mutual attention, the structuring of early reference skills and turn taking, is of inestimable importance for all children, but particularly the hearing impaired. Therefore, in order to improve the communicative and language skill, Hoddop (1998), have suggested that children who are deaf may require mothers who engage in more physical and visual contact and who proved a more emotional, upbeat interactive style.

2.5.2 Early Intervention

Early years are important for the overall development of children. Environmental factors in which children faces during the early years play a great role in their development. Particularly early caregiver-child relationships have long term significance on the child's health and development (Rahel, 2005). The home is the immediate social environment in

which children learn social interactions with members of the family primarily with mothers since birth. This early social relationship has a long term effect in exerting a powerful influence on different developmental areas such as emotional, cognitive, communication, etc. The interaction is more important when the child is disabled. Thus, according to Rahel (2005), intervention interaction is very crucial for the overall development.

Caldwell, et. al. (1975, cited in Tirussew, 2005) used the term early intervention to refer to a manner in which quality environment facilitates optimize child development. Moreover according to Odom and Wolery (2003, cited in Tirussew, 2005), strengthening relationships with the primary caregivers and on young children's social emotional development is a major contribution in early intervention programs.

Webster and Webster (1993) noted that it has been said that hearing parents of a deaf child grieve for the 'normal' child that they have lost and must be helped through the stages of coming to terms with such loss. Moreover, there may be negative attitude towards child's deafness and some misgivings as well as misconceptions about the future. They may be hesitant about how to manage, gain eye contact or talk with their child, feeling that their natural parenting instincts are no longer appropriate. They may find every day interactions with their child frustrating, unfulfilling or lacking in enjoyment. In fact this is not only evident in parents of deaf children. Webster and Webster (1993) noted almost any disability in an infant will interfere with ordinary pattern of interaction. Therefore, parents require information and support to come to terms with their child's deafness and also require new skills through intervention programs to help them enjoy more productive, social, play, linguistic and communicative interactions. Moreover, according to Tirussew (2001) the rationale for intervention in to the life of young hearing children is largely accepted, since for a child with profound hearing loss, language is not learned in spontaneous fashion, but must be thought.

According to Batshaw and Perret (1992), if a hearing loss is an isolated disability, the children tend to do well, often going to college and having a professional career. This can be true even for the profoundly deaf child, provided he or she is identified early and develops alternative methods of communication. In the study of Löwe (1981, cited in Tirussew, 2005) indicates that the earlier a hearing impairment is identified, the better are the child's chances for receiving treatment and thus developing good communication skills, appropriate behavior and satisfying social relationships. Webster and Webster (1993) also argue that the sooner a hearing loss is detected, the sooner that the impact of deafness can be reduced at source, by treatment, or by provision of hearing aids and appropriate family support.

A child will grow following normal pattern of development if he/she is provided early with appropriate linguistic and communicative skills. Löwe (1981, in Tirussew, 2005) said just as sensory deprivation is understood as a lack of sensory stimuli, for auditory impaired child most important is auditory stimuli.

The study conducted by Addis Ababa University in collaboration with University of Bergen, Norway (Rye H. 2001) implementing MISC (Mediational interaction for sensitizing caregivers) program, which is a type of familial intervention program, in Ethiopia have found that early intervention promoted high quality of mother-child interaction, which were clearly observed in terms of focusing the child's attention on a certain activity or task, respecting the child's initiatives, mediating meanings of feelings of competence, regulating of the child's behavior and turn taking (Tirussew, et. al. 1996; Tirussew, 2001, in Tirussew, 2005). The results of the same study by M.V. Chiswanda (1997) also indicated the importance of early intervention. The intent was to focus on increasing the communication skills and interaction strategies between the mother and child by using MISC intervention program. The analysis of the study yielded confirmation of pre-and post intervention changes in each hearing mother's communicative interaction with their deaf child.

It is generally believed that for verbal language to develop adequately, children must be exposed to speech in their first 2 years or so of life. Congenitally deaf children will lack this exposure unless their hearing impairment is identified early and suitable treatment and therapy are begun without delay (Bench, 1992).

According to Webster and Webster (1993), the following tips can be used readily to ease communication at home and help the child to make up lost ground.

- Use a home-school diary for keeping teachers in touch, and reinforcing school work at home
- When talking with children it helps to cut down background noise
- Gain the child's full attention and eye contact before speaking
- Use lively facial expression and gestures.
- Avoid speaking for a child or 'talking over, help a child to take part by giving lots of praise and encouragement.
- Rephrase if the child asks for something to be repeated
- Find quiet times to sit and read or talk together.

2.6 Mothers' Reaction to having a Deaf Child

It is natural for parents to want their children to be smarter, more accomplished, and happier than they, the parents, are. When parents first learn that their child has a severe disability, these hopes are dashed (Batshaw and Perret, 1992).

The parenting of any young child may produce a large amount of parental stress. Later, however, differences generally do emerge between families of children with and without disabilities (Hoddap, 1998). The birth of a child with disability alters the previous family routines and change parent's values and may enter into a new stage of functioning. According to Moores (1996), since changes in role and function are the major sources of the stress that the birth of a child brings, it is logical to assume that the strain increase

when the child is identified as being deaf. Effects of the strain, in turn, will affect the child.

Schlesinger and meadow (1972, in Hoddap, 1998) observed in their study that deaf parents of deaf children cope with the crises of diagnosis easily and quickly, while their hearing counterparts prolong and intensify it. In their study Prior et al, (1988, in Hoddap, 1998) found that the mothers of preschoolers who were hearing impaired were more anxious and depressed than were mothers of same-age hearing children. The mothers of children who were hearing impaired were also higher overall on a scale of psychiatric symptoms. Hoddap (1998) noted that Mothers of children with disabilities do mourn the loss of the individualized child; these mothers may also be more prone to ruinous emotional problems, as may husbands, couples, and siblings.

According to Moores (1996) the deaf child presents the family with specific problems that may result in Shame, guilt, parental recriminations, and restricted communication if adequate counseling is not received. Research conducted by Schlesinger and meadow (1972, in Meadow, 1980) indicated that parents show some sense of frustration about their inability to communicate with their children. Most parents in the study stated that the child's inability to understand them was more frustrating than their own inability to understand the child.

Apart from the influence of stress factors derived from the impairment itself on the mothers and family patterns, according to Tirussew (2005), society's perception and attitude towards children with disabilities are full of myths, misconceptions, fear and rejection. Children are in turn likely to develop mistrust, shame, hostility and feelings of inferiority. Nolan and Tucker (1981) due to the psychosocial impact of deafness, parents worry about explaining the handicap to family and friends.

Smith, et. al. (1994) also describe such different factors that play the crucial role in the resolution process: the magnitude of the event, the family's general level of vulnerability to outside stress, perception of the seriousness of the event, and the family's regenerative abilities. Rolf, et. al. (1990) added effective social support do contribute to mental health

and some evidence that they may provide a buffering protective function against psychosocial risk. On the other hand, Hodapp (1998) entails for many families, such a child is a burden imposed by God; indeed families often feel that they have been chosen to raise the child because of their special strength and gifts.

According to Singer and Irvin (1989, cited in Batshaw and Perret, 1992), the most common response to being told that a child has a severe disability is some combination of shock, disbelief, guilt and an overwhelming feeling of loss. They suggested parents experience such emotions as: **Denial:** It is not uncommon for parents to initially deny their child's diagnosis. **Depression:** After the initial shock and denial have worn off, family members typically go through a period of depression. Many studies also indicate depression among mothers have a great impact on the development of the child and the quality of interaction. Weissman, Paykel and Klerman, (1972, in Rahel, 2005), depression frequently manifests as self-preoccupation, irritability, diminished emotional involvement, increased hostility and resentment, fatigue and helplessness. Furthermore Batshaw & Perret (1992) noted because the parents feel depressed, they tend to stay at home rather than face the requirements of social interactions. **Anger and Guilt:** At some point, many parents feel angry and search for someone or something to blame. Often the anger is directed to God or at the whole world. **Bargaining:** Some parents experience bargaining stage, during which they may turn to non conventional forms of therapy in hopes for finding a cure for their children. This stage is often filled with frustration and a sense of failure. **Acceptance:** How well individuals ultimately adjust to their child's disability depends on many factors, including marital status, support systems, and previous life experiences (Crnic, Friedrich & Greenberg, 1983). Fortunately, after a period of time, most parents feel more accepting of their child's situation (Blackher, 1984; Bogdan & Taylor, 1987; Moen & Howery, 1988).

CHAPTER THREE

RESEARCH METHOD

3.1 Research Design

Considering the nature of the present research, qualitative and quantitative research methods were followed. The data collected through qualitative approach was needed to carry out in depth investigation of the research questions. Gall et al. (1990) stated one of the main characteristics of qualitative research is its focus on the intensive study of specific instances, that is, cases or phenomena. The study explores and describes communicative interaction between hearing- mother deaf -child dyads. A quantitative approach was also used to evaluate the communication and psychological state of mind of hearing mothers of deaf children under parenting style context.

3.2 Sampling Procedure

There are four special schools for the deaf in Addis Ababa city administration. These are: - CoAction or ENAD (Ethiopia National Association for the Deaf) pre-school, Alfa, Mechanisa and VICKtory schools for the deaf. In addition five special classes/units- Akaki, Minilik II, Sibiste Negase, Yekatit 23 primary schools and Minilik II secondary schools are available in the city.

Total sample participants were selected from three schools for the deaf in Addis Ababa, namely CoAction preschool, VICKtory, and Mechanisa Schools for the deaf. A total of 38 (16 Male and 22 Female) deaf students are attended at CoAction preschool for the deaf. A total of 69 deaf students (30 Male and 39 Female) are enrolled at VICKtory School for the deaf. A total of 324 (192 hearing impaired and 132 hearing) students are learning at Mechanisa School for the deaf.

The sample of the study includes six hearing- mother deaf- child dyads and 40 hearing mothers other than mothers of those dyads. Hearing-mother deaf-child pairs (dyads) with the required age level and degree of severity were selected with the help of the administrator and teachers of VICKtory school and social workers of sign language training and social service organization at Mechanisa School. The criteria used for selecting the participants (dyads) include:-

- a) Profoundly/ severely deaf children with age range 5-9 years,
- b) deaf children's mothers who are not deaf
- c) mother's willingness to participate in the study

Hence, six hearing children were then selected based on the above criteria from two schools for the deaf i.e. Mechanisa and VICKtory School for the deaf. Successful attempts were made to match student's gender, degree of severity and equal proportion of participants from each of the schools. As a result three children from each school i.e. 2 female and 1 male from VICKtory and 2 male and 1 female from Mechanisa School and their mothers were participants of the study.

Similarly quantitative data were collected from 40 hearing mothers other than the dyads. Incidental sampling procedure was used to select the participants. Based on this, 12 mothers whose deaf children are learning in Co Action preschool, 5 mothers whose deaf children are attending in VICKtory School and 23 mothers whose children are learning in Mechanisa School participated in the study.

3.3 Instrument

The study is concerned with the communication process in hearing- mother deaf- child dyadic interaction and the method of communication used. The empirical data from six hearing-mother deaf- child pairs were collected mainly through observation of mother-child communicative interaction in their home through video recording, observation check list and interview schedule. In addition questionnaire was also employed.

A. Video recorded Observation

The video observation of communicative interaction between the dyads was based on themes of communication in the observation check list which includes communication initiated and responded by the dyads, mother's participation and competence in communicative interaction with the child, the frequency and level of understanding between the dyads, the mode of communication preferred and used and the difficulties they encounter in the process of communication. The interaction between the dyads was video recorded at the home of the dyads.

B. Observation check list

It consists of the observation themes in which video recording was conducted and analyzed. It was used to examine and describe the extent of mother-child communicative interaction between the dyads. Free interaction situations were filmed by an assistant while the researcher used an observation checklist for recording the interactions

C. Interview Schedule

Interview technique was used to gather in depth information. Semi-structured interview was prepared and carried out with those six mothers (in Amharic) and was tape recorded.

D. Questionnaire

A questionnaire was used to investigate if parenting style has a relationship with mother's communicative interaction with her deaf child and psycho-emotional feeling. It was given to 40 hearing-mothers of deaf- children who are different from the six dyads. The questionnaire includes:

- i) A section requesting about the communication process mothers have with their deaf children including the mode of communication used.
- ii) A section to know the psychological state of the mother on having a deaf child.
- iii) A section focusing on parenting style of the mother.

3.4 Validation of instruments

Before conducting the pilot study the original questionnaire, interview schedule and Observation check list items were given to 5 (five) experts, one faculty member from developmental psychology, two faculty members from measurement and evaluation and two from special needs education of the Department of Psychology, Addis Ababa University . The experts were requested to judge the relevance of the items in relation to the objectives. They were also requested to give comments on non-qualified items and provide the alternatives.

A. Pilot Test

The pilot test was carried out at Mechanisa School for the deaf. Two mother dyads were video taped at their home with the consent of the families. The dyads' free communicative interaction was video recorded for three days. Each day the shooting lasted for 15 minutes. The purpose of repeated shooting was to make the interaction as natural as possible. It was noted that as the shooting proceeded from one day to the next the natural context of communicative interaction was gained. Interview with two mothers were also conducted. Interview with one mother was conducted at the first day of observation. With the second mother it was carried out after completing the video recording of the dyads. From the results of the pilot study it was learned that it is important to conduct interview after the observation sessions are completed. This was because in-depth information was gathered after making the final observation. Therefore, it helped to refine the interview data collection plan. In addition, ten questionnaires were given to mothers. Out of them, 6 questionnaires were returned whereas two were not returned and two of them were not properly filled. Cronbach alpha was calculated to check the internal consistency and it was found to be $\alpha= 0.63$ for communication items, $\alpha= 0.92$ and $\alpha= 0.99$ for psycho-emotional feelings and parenting style items, respectively.

B. Main Study

Data for the main study were collected through questionnaire, interview and observation. . Each school wrote official letter of consent to the biological hearing mothers. Mothers were briefed about the study and asked their willingness to participate in the study.

The empirical data were based mainly on observation of the mother-child communicative interaction. Detailed observation was conducted with a sample of six hearing mother-deaf child pairs. Information was also collected through interview. After making rapport with mothers, they were asked to interact with the child as they naturally do. Video recordings of 15 minutes each in length, mother-child interaction for three days were made at the home of the dyads. The intention behind video taping a free interaction episode was to assess the communicative interaction between the dyads in its natural context. Six dyads were observed for three days 15 minute each day (6 dyads x 15 minute x 3 days)

In addition, 42 copies of the questionnaire were distributed to hearing mothers whose deaf children are attending the three schools in Addis Ababa. The questionnaire was collected from 40 hearing mothers in one of two ways. The mothers completed and returned the questionnaire they received either to the researcher himself or to the school where their child learns.

3.5 Difficulties encountered in data collection

The major problem the researcher encountered was finding willing mothers and family members to participate in the study.

The sample schools were fully cooperative in supporting the researcher to reach hearing mothers of deaf children based on the criteria. After identifying the target population, mothers were given official letters to come to the school. However, sufficient number of mothers did not come. Mothers who came to the school were briefed about the purpose of the study and asked their willingness to participate in the study. Most mothers were willing to fill only the questionnaire but not for observation and interviews. Then, with the help of social workers of sign language training and social service organization at

Mechanisa School, the researcher tried to reach mothers during home visit programs of the social workers. It was noted that not only mothers but also family members were less willing to participate in the qualitative study. The researcher assumed that due to various factors, such as most deaf children come from low economic background and mothers were involved in taking care of other children at home, managing home tasks, go to work, thinking that taking repeated video recording at their home on day to day basis may disturb their daily life, etc finding willing mothers were challenging. Moreover, the target group of deaf children with the required age range and degree of severity in the schools were few in number.

3.6 Method of data Analysis

The study followed qualitative and quantitative study techniques. For qualitative analysis, interactive model of analysis developed by Miles and Huberman (1994) was used to analyze the data secured through observation and interview. Data transcription and translation, categorization, display, reduction and verification were carried out at each step of data collection. The data secured through video recording were categorized based on themes prepared on the observation checklist and analyzed qualitatively through in depth explanation. Similarly the interview data obtained from hearing mothers (which was conducted in Amharic) were transcribed and translated into English. The transcription and translation process was carried out immediately after each session. Then the data were categorized into different themes pertaining to the research questions. After systematic organization thematically, the data were analyzed qualitatively and presented descriptively, case-by-case.

To analyze the data obtained through questionnaire, the scores on loving/warmth parenting style and demanding parenting style were computed. These variables were measured on the hearing-mothers with regard to their other normal children's context. These parenting styles were measured in their normal children's context to understand such parenting styles' relationship with communication with deaf children and mothers psychological state of mind.

Scores on both of the above variables indicated a situation where mothers were found to have similar mean values. Hence, it was decided to make exclusive groups of mothers taking scores on both loving/warmth and demanding parenting styles.

In order to categorize participants, the procedure followed was that, the total scores of each respondent on each variable, i.e. the total score of loving and demanding items were listed separately in descending order. Then, on loving category, the upper 30%(with high score) was categorized as high loving (H_L) and the bottom 30% (with low score) was categorized as Low loving (L_L) and the middle 40% was categorized as Neutral. Similarly on demanding category upper 30% (with high score), the bottom 30% (with low score), and the middle 40% of the scores were categorized as high demanding (H_D), low demanding (L_D), and Neutral respectively. Finally five groups were obtained. These were:-

Figure 1. Classification of hearing mothers in terms of parental warmth/ love and parental control/demanding dimensions.

		Love/Warmth	
		High	Low
Demand/ Controlling	High	1 Authoritative	2 Authoritarian
	Low	3 Indulgent	4 Neglectful

5 Neutral

To find whether these groups of mothers differ on communication with their deaf child and on psychological aspect Kruskal-Wallis Test was used, as alternative test for ANOVA.

CHAPTER FOUR

RESULT, PRESENTATION AND ANALYSIS

The study aimed at exploring and describing communicative interaction i.e. communication methods used and challenges between hearing-mother deaf-child dyads in Addis Ababa. This chapter presents the analysis, presentation and discussion of data secured from 6 dyads through semi-structured interview and observation (i.e. video grapy and observation check list).The findings are presented qualitatively case-by-case. The results are organized into major themes in relation with the research questions. For each dyad (cases), in-depth interview result is presented followed by observation result.

Moreover, an attempt was made to investigate whether there is significant difference among groups on communication and on psychological feelings of hearing mothers of deaf children under parenting style of their normal children's context. The categorization result yielded that among the 40 mothers, 6 of them were categorized under Authoritative parenting style, 3 of them under Authoritarian, 8 of them under Indulgent, and 1 of them under neglectful parenting style. The remaining 22 individuals were categorized as Neutrals.

Figure 2. Frequency of Mothers under the Groups

Authoritative * * * * * * N=6	Authoritarian △ △ △ N=3
Indulgent ● ● ● ● ● ● ● ● N = 8	Neglectful † N= 1
Neutral N = 22	

To work with the statistical analysis, neglectful group with only one individual and Neutrals were not considered. Therefore, statistical significant differences on dependent variables were observed using Kruskal-Wallis Test, as alternative test for ANOVA among the three groups, i.e. Authoritative, Authoritarian, Indulgent. Finally the results are discussed.

4.1 Case presentation

Case- 1

Hearing-Mother Deaf-Child Bio-data

The mother is a 24 years old housewife. She is married and has two (2) children. Her first son is deaf and the second one is normal hearing. She had attended her formal school up to grade 6. The child is a 6 year old boy attending his kindergarten education at VICKtory school for the deaf in Addis Ababa.

Age of onset, Cause and Identification

The child, according to the mother, was normal at birth. He was like other normal children. He produced voices and reacted to people's sound stimuli. When asked about the time the child's deafness occurred, the mother explained that he became sick at his 5th month of age. The result of the diagnosis showed high fever with 42⁰C and meningitis was his sickness. Afterwards the child became non- responsive to sound stimulus such as calling. As a result of the seriousness of the condition (non-responsiveness) parents became worried and suspected the child's hearing ability at around the age of 2. Then the child was taken to hospital and the family was told that the child is deaf.

When asked whether the mother had prior knowledge or experience about deafness or not, she replied none, and explained that this was the main reason for not identifying the problem and intervening early.

Communication methods used

The child acquired deafness during pre-lingual period. So he has no memory of spoken language. Regarding how the mother and her deaf child communicates, the mother replied that the dyads communicate through non-verbal means like gestures, movement of hand and body parts- indicating, pointing, showing, doing in combination with spoken language. The child used sign language as his mode of communication. The mother indicated she couldn't use sign language. It is the most difficult way of communication

method for her. The mother ascertained that the methods of communication used between the dyads are not efficient. Most of the time, they face problem in understanding each other and frequently have a problem during the process. The mother reported that;

"I get difficulty in communicating with my child on some personal issues and expressing emotional feelings. For example, I usually worry for my child when he is at school, how he did in school tasks, what happened to him etc. but due to the communication barrier, I fail to do so and make interpersonal communication."

During the dyads communication process most of the times the mother preferred to use spoken or verbal language in combination with non-verbal communication modalities. However, the mother believes that her child face difficulty in understanding the message conveyed to him because of the mismatch in the preferred mode of communication by the mother-child dyad.

The mother expresses her emotions, feelings, wishes etc to the child through a combination of verbal and non-verbal means (home signs, gestures, facial expression etc). Since the mother does not understand sign language, the child's expression is also limited on non-verbal modalities. When ever the mother fails to understand or misunderstand the child becomes angry.

Impact of deafness on Hearing-Mother Deaf- Child Communication.

The mother stressed that communicating with her deaf child is very difficult. Concerning the areas of difficulty she indicated that among other things, in understanding the child's needs, feelings and interests, in communicating her feelings to the child, in helping the child in school tasks and assignments were highlighted. *"For instance, the family does not exactly know when the child is in some kind of pain."* the mother said. As a result of communication barrier they face a difficulty to understand what is wrong with the child. *"Always the family was confused in preparing the type of food for him. We just prepare and give him whether he liked it or not."* she added. Even though, the mother and other family members have a positive attitude towards the child, the communication barrier

makes it difficult for them to develop mutual understanding and optimal communicative interaction.

With regard to the impact of deafness on dyadic communicative interaction, the mother ascertained that the presence of deafness on a child causes an adverse effect not only in communicative interaction but also the quality of mother child dyadic interaction, and the interaction the child has with other family members. Further the mother reported that unquestionably being a mother of and mothering a deaf child is very challenging especially for mothers who do not speak the child's language, signing.

Despite the challenges, the mother considers her child as a special child and gives a lot of love and care even more than his younger brother. In addition she pointed out that she encouraged the child to participate in communicative interaction with her as well as with members of the family. Again, apart from the difficulty the child's deafness imposes on the family in general and dyadic communicative interaction in particular, the mother indicated that she and the family accepted the condition and trying to live happily with the child. To reach at this stage on the one hand, the mother said "*it is the will of God I can do anything*" on the other hand, she acknowledge the child's attendance in the school made its contribution. But before coming to these terms, after realizing that the child has a problem of hearing, she felt very bad and worried, cried, confused and she thought the future is bleak to the child and to the family.

As a consequence of the challenges and the effects of the child's deafness on the communication interaction between the dyads and with in the family, parents decided to attend sign language training and learn how to communicate with their child. In addition to this the child is receiving appropriate education. The mother says with all this she believes and hopeful to be able to communicate each other in the future.

When asked whether the presence of a deaf child has brought any effect on the marriage and social life, the mother reported that none. Rather she has a good marriage and

satisfactory social relationship. The family members also give support to the mother and take part in communication with the deaf child though it is difficult.

Early intervention

Regarding the provision of help/ assistance by the mother or the family for the child to learn communication skill as early as the condition occurred; the mother indicated there has been no help in this area because the entire family didn't have the information and skills to do that. Therefore, they didn't know what to do. Rather the mother said "*we were scared and confused after realizing the child's deafness.*" In addition the family didn't receive any sign language and communication skill training support. The cumulative effect of these factors blocks parents to take measure to improve the communication skill of the child as well as the family which would facilitate positive communicative interaction between the dyads.

Generally, the mother indicated even though their communicative interaction becomes better after the child starts school in this academic year, still there are problems in understanding each other on various issues. However, she explained she is trying hard to manage the family life by accepting the child's defenses and providing possible conducive environment. She also hopes the future will be even better because she and her husband plan to attend sign language training. "*I am longing the day we understand each other on every aspect of his life.*" she said.

Observation Result: Case 1

1. Effects of deafness on Hearing-mother Deaf child communicative interaction

The dyadic communicative interaction was video taped for three days (3 times) 15 minutes each day. Successive filming was used to observe the natural communicative interaction between the mother- child dyads.

1.1 Communication methods used by the dyads

From the episodes, it was observed that the mother does not use sign language to communicate with her child. Instead she uses verbal language and a combination of hand and body movement, facial expression etc. The home environment is verbal. No one among the family members can sign. Therefore, the child lacks sign language stimulation.

The mother initiated communication sometimes and responds to communications initiated by the child. However, there was less shared attention between the dyads. Communication was carried out using non-verbal language, which includes indicating, showing, pointing, doing by using hand and body movement. Whenever communication exists, usually it focuses on the present and visual objects.

The mother prefers to use verbal language and she needs the child to understand verbal language. The child's preferred mode of communication is sign language. From the successive observation a mismatch of communication modality was noted (observed). As a result, most of the time mother-child dyadic communicative interaction had occurred in non-verbal communications such as facial expression, physical contact, gestures-indicating/pointing objects, showing or doing activities. Therefore, their communication areas were on a very limited issue, such as asking the need for food, drink, etc.

1.2 communication challenges of the dyads

It was noted from the observations that mother-child dyads were not engaged in expansion of ideas, explanations, story telling, discussions, etc. Moreover, mother's competence in motivating and encouraging to participate in family communicative interaction, in assisting the child in school tasks and assignments, in helping the child to communicate, in spending more time in shared attention with the child and guiding child's activities more frequently were not observed.

The child initiates communication rarely with the mother. Responding communication initiated by the mother was also rare. The child uses sign language. Communication modality mismatch existed. Not only that but also the dyads had less frequent

communicative interaction. When communication existed they both do not sustain conversation.

It was noted from the observation, due to the mismatch in communication modality. Understanding in different issues between the dyads was difficult. The mother hardly understands the child's communication. When misunderstanding occurs, the mother required the child to repeat the message. During such conditions and when the child's needs were not met or whenever he was not understood by the mother and other family members. When there was a challenge in understanding the needs of a child and communication between the dyads, the child responded with dissatisfaction through shouting, crying, beating, etc. This condition created strain on the mother, which in turn affected the quality of communicative, interactive between the dyads. According to the observations conducted, there was no action or help given to the child to regulate his behavior and promote positive communication.

In general, even though the mother loves, give time and affection to the child, due to the communicative barriers, from the observation, the mother-child dyads seem to have less emotional attachment and less quality communicative interaction

Case 2

Hearing-Mother Deaf-Child Bio-data

The mother, 39 is a daily laborer and has two daughters. She got divorced after the birth of a deaf child. She complete her secondary education up to grade 11. The 2nd child is deaf. She, 6 lost her hearing ability after birth. She is learning at VICKtory School for the deaf in Addis Ababa.

Age of onset, Cause and Identification

Either the time of child's deafness occurrence or what causes it is not exactly known. Regarding the cause the mother believes that it was the will of God. The mother indicated that the child was active like other children at birth and in her early ages, she used to

produce some verbal sounds and utter few words. But when she got older spoken language becomes difficult and the child's deafness prevailed.

The mother identified the child's deafness. For verbal communication or sound stimulus initiated by the mother and other family members like calling, ordering etc, the child failed to give response right away. When such conditions happened regularly, the mother suspected that the child had a problem of hearing. However, the child was not taken to medical examination and diagnosis. The mother indicated this was so because she had no prior knowledge and information about the possible causes and effects of deafness. Due to this reason the mother thought the condition was temporary or it was a developmental delay in speaking which will become normal and better as the child grows. The interview result revealed lack of knowledge/ignorance and cultural myth and misconceptions affect early identification and the development of the child's communication skill.

Communication methods used

The child began her education at VICKtory School for the deaf in Addis Ababa in September 2006. Before the child attended the school, communicative interaction between the dyads was very difficult and complicated. Regarding this the mother indicated, *"Until recently i.e. the beginning of this academic year things and communication between us was extremely difficult. I couldn't understand what the child needs and I couldn't pass my feelings to her."* In the school the child is exposed to different mode of communication mainly sign language. Since then not only dyadic communicative interactions became better but also the child became much happier than before. The mother is not signing. Therefore, the dyads communicative interaction was carried out mainly through Non verbal communication modalities which include facial expression, gestures, and the movement of hand and body parts- indicating / pointing an object or people.

Moreover the child benefits from lip reading. The interview result indicated that even though generally there is progress in communicative interaction, still there is a challenge.

The communication methods used by the mother were not efficient. Related to this, the mother pointed out

“We still do not understand fully. I have a difficulty in communicating on various issues other than limited and present things. Furthermore understanding her needs and feelings continue to be challenging.”

Signing is the most difficult way/ mode of communication for the mother. The inability to sign is a barrier between the dyads communication and it interfered with the frequency of communication. Apart from the difficulty/ challenge deafness imposes on the dyads communicative interaction, they have a positive and loving relationship. The observation results of the dyads also indicated they have physical and eye contact.

The mother helped the child in her school tasks and assignments. During their discussion communication was conducted through non-verbal modalities mainly writing, showing, and facial expression etc. The observation result also indicated that the mother participated in child's school task.

The mother preferred to use spoken/ verbal language and she needs the child to do the same. This is because it is the easiest way for the mother and the mother believes the environment outside school is verbal. Therefore, the mother needs her child to deal with in the verbal environment effectively at least by reading people's lips. In contrast the child preferred to use sign language to communicate. The child rarely understands the preferred mode of the mother. The child to benefit from lip reading the mother speaks in slow rhythm. Therefore, there is a mismatch in communication modality. Consequently, the mother-child communicative interaction is carried out mainly by non-verbal communication modalities which help to communicate only on visual and present issues.

When communicating with non-verbal modes, most of the times, repetition of the message is required. At times the message is not understood the child looked the mother quietly or asked to repeat what has been tried to communicate. The result indicated the methods used for communication were not efficient to process the dyads intention to each other.

Impacts of deafness on Hearing-Mother Deaf-Child Communication

The interview result ascertained that deafness has an adverse impact on the communication interaction between a hearing mother and deaf child. It is not only on dyadic interaction, but also on the interaction with other family members and outside environment.

“Most of time we don't understand each others feelings. For instance the child may require something, which I couldn't do or fulfill for her; I face difficulty in making her to understand why. During such moments I use force and become angry on her or punish her.” the mother explained.

Nevertheless, after the child started learning language and communication skill at school, communicative interaction became better and better. Moreover the awareness of the impact of deafness by the mother drives her to encourage her child to participate in communicative interaction and social interrelationship. This was also evident during the observation episodes. It suggests that knowledge and awareness is the primary reason for the improvement on communication between the dyads, at least on basic issues and needs.

Regarding the attitude towards the child, the mother replied that *“my daughter is precious to me, I get her during the difficult times of my life and we passed difficult time together and I love her too much and I will do what ever it takes me to do to make the child independent and efficient in this world when I am gone.”* The mother indicated even more love is given to the child as compared with her big hearing sister. Some times the big sister got jealous.

Considering all the difficulties, being a mother of a deaf child is challenging. However, the mother accepted her child's deafness. She believes it is the will of God that she can do nothing about it. But it was not easy for the mother to immediately accept when coming to know her daughter was deaf. She undergoes different psychological feelings and emotional disturbances. Above all, according to the mother, the most frustrating and difficult was finding appropriate school placement. Imagining her child with out education was irritating to the mother. In fact until VICKtory School for the deaf was found, things were very complicated and bleak. The mother used to cry for her child's

future. Then after words things started to become pleasant. Instead of feeling helplessness, she started to dream hopeful future. The reason for this, according to the mother, the child started learning basic skills and abilities, communication skills that will help her to function in the child life. Furthermore she thinks things and communicative interaction between the dyads will be better as long as the child continue to learn, grow and as the mother and other hearing daughter planned to take sign language training. The mother believes it requires great effort but with the help of God things will be much better.

Regarding the marriage status the mother indicates that her marriage was not peaceful. Her husband was an alcoholic and had arguments and disagreements. The deafness of the child made it worse. He started hitting and insulting her, such as “Yedenkoro Enat” and “Yeduda Enat” meaning a mother of deaf child. Finally, she got divorced and he left home. He never came back and provides no help to the child. In relation to the social life the mother had before and after the birth of a deaf child, the mother indicates she has good and satisfactory relationship. However, sometimes peoples attitude and opinion towards deafness and things they speak about my child makes me sad. One day a woman said to her “*You are so lucky that you have a deaf child because you can use her for begging.*” Such expressions make the mother irritated. The mother indicated apart from the challenges, she accepted the child’s disability and tries hard to manage the family life.

Early Intervention

Rather than taking the child to medical centers for diagnosis and help, the mother preferred searching for educational intervention alternatives. Based on this the child was taken to the nearby kindergarten. But, the environment and learning was not conducive to foster future success. Finally the child attended VICKtory School for the deaf, which is a special school in Addis Ababa. Except searching for appropriate school placement for the child, no measures were taken to improve the communication skill neither the child nor the mother as early as the problem has happened. Therefore, the child lacks early home intervention. Regarding this the mother said

"This was so because I didn't know all about deafness and its impact on communication and I didn't know what to do. If I had the awareness, things would have been different and much better now."

As a consequence until the child started learning the family didn't receive any kind of support including early diagnosis, sign language and communication skill training. At the moment a religious organization (unspecified protestant organization) provides clothing and educational materials support to the child. Further more, VICKtory School for the deaf offered a chance to the mother and the family members to attend sign language training. The mother indicated that the school called her previously but she couldn't manage to attend the training. Among other factors, she is divorced and she is the head of the family, who makes money for the family. So she had no time to attend the training.

Observation Result: Case 2

1. Effects of deafness on Hearing-mother Deaf-child communicative interaction.

Communicative interaction of hearing-mother deaf-child dyads, methods of communication used and the difficulties they encounter during their interaction was the intent of the observation. The communication process was videotaped for three days, 15' in length each day at the home of the dyads. Along with video recording, observation checklist was used.

1.1 Communication methods of the dyads

During successive observations mother child communicative interaction and information exchanges were occurred in most of the time in non- verbal communication. The mother is hearing and was not using sign language. When communicating with the child, the mother used non verbal communicative modalities such as gestures, body and hand movement which are indicating, showing, pointing an object, facial expression or doing an action together with spoken language. When using verbal mode of communication with non-verbal ones, the mother spoke slowly so that the child could read lips and understand the message.

It was observed that besides the communication barriers, the dyads have a loving and positive interaction. The mother frequently initiated communication with the child and responded to communication emitted by the child. The child initiated communication, most of the time, when stimulated by the mother but responded always. From repeated observations, the mother was encouraging the child to use different mode of communication, including verbal language to express her needs and feelings. The mother was providing help and assistance for the child in school tasks and assignments.

The child's preferred mode of communication is sign language and the mother's preferred mode of communication is verbal language. Communication method mismatch was noticed. For these reason a combination of verbal and non-verbal methods of communication which includes pointing, indicating, showing (body and hand movement), and facial expression were the ways mother tired to interact with her deaf child. The child perceives the message through lip reading and understands concrete and observable issues visually.

1.2 Communication Challenges of the dyads

Due to the mismatch of communication modality between the dyads mostly they used non-verbal language to express their needs or intentions. It was observed that the mother had higher need to communicate with her child but due to the communicative barrier i.e. the inability of the mother to sign made it difficult to communicate in every sphere (aspect) of the child's life.

They both initiated eye and physical contact; respond to communications initiated and the mother tried to spend more time in shared attention with her child. Due to the mismatch in communication modality, the dyads were not responding fully to each other's initiation.

Regarding frequency and quality of communicative interactive between the dyads, repeated observations indicated that the dyads have positive and loving interaction, and communicate frequently. However, their communication centers on observable and objective issues. During communication, even though the dyads understood each other on

with high fever. In addition to this from time to time a sort of paralysis on the limbs which interfered with the child's motorical movement of hands and legs was followed.

The mother's concern was on the paralysis of the child. She didn't know that the child had acquired a hearing problem. Rather she was worried about the inability of the child's limb to make gross and fine movement. Three or four days later after vaccination, the child's father noticed that the child was also suffering from a hearing problem. Whenever the father started talking with her, the child was not responsive to his sound stimuli, as she had done it before the vaccination parents tried medical help and succeeded with the problem of paralysis but not with the deafness.

Before the child becomes deaf the mother had the experience of observing deaf people around Mechansia area. She used to think the problem can only be occurred congenitally, i.e. she had no idea/ information on the occurrence of the condition after birth at any time. Now she recognized that it is not so.

Communication methods used

When asked the ways the mother communicates with the child, she responded that after the child became deaf communication between them was troublesome. There was no way they understood each other and the child's feelings even the food and drink she needs. The child attended her education at VICKtory School for the deaf in this academic year (2006/2007). She is learning sign language and communication skill at the school. The mother ascertained that after the child started schooling (learning), communication becomes better. At home she showed the mother her language. Then the mother tried to use it to communicate with her. So that, the mother said "*now we understand at least on basic needs such as the kind of food, drink she needs, when she smells good or bad etc.*"

Even though the mother try to use a form of "sign" language to communicate with her child, the mother point out that it is not enough to express internal feelings, emotions, wishes etc. As s result, the mother use non-verbal modalities such as gestures, facial expression, body and eye contact etc. Similarly the child used body contact, hugging,

kissing, and sign language to express her feelings, interests, desires etc. But, whenever the mother failed to understand her needs, the child becomes angry and cries. We can infer that the communication methods used in their dyadic interaction are not efficient. The mother noted that they still encounter communication challenges frequently on higher issues. At the moment the modalities used helps them to understand each other only on basic needs. Beyond such needs as food, drink, cloth, play etc, understanding complex words signed by the child like father, mother and others is challenging. Moreover, the child communicates better with her mother only. With the father it is still difficult. Surely the mother believes if she or family members learn sign language, things will be much better. '*Sign language is the most difficult way of communication to me.*' the mother said.

Non-verbal communication is the mother's preferred mode of communication which includes very little finger spelling, gestures, eye and body contact etc. The mother indicated that the child understands her preferred mode of communication less often. She also noted that misunderstandings occur during their communication. At that time repetition of the message is carried out.

Impact of deafness on Hearing-Mother Deaf-Child Communication

The mother was asked on the extent of difficulty in communicating with her deaf child. She sadly, replied that it is extremely difficult. Understanding clearly the child's thoughts, interests, feelings, conveying one's attitude, feelings, questions etc, providing parental help and assistance in school and home tasks and more others are the areas of difficulty indicated by the mother. With respect to giving help/assistance to the child in school tasks and assignments, the mother indicated it is little. But she makes frequent contact with the child's teachers on her achievement. They told the mother that the child is fast in learning sign language. Writing is the area of difficulty for the child. So the mother sometimes gives help in that learning domain.

The primary effect of deafness is on language and communication skill of the child. When asked whether the child's deafness has an impact on the communicative interaction

between them, the mother indicated absolutely it has an adverse effect. But, the mother ascertained that communication challenges will no longer exist if any mother or family members learn sign language. Moreover, she underlined that the child's deafness did not bring any effect on the dyadic emotional interaction. The observation result also shows they have positive and loving relationship apart from the communication problem.

The mother expressed her child as loving, clever and fast. Compared with other children she showed affection and love to the mother. Nevertheless the mother underlined that mothering a deaf child is very difficult and challenging. She said '*my child's problem occurred later after birth. I didn't have early experience/information to handle the situation. If it was occurred congenitally, probably things would have been different.*'

Normally the mother undergoes different psychological states when learned her child was deaf. The mother expressed her feelings as follows:

"Before my child becomes deaf, when I see deaf children around Mechanisa area where I used to work, I feel sad for them. When the condition occurred to my child I felt confused and sad. I was worried how I am going to handle the situation and how I am going to send her school. What would I tell peoples regarding the child's deafness because I felt shame. Therefore, I decided to keep the child home. However, my sister advised me to send the child school and she took her to VICKtory School for the deaf. The teachers and school principals shared me their experiences and advised me."

To the mother the most frustrating was and still is the incident (cause) of the child's deafness. The presence of deaf child doesn't bring any effect on the marriage and social life of the mother. The mother receives support from the rest of the family. In addition other family members especially her siblings participate in communication and play activities. The mother and others give love and warmth to the deaf child. The mother indicated with all the difficulties now she comes to terms with the disability and tries to manage the family life. She suggested that in the future communication problem would be solved because the child is learning appropriate language and communication skill. In addition, the mother and other family members have a plan to learn sign language and become competent in communicating with the child.

Early Intervention

Regarding the provision of early communication skill intervention, the mother replied that after recognizing the child's deafness, the family effort was taking the child to different medical centers for treatment searching for cure to the problem rather than giving optimal communicative environment at home. Furthermore, the family did not receive any sign language and communication skill training from any institution. Therefore, due to lack of access and prior knowledge/ experience about deafness, the mother didn't take any measure to improve the communication skill of either her or the child's. The mother indicated she felt confused and didn't know what to do. The school advised parents and family members to attend sign language training.

Observation Result: Case 3

1. Effects of deafness on Hearing-mother Deaf child communicative interaction

The dyadic free interaction was video taped at their home. The communicative interaction was filmed for three days. Each day 15' of episodes was filmed. The impact of deafness on communication between mother-child pairs, communication modalities used and problems occurred during the interaction was the focus of attention. These behaviors were also recorded using observation checklist.

1.1 Communication methods of the dyads

The mother used a form of "sign" language, which is not sufficient to engage in explanations, expansion of ideas, and expression of feelings and attitudes with the child. The child used sign language. As a consequence of the inability of the mother to perceive signing, mother-child communicative interaction and information exchange were predominantly occurred only in non-verbal communication modalities which includes gesture, hand and body movement, facial expression, very limited finger spelling. The mother does not use verbal language. When used, it was with very low tone.

It was observed in all sessions of video recording that the mother tried to communicate frequently with the child, responded to few communications initiated by the child. The child was encouraged some times forced to participate in communicative interactive with the mother. However, encouraging the child to use different mode of communication was not present.

1.2 Communication challenges of the dyads

Mother-child communicative interaction most of the time were initiated by the mother. The child tendency to initiate communication was rare. The child responded to communication when stimulated by the mother. Frequency of the child's communication initiated by the child was low. In addition, the child does not sustained communication and when understanding was difficult, frequent breaks in communication by the child was observed.

It was noted from the observation using only non-verbal communication was not sufficient for the child to understand information transferred from the mother. When understanding was difficult the child frequently cut off conversation. More over, in their communication the dyads repeated the message when both failed to understand a given message. Even though, the use of inadequate 'sign' language by the mother helped them to understand on basic issues and needs. Expressing feelings and ideas fully were not possible. Rather, communication was limited on present and observable issues. In addition to this, in all the sessions, it was noticed that most communication issues were similar. Using such communicative methods to express and explain variety of issues was difficult.

Little help/assistance was given in school tasks and assignments. During the observation sessions the child was not involved in family conversation. The dyads usually initiated eye and physical contact. But responding fully to each others initiation was challenging. Moreover, the dyads showed little shared attention between them. The dyads had loving and affectionate relationship. They express their feelings through hugging, holding each other, kissing etc. They sometimes engaged in play activities.

During their communication, misunderstandings and problems in understanding occurred. When her needs or requests were not met due to misunderstanding by the mother, the child cutoff communication.

Generally, the dyads had good quality of interactive and emotional attachment. But the inability to sign on the part of the mother interfered with the quality of communicative interaction.

Case 4

Hearing-Mother Deaf-Child Bio-data

The mother, 42 is married and has 4 children (2 female and 2 male). She is a housewife illiterate woman. The child, 9 is last born congenitally deaf i.e. the deafness occurred at birth. He is attending his primary education at Mechanisa School for the deaf. He is a grade 2 student.

Age of onset, Cause and identification

The child is born deaf. The mother and other family members were not aware of the child's deafness. Even though the mother recognized he was not active like other children, she was thinking (expecting) that he will be verbal and start speaking as he got older. Unlikely the condition remained the same. Until he reached three years of age no one among the family knew that the child was deaf. After this all times the mother was the one who identified first the child's deafness. Regarding how she identified the condition, she replied that:

"One day the father is at work and other children were at school. He and me only were at home. I went to the toilet. He searched me at home and he couldn't find me. Then he started crying. When I come back he was standing and crying in the verandah. Then I called him to ask him what was happening to him. But there was no response and he continues crying. I called him again and again. No response was there at all. Then I get shocked and went to him and touch him at the back. When he saw me he got shocked and looked at me. Then I know some thing was wrong with the child's hearing ability."

Soon after, the mother took him to black lion hospital and private clinics. She was told that the child is deaf. The cause of the child's deafness is not known.

The mother does not know the causes and impact of deafness on communication. The mother's ignorance led her not to identify her child's deafness and hinders to get early treatment (diagnosis), early communication intervention etc.

Communication Methods Used

Before the child entered school communication between the dyads was carried out by using non- verbal communication modalities which, includes showing pointing, indication and doing and etc. For example, when the child needs food he told her that he needs something to eat by doing the act of eating. *"But, whenever I couldn't understand him on other issues, which the mother said frequently, he gets angry."* Communicating with the child on different issues is often difficult for the mother. The dyads expresses their feelings emotions etc through non verbal modalities like using hand and body movement, facial express, gestures etc...Therefore, the mode of communication used was not efficient.

When the child attended in Mechanisa School for the deaf, he learned sign language. His hearing siblings are also attending the same school. They started learning sign language in the school. So that communication with them became easier. But with the mother, communication continues being challenging. The mother replied that *'understanding him is still difficult'*. For the mother signing is the most difficult way of communication. Due to that communicative interaction with the child is limited. Of course the presence of signing brother and sisters at home helps the child to communicate with the family.

When communicating with the child, the mother prefers to use non-verbal modes of communication (indicating, showing, doing facial expression etc) in combination with verbal language. Most of the time, there is a communication gap between them. The child fails to understand the message communicated through mother's preferred mode of communication. Sometimes he is benefited through lip reading. Whenever there is lack of

understanding between the dyads communicative interaction, the child responds angrily. The child needs all members of the family to sign including both parents in order to understand him better.

Impact of deafness on Hearing-Mother Deaf-Child Communication

Communication with a deaf child is very difficult (challenging) unless signing is possible. The mother also indicated that communicating with her child is extremely difficult because there is a difference in communication methods. Communication centers on a very limited issues. In relation to the areas of difficulties, the mother pointed out that it is difficult in understanding the child's needs, feelings and interests, in communicating feelings to the child, it is also difficult in guiding, giving advice or punish for his wrong deeds. She said, "*as a mother I can't help and take quick measures to manage (correct mistakes) and regulate his behavior.*" Therefore, the mother communicates every thing through his sisters and a brother.

Regarding the impact of deafness on communicative interaction between the dyads, the mother asserted "*definitely it has an adverse effect especially if the mother and other members of the family do not sign. If the mother and other family members do not speak with his language, how can they understand each other?*"

When there is a mismatch in the communication modality between the mother and the child, the impact it has on communicative interaction is huge. In fact, the mother takes care of the child and encourages his siblings to participate in communicative interaction. His sisters can be said they are his world. The child does every thing with them. He expresses his feelings and needs to them. They help him is communicating with his mother and in doing his school tasks and assignments. They serve as a bridge in the dyads communicative interaction.

When expressing the child, the mother indicated that he is special. The mother and the rest of the family love the child. He is described as very active, aware of his surrounding; he gets a ngrly when peoples d o n o t u n d e r s t a n d h i m. H e n e e d s q u a l i t y a n d g o o d t h i n g s

though the family's economic problem limits to full fill what he needs. He doesn't want to be punished by any one (parents, teachers etc). Instead he believes, people should make him to understand because if told he accepts. Generally the child is expressed as unique and loved.

According to the mother being a mother of a deaf child is not only difficult but it is also very sad, especially when there is a communication barrier, when it is difficult to communicate on every aspect of the child's life as the mother do with other children, when understanding with the child is a challenge. Apart from the difficulty imposed by deafness on communication, the attitude of people makes it ever more difficult.

The mother passed through different psychological experiences when coming to know the child had a problem of hearing. She stated

"I cried so much. I'll never forget that day. But it is the will of God. I can do nothing."

Then the mother worked hard to get help and cure for him. She took him different medical centers. She refused the option of surgery and took him to holy water. Moreover the negative attitudes and myth of people towards deafness causes the mother to undergo different psychological feelings. Regarding this the mother said *"I get upset and feel sad when people said such words as how is your sick son, how is your "denkoro legish" or "dudaw legish" that is to mean your deaf son.*

Regarding the future, the mother indicated learning to sign was difficult for her. As the child will continue learning and grow up, so that he may read lips better. In addition, communication in the future will be better as a result of this and so long as his siblings can sign.

According to the mother the presence of a deaf child does not bring any effect on the marriage and social life. Members of the family especially the child's siblings participate in communicative interaction because they speak his language, signing. The child also plays with other children, but the mother said, *"I get surprised how he plays with other children."* The mother says she take him in social gatherings such as wedding, birth day

party etc. Initially accepting the child's deafness was very hard by parents. Now they come to terms in coping with the disability. Among many factors, the child's quick environmental awareness and understanding and the ability of sign language by siblings contributes for parents to cop with and manage the family life. The mother receives great help from the family particularly sign language interpretation from her daughters and son which is vital for understanding the child's every sphere of life.

Early Intervention

As indicated the child's deafness is recognized when he was 3 years old. The child was not given (did not receive) early communication skill intervention at home. Moreover, no measure was taken to enhance the communication skill of the child after the problem was diagnosed. The mother indicated this was so because they didn't know what to do. She said "*Late alone giving early intervention on communication skill, to your surprise, he went to school by him self following his sisters.*" Parents returned him three times. Finally, they let him to attend school.

In addition, prior to the start of schooling the family did not receive any support in sign language and communication skill training etc. The school he attended (Mechanisa School for the deaf) has a social service and sign language training center. The mother was called upon and advised to start sign language training. The mother attended the course a couple of times but she couldn't finish it because she replied, "*I am illiterate and it was difficult for me to understand.*" Therefore, instead she sent her daughter and son to attend the training.

Observation Result: Case 4

1. Effects of deafness on Hearing-mother Deaf child communicative interaction

Modalities of communication used and difficulties (challenges) hearing-mother deaf-child dyads experience during their communicative interaction were video taped at their home for three days. Each day 15 minutes episodes of free interaction were recorded.

1.1 Communication methods of the dyads

The child lives with his father, mother, two sisters and one brother. The parents do not sign at all but the deaf child and his siblings can. The child communicates fluently with his siblings using sign language. It is observed that the mother rarely initiated communication to deaf child and hardly responded to communication initiated by the child. During communication the mother used spoken language together with non-verbal communicative modalities i.e. hand and body movement, facial expression etc where as the child used sign language. The child benefited from lip reading. Great extent of communication modality mismatch between the dyads was observed. Mother's communication using non-verbal modalities centers on visual objects and limited issues i.e. pointing indicating, showing an object, people etc. The quality and frequency of dyad's communicative interaction is low.

1.2 Communication challenges of the dyads

Initiating and responding to communication between the dyads occurred rarely. The quality of interaction was poor. From one episode to the next, the non-communicative interaction between the mother-child pairs increased. Therefore, even when communication exists, the dyads did not sustain communication. Due to the gap in communication, the quality of communication interaction between the dyads was poor. The mother did not neither encourages the child to communicate using different mode of communication with her nor assisted in his school tasks and assignments. The interview result showed siblings assisted him in school tasks and assignments. It was observed that the mother lacked competence in helping the child to communicate

However, the child was very active and happy in the family. This was because his two hearing sisters and brother knew sign language and they communicate with the child efficiently. During the observation it was noted that in most of the time the child communicates with his siblings rather than his parents. Siblings learned sign language at Mechanisa School for the deaf.

Usually the dyads communicated through siblings especially in areas other than visual objects and concrete issues. They were the channel (bridge) of communication between the dyads. Sustained communicative interaction existed between the dyads so long as the siblings were there (available). The mother initiated and responded to communication through them. Generally it was observed that the child frequently communicated and sustained communication with his siblings using sign language but rarely with his parents. Moreover, in each episode of observation, it was noted that the dyads showed very few initiation of communication, eye and physical contact. The mother was not responding fully to few communications initiated by the child. In addition, it was also observed that the child had no experience of shared attention with the parents. As a result of communication challenge the mother were not spending more time communicating with her child and guiding child's activities frequently. All these aspects of communicative interaction were occurred with his siblings through sign language.

The child engaged in play and communicative activities with his sisters and expressed his wishes, needs, and internal feelings through them. From the successive observation it was understood that the mother is passive participant in communicative interaction between the dyads. Parent-child information exchange was mainly conducted thorough his sisters. This indicated that the presence of family member, who can speak deaf language, signing, is a conducive and stimulant environment for deaf child to his learning, development and adjustment to the requirements of life. In such family environment, a deaf child gets an optimal linguistic input.

Case 5

Hearing-Mother Deaf-Child Bio-data

The mother, 46 is widowed and illiterate. She is a daily laborer with monthly income of 90-120 birr. She lives with her 4 children. Her 4th daughter is deaf.

The child is 6 years old pre-lingual deaf who lost her hearing ability before the age of 3. She lives with her mother, two brothers and one sister. She attended her primary education at Mechanisa School for the deaf in Addis Ababa.

Age of onset, Cause and identification

The child is pre-lingual deaf. The mother indicated that the child's deafness occurred at 2 years and 3 months of age. Regarding the cause she has doubts on the exact cause of it. But she indicated that the child became sick around 2 years of age. The diagnosis results showed that the child was attacked by diharria and had high fever. Later on a form of paralysis occurred starting from the child's lower limb (Legs) and spread to upper body parts (mainly the upper limbs). It restricted the child to move easily. A hearing problem was also observed. Then she was taken to hospital for treatment. But the result gained was little. Therefore, the mother took the child to holly water. Based on the mother's report, the child recovered from the paralysis after having continues holly water but not from the hearing problem.

Like most participants understudy, the mother identified her child is having a problem with hearing because the child showed non-responsive behavior for verbal linguistic input. Moreover, the mother recognized that the speech produced was abnormal and had no meaning. The mother explained that all these occurred after the child was sick. But, earlier she was normal and there were fluent production of speech and used to responded to mothers verbal and/or non-verbal communication.

Communication methods used

Regarding the ways the dyads communicate, the mother said she uses verbal means in combination with either home sign or "sign" language. She indicated the extent the child benefits from lip reading is not much. In addition, signing is the difficult way of communication for her though she managed to attend sign language training. *"I started the training recently and since I am illiterate I am facing a problem in understanding and remembering the signs."* said the mother.

Therefore, most mother-child communicative interaction, expression of feelings attitudes, etc. are conducted through non-verbal communication modalities such as gestures, hand and body movements- showing, indicating, acting, etc., facial expressions and home signs. The mother was asked whether the used modes of communication are efficient or not, she indicated that before the child attended school, communication hardly existed. But afterwards communication between the dyads became better. However, she underlined that the methods that are used for communication are not efficient to interact, express, explain the feelings, do's and don't do's, the good and the bad etc. Most communication centers on basic needs (i.e. food, clothing, drink, sleep etc) of the child because these can be expressed through home signs and gestures. The mother pointed out that in terms of communicating on issues that are far from the visual and present events, they frequently have a problem.

Both the interview and observation result showed that the dyads have low quality of communicative interaction. The problem intensified during their way to and from school. The mother said due to communication barrier explaining and discussing different issues around the environment is difficult. The child also exhibits hyperactive behavior and emotional instability. The mother is confused and unhappy with the child's behavior. She believes this behavior occurs when the communication needs are not met and understanding is impossible. The child suddenly yells and shouts loudly. The child also sometimes refused to respond mother's communication.

However, the mother is not happy with the way things are going in learning sign language. She being illiterate is interfering with the acquisition of sign language. *"I wish I could understand better. It had been almost two months since I attended the training but still I use very few signs."* she said. But she also noted that communication is better than before. Earlier she used to communicate, if at all there is communication, verbally and home signs. Now she adds "sign" language on verbal and non-verbal modalities and the child understanding also became better. Therefore, previously the mother's preferred mode was verbal. She also wanted her child to speak. But the child didn't understand it.

She even rejected the mother's verbal input. She said "*it is hard for me to say there was communication at all. That is why I managed to attend the training.*" The training helps the mother at least in developing awareness about deafness and its impact. When asked whether she had early experience/ information regarding deafness and its impact on communication, she replied that not at all.

The mother's effort in encouraging the child to participate in communicative interaction with her and other members of the family is little. She indicated that other family members communicate with the child even though not frequently and on different issues. The child and her older brother communicate hardly.

Impact of deafness on Hearing-mother deaf-child communication

The mother ascertained that communicating with deaf child is extremely difficult especially when the mother can not sign. She also indicated that the presence of low economic status complicated the situation.

"I blame God for my child's deafness, adding problem on the troubles I already have in my life, and I get depressed when I fail to communicate as other children." explained the mother.

Regarding the areas of difficulty she stressed reciprocal communication, understanding of ideas, thoughts, feelings and overall mother-child relationships.

When asked how the mother expressed her child, she indicated that the child is last born. Due to the problem the mother tends to give more love to the deaf child than others. But, she stressed the child's behavior (which is hyperactive) create problems between the dyads. From the observation result it was also noted that the child showed unstable behavior. She exhibits this behavior when her needs are not met and whenever the mother forced her to engage in topics other than her focus of attention. The inability to communicate efficiently interferes with regulating the child's behavior.

In the course of interview the mother repeatedly stated that being a mother of deaf child is extremely difficult. When discussing about the difficulty and her emotions, also expressed

the challenges she faces due to having a deaf child. *"Apart from the problem deafness imposes on communication and mothering, the social attitude stigma and discrimination makes it more difficult. Moreover, low socio economic status makes it even worse."* said the mother. Likewise realizing the child's deafness at the beginning was not an easy task for the mother. She expressed her feeling as follows: - *"I totally went mad and out of control. I became very sad and asked God why you gave me this at least. I even tried to commit suicide once."*

From the interview it was understood that other than the occurrence of the disability, other factors such as extreme low economic status of the family with no support, the presence of other diseases like paralysis associated with deafness, lack of awareness and knowledge on what to do and where to go may precipitate the mother's bad feeling towards having a deaf child. Meanwhile the positive prognosis found on the paralysis of the limbs and the founding of Mechanisa School for the deaf contributes to come to terms with the disability and for taking measures or actions to improve communication skill and interaction between the dyads. At the moment the mother faces difficulty in understanding sign language. But, she is determined to try her best as much as possible. Therefore she hope the future will be better.

Regarding her social life, the mother indicated she had a very satisfactory relationship with neighbors before the birth of a deaf child. But now, the mother explained, the condition is the reverse because people's attitude towards the child's deafness is very negative.

Early Intervention

Regarding the measures taken to improve communication skill as early as the problem had happened, the mother indicated not at all. She said *"at that time I didn't know what I should do. Moreover not only her hearing status worried me but also the child's inability to move."*

As a result no early linguistic and communication skill input was provided for the child excepting finding cure from medical alternatives to holly water. But recently the mother started taking sign language training at Mechanisa School for the deaf. She stated "*I have started with the intent of avoiding communication barriers that is characterized by conflicts and disagreements; and to provide conductive communicative environment for me and my child because I feel pity when misunderstandings occur.*"

Observation Result: Case 5

1. Effects of deafness on Hearing-mother Deaf-child communicative interaction

The impact of deafness on the communicative interaction between Hearing-mother Deaf-child dyads and the method used in the process were the intention of the observation. Therefore, episodes of dyadic communicative interaction was video taped for 3 days 15' in length each day.

1.1 Communication methods of the dyads

The observation result showed that the mother sometimes initiated communication with the child. When communicating, she used spoken language in combination with home sign language, non-verbal modalities or "sign" language. The mother used touching, moving the body, vocalization, waving hands etc to get the child's attention for communication. The child rarely initiated and only sometimes responded communication. She preferred to use her language, signing. The modes of communication preferred by the dyads did not match. Therefore, most dyadic communicative interactions was carried out using non-verbal modalities i.e. home signs, gestures, hand and body movement, facial expression etc and to some extent the child benefit from lip reading. When compared, the child understood the mother better. It was noted that when, communication existed, the use of multiple modalities was helpful for better interaction. However, the mother did not use or interpreted sign language adequately to various aspects /areas of mother-child

interaction. It was observed that she was not engaged in explaining concepts and events. Similarly, the child's ability to comprehend spoken language was limited. Consequently, the methods of communication were not efficient.

1.2 Communication challenges of the dyads

The mother tried to use 'sign' language. It helped them to communicate each other on limited and concrete events though it was not adequate to engage in explaining and expressing ideas, events etc. As a consequence communicating with the child was challenging. Because the mother was not fluent in signing, as it was noted, she held sign for short period of time. Moreover, her 'sign' language represents few words that can't express ideas. In addition, it was also observed that the dyads were not engaged in consistent and sustained communication covering issues which include previous events, abstract ideas etc. Rather they usually communicate on observable and visual objects, people etc

The mother sometimes responded to child's communication. The mother's competence in motivating/encouraging the child to communicate and use of different mode of communication was not adequate. She also participated little in helping the child in school tasks and assignments. The mother seemed enthusiastic to communicate with the child but due to various factors, she was not optimally responsive to her child's communication needs.

On the other hand the child rarely initiated communication and she sometimes only responded to communications initiated by the mother, i.e. from the observation it was noted that she sometimes involved in communicative interaction when stimulated by the mother. The dyadic communication was characterized by disagreements, arguments and fighting's. Most of the time, they engage in conflict. According to the mother, during interview, this behavior also occurred outside home on their way going to and coming home school. The child exhibits hyperactive behavior. The observation result indicated the disagreement occurs when there was misunderstandings between them and when the

mother initiate interaction topic that differs from the child's focus of attention. The child also sometimes rejects mother's communication. Whenever the child cuts communication it was observed that the mother usually forced her to refocus and sustain communication. During such moments the child reacts negatively in protest. The mother responded to such behavior by shouting on her or beating the child. Instead of regulating the child's behavior the mother dealt with the situation aggressively through anger and punishment.

Therefore, the quality of dyadic interaction and communication was poor though they sometimes seemed to have loving and Warmth relationship exhibiting playful and joyous affect. But it doesn't last long. Due to various factors such as extreme low economic status, lack of social support, the inability to communicate efficiently with the child and the child's hyperactive behavior, the mother sometimes loose interest in interacting and communicating; and the mother becomes bored. During such moments she neither initiated nor responded to communication. Sometimes she responded angrily to the child's communication. It was noted that the mother complained with no or little provocation.

In general, it was observed that the mother does not use 'motherese' behavior in helping the child to involve in sustained communicative, in regulating the child's behavior. The mother was anxious to improve communication with the child though when communication existed with only minimal linguistic input. Moreover, they had less shared attention between them.

Case 6

Hearing-Mother Deaf-Child Bio-data

The mother, 38 is a diploma holder from Addis Ababa commercial college. She is married and has four children. Her 3rd child is deaf. The Child is 8 years old pre-lingual deaf. He lost his hearing ability before 4 month of age. He attended his primary school at Mechanisa School for the deaf. He lives with both hearing parents and 3 brothers.

Age of onset, Cause and identification

The mother reported that the child seems normal at birth. But when he reached three and half month years old he got sick. The child was taken to hospital and diagnosed with high fever. There were also abnormalities on the eye, i.e. the eyes were turning in wards and out wards (squints). Again the child was taken to private clinics. The doctor's diagnosis indicated the child had cold and 5 injections were prescribed. At the child's 6 month of age, the mother noticed white line on the Retina of the child's eye while she was breast feeding. The father knew that the child had a problem of vision. In addition, the child failed to respond for parents call or sound stimuli. But, the mother was worried for her child's eye problem and never was his ears. The mother said

"I didn't take him to hospital for his ear because on one hand the problem was apparent in his eye. On the other hand peoples told me that if children focus or give attention on something, it is normal that they don't turn and respond."

Therefore, the mother ignored the ear and continues to look for remediation for the eye problem. When the vision problem becomes serious the child was taken to hospital and the problem was cured following eye surgery at his 1 year and 9 month years of age.

The child's deafness was diagnosed at his 4th years of age. Regarding the time of deafness occurred and the cause, all the doctors after reviewing his history suggests that it was occurred when the child was first sick on his 3rd and half month of age which might be caused by high fever. The mother explain the incidence that lead her to suspect the child's hearing ability and taking him for examination as follows:-

"One day I called him while he was on bed. He didn't respond. I called him again loudly. Then out of fear and shock I grab him and start talking to him. Except gazing (staring) at me there was no response. Then I came to realize the child might have a hearing problem."

The mother indicated, however, before the diagnosis the father used to give comments on the child's hearing status. But she refused to accept it.

Communication methods used

The mother started learning sign language at Mechanisa sign language training and social service organization. Regarding the way the dyads communicate, the mother indicated that she communicate through verbal language in combination with "sign" language or non-verbal modalities- hand and body movement including indicting, showing, doing, facial expression etc. Even though she signs a little, still there is a problem in communicating with the child.

"I still can not relate the objects or ideas with the language. For example if I want the child to wear a shoe I have to show him, if I want him to wash his face, I have to act washing my face. It is also difficult to tell him about animals, birds, hen etc. except showing and pointing to him." the mother explained.

However, the mother noted that the communication the dyads have is much better after the child entered school and she started sign language training. Earlier they experienced a great deal of communication challenges. Currently communicating with the child appears to be good but the communication methods are not efficient to communicate on various issues as she does with her other hearing children. Sometimes the mother found it very difficult to understand the child. Though she is attending sign language training, it is the difficult way/mode of communication.

"I started learning recently and when I learn it in the school I understand every thing but when I come home I tend to forget." For example the mother indicated that "sometimes the child asks me about different pictures and things on a book. At this moment the extent that I can explain is limited due to communication barrier." she said.

Moreover, the mother expressed her feelings, attitudes, emotions etc verbally together with 'signing' or non-verbal modalities. The child used sign language and non-verbal modes of communication to express his.

Impact of deafness on Hearing-mother Deaf-child communication

When asked how difficult communicating with deaf child is the mother stressed that communicating with a deaf child is very difficult. She also underlined that interpersonal

communication with full understanding is impossible unless all members of the family and the society have the awareness on deafness and its immediate impact on communication and language development. Therefore, learning sign language and communication skill is important to provide early communication and language stimulation.

Regarding the frequency of communication challenges the dyads experience; the mother said the problem is not intensified in understanding for fulfilling the child's basic needs. The problem they encountered was in discussing and explaining objects, events, experience etc. With respect to this, the mother added,

“By his nature the child is inquisitive; he has a good observation and always asks. For example, after I have finished talking through phone, he ask me who was that I was talking to and what was I discussed. Or sometimes due to lack of money or other reason I can't buy the things he asks. During such and similar events, I face difficulty in explaining all the things.”

For one thing the mother's signing ability is not enough to express such events and non-verbal modalities are not efficient to give detailed explanation other than visual and present things in space and time as they can't replace verbal or sign language. In general the areas of difficulties the dyads encounter in their communicative interaction are in understanding the child's internal feelings and thoughts, in communicating her desires and in explaining different issues in the environment. For example the mother said,

“He and his younger hearing brother were learning at the same kindergarten. But when I found Mechanisa School for the deaf, I look him and registered. He felt very sad. He then noticed that there was a difference in the number of exercise books between them. I.e. the younger brother's were 9 but his was 5. In addition more books were bought to the younger one. At that time the child feels bad and asked why it was so. I was in no position to explain and to make him understand except feeling sorry.”

Nevertheless, the mother indicated the dyads develop positive and loving relationship. She also noted that she is making an effort in creating optimal communicative environment at home, in guiding him to communicate with members of the family and assisting in school and home tasks and assignments. She indicated there is also progress.

When asked to express her child, the mother reported that at birth he weighs more than other children. He was also active. Even after he became deaf, he is keen observer, inquisitive and joyful. The presence of a deaf child doesn't bring an effect on both marriage and social life of the mother. In contrast she received support from the family specially the husband. The child's father loves him and always buys things for him. At times when the child's needs are not met, he gets upset.

All in all, the mother explained that being a mother of a deaf child is very difficult especially if the mother does not know how to sign. Learning that her child is deaf was not an easy task for her. She said "*from the day I realized my child's deafness until he started learning at Mechanisa School, I used to cry and blame God for the child's deafness.*" After the child attended school communication between them began changing and she started accepting the disability. This was because the child started sign language and communication skill at school, the mother received counseling service and advice from the school; she also observed many similar cases in the school. Moreover, when the child went to hospital for eye surgery, the doctor told parents that the surgery can only be carried out if the child was free from any cardiac problem. That was another stress for the family. Fortunately the diagnosis proved he had no problem. So the surgery was done successfully. Remembering the situation for the mother was irritating. She said "*What would I do if my child was blind in addition to his deafness. For this I turn and thank God.*" Such factors and family support contribute to adjust her self with the child's disability. With respect to this she indicated "*now I feel better than before and in the future with the will of God things will be much better.*"

Early Intervention

The mother noted that due to lack of knowledge and early information, the presence of other diseases, early intervention measures were not taken place except encouraging him to watch television programs, especially kids program, to play with his brothers and taking him to church and prayer sessions. The mother does this with the intent of exposing the child to verbal environment. In addition after diagnosis the mother tired to

teach him to differentiate letters and speak verbally. So that she usually spoke loudly, slowly and repeatedly in front of him by showing the letters. The mother said that, as the problem is hearing it couldn't take them far even though little progress was gained. That is why she managed to learn sign language recently.

Regarding their communication the mother indicated that at the moment communication is still challenging between the dyads. However, she underlined that "*surely in the future we will communicate each other on each and every piece of his life because for one thing he will learn more language and communication skill more and in my part as well I develop the awareness and will continue learning sign language.*"

Observation Result: Case 6

1. Effects of deafness on Hearing-mother Deaf-child communicative interaction

Focusing on the methods of communication used and the problems the dyads encounter due to the child's deafness, the mother-child communicative interaction was video taped for 3 days 15' each day at the dyads home. Observation check list was also used.

1.1 Communication methods of the dyads

From the observations it was noted that the mother engaged in communicative interaction between the dyads. Most of the time mother-child communicative interaction was initiated by the mother. The mother used vocalization and tactile contact such as touching, moving the body and clapping or waving the hands to draw the child's attention for communication. During the process of communication the mother tried to sustain (maintain) attention/conversation. The mother was observed using verbal/spoken language and "sign" language for communication. However it was noted from successive observation the child benefited little from these communication modalities. The mother had little competence in using sign language to express ideas. It was also noted from the observation the mother held "sign" for a short period of time, i.e. it was less elongated. The used "sings" also represent few words that do not convey extended ideas. The mother

encourages and motivates the child to communicate with her and his brothers. She also involved the child in play activities with them.

Most of the time the mother preferred to use verbal language. That is, she always accompanied her communication either "sign" or non-verbal with spoken language loudly and slowly whereas sign language was the child's preferred mode of communication. But, due to the inability of the mother to use sign language adequately and due to the inability of the child to understand (comprehend) verbal language, a mismatch in communication modality was observed. As a result dyadic communicative interactions were carried out by non-verbal methods, i.e. eye and physical contact, facial expressions, hand and body movements including pointing, showing, doing an action etc including home sign.

1.2 Communication challenges of the dyads

It was indicated that the mother used verbal language and she needed the child to speak. When interviewed why, the mother indicated that she needed the child to differentiate letters and understand message/ information through lip reading. The child benefited through lip reading though sometimes he failed to understand. So that repetition of the message was required. The mother also tried to use "sign" language. Though the use of "sign" language was helpful, it was not sufficient. The inability of signing adequately on the part of the mother restricts the quality of mother-child interaction. Therefore, most dyadic communicative interactions and information exchange were occurred in non-verbal communication modalities, which restrict their conversation on limited communication areas.

On the other hand the child initiated communication sometimes and responded to communication initiated by the mother. He used sign language for his communication. Due to lack of sufficient knowledge of the mother in sign language, the child was engaged in non-verbal modalities to communicate. As a result not only the child sometimes frustrated when the mother was unable to understand what he wanted/tried to convey but also when he experienced difficulties in understanding her message.

The mother initiated communication frequently, but some times she raised topics that are different from the child's attention. She responded to communication initiated by the child at all times. Moreover she encouraged the child to use different mode of communication (i.e. verbal and non-verbal). It was observed that she was participated in providing assistance/ help in school assignments and tasks, in involving the child in household and play activities and family conversations.

Generally, the mother attempts to minimize misunderstandings between them and tried to give maternal positive affect. They also had better shared attention on some issues and she tried to guide the child's activities. However, due to the communication barrier the mother was not optimally responsive to her child's communication and they were not observed engaged in more explanations, descriptions of ideas, events and objects other than concepts and events that are visible and present in time and space.

4.2 Quantitative Result

4.2.1 Background of the Respondents (Mothers)

Table 1- Age, Family and Marital Status

Characteristics	Respondents	
	Frequency	Percent
1. Age		
22-25	6	15
26-29	6	15
30-33	9	22.5
34-37	10	25
38-41	4	10
42-45	2	5
46 and above	2	5
Total	39	97.5
Missing System	1	2.5
Total	40	100
2. Family Size		
3-5	21	52.5
6-8	17	42.5
9-11	1	2.5
Total	39	97.5
Missing System	1	2.5
Total	40	100
3. Marital Status		
Married	38	95
Not married	1	5
Divorced	1	5
Total	40	100

According to the personal details shown on Table 1 regarding the ages of the mothers, the highest proportion range 34-37. The mothers' ages range from 22-48. The mothers' mean age was 32.

As indicated in Table 1, the maximum family size of the respondents was 11, the minimum family size was 3 and the average family size of the respondents was 5. From this, we can say that most of the respondents do not have small family size.

Table 1 also shows the marital status of the respondents, 38(95%) of the respondents were married. Only 1(2.5%) divorced where as 1(2.5%) of the respondents were found to be out of wedlock (unmarried).

Table 2 Mothers' Occupation

Item	Frequency	Percent
Housewife	27	67.5
Government employee	3	7.5
Private employee	2	5
Daily laborer	6	15
Merchant	1	2.5
Other	1	2.5
Total	40	100

As the occupational profile of the mothers of deaf children indicated on Table 2, 27(67.5%) of them were found to be housewives. The Table also indicated that the majority of the mothers were not engaged on occupations or jobs that generate high income to their families. From this, we can understand that the vast majority of the respondents do not have jobs so that they do not get monthly income at all.

Table 3 Average Monthly Income of the Family

Value Label	Frequency	Percent
Below 300 Birr	17	42.5
301-500 Birr	7	17.5
501-700 Birr	3	7.5
701-900 Birr	1	2.5
901-1100Birr	2	5
1101& above	1	2.5
Total	30	75
Missing systems	10	25
Total	40	100

As can be seen from Table 3, 17(42.5%) of the respondents said that their average monthly income of their family is less than 300 Birr. From this, it can be said that the economic status of the parents put them in difficult situation to fulfill the basic needs of their children.

Table 4 Mothers' Educational Background

Education level	Frequency	Percent
Illiterate	6	15
Read & write	5	12.5
Grades 1-6	7	17.5
Grades 7-10	9	22.5
Grades 10+1-12	12	30
Diploma & above	1	2.5
Total	40	100

As the above Table indicated, the majority of the respondents (mothers of deaf children) did not complete their elementary education. Among the mothers, 6(15%) of them are illiterate, 5(12.5%) of them can only read and write. This indicates that the majority of the mothers did not get proper education. It implies that, they are not in a position to assist their children educationally.

Table 5- Profile of Deaf Children

Characteristics	Respondents	
	Frequency	Percent
1. Sex		
Male	16	40
Female	24	60
Total	40	100
2. Age	Male	Female
5	1	2
6	5	3
7	3	8
8	7	11
Total	16	24
3. School	F	%
- Co action Pre School	12	30
- Mechanisa	23	57.5
- VICKtory	5	12.5
Total	40	%
4. Grade level	F	47.5
KG	19	45
1-2 Grades	18	7.5
Grade 3 & above	3	100
Total	40	100

As indicated in table 5 the study included 40 deaf students out of whom 16 (40%) are males and 24 (60%) are females.

Regarding their age, their ages ranges from 5-9. The majority 23(57.5%) of deaf students were selected from Mechanisa deaf school. Most of deaf children under study are attending their education from KG up to grade 2.

Table 6- Descriptive statistics on variables (N=40)

Variables	Items	Minimum	Maximum	Mean	SD
Loving	10	26.00	81.00	55.30	11.73
Demanding	10	11.00	35.00	20.00	4.89
Communication	18	10.00	39.00	22.25	7.30
Psycho-emotional feeling	23	3.00	62.00	43.42	11.03

As table 6 indicated, 40 hearing mothers were measured on, Loving, demanding, Communication, and Psycho-emotional variables.

Loving and Demanding variables of hearing mothers were measured on their normal children context. The variables were used for categorization of mothers into groups as described in chapter 3. The categorization was used to understand whether there was significant relationship between parenting style of hearing mothers and communication with their deaf child and on psycho-emotional feelings, by computing Kruskal-Wallis Test.

The table below shows the means, the standard deviations and the number of cases in the groups.

Table 7- Means, Standard deviation, and number of cases (respondents)

Variable	Authoritative N=6		Indulgent N= 8		Authoritarian N=3	
	Mean	SD	Mean	SD	Mean	SD
Communication	39.33	11.02	50.63	8.35	39.33	6.12
Psycho-emotional feelings	54.00	15.62	43.75	12.01	58.67	9.14

Table 8- Kruskal-Wallis Test for total communication score

	Parenting style	N	Mean Rank
Communication	Authoritative	6	6.00
	Indulgent	8	12.13
	Authoritarian	3	6.33
	Total	17	

Table 9- Test Statistics on Communication Score by Kruskal- Wallis Test

Communication	
Chi-square	5.803
df	2
Asymp. sig.	0.055

χ^2 not significant at .05 level

As it is indicated in Table 9, the chi-square showed statistically no significant difference among groups on communication variable at 0.05 level.

Table 10- Kruskal-Wallis Test for total Psycho-emotional Score

	Parenting style	N	Mean Rank
Psycho-emotional	Authoritative	6	10.00
	Indulgent	8	6.63
	Authoritarian	3	11.67
	Total	17	

Table 11- Test Statistics on Psycho-emotional feelings by Kruskal-Wallis's Test

Psycho emotional feelings	
Chi-square	3.578
df	2
Asymp. sig.	0.167

χ^2 not significant at .05 level

As it is indicated in Table 11, the chi-square showed statistically no significant difference among groups on Psycho-emotional variable at 0.05 level.

CHAPTER FIVE

DISCUSSION

5.1 Discussion of the qualitative results

Communications takes place when there is a sender who transmits a message, another person who receives the message and give responses as well and when understand the message.

When a deaf child exists in a hearing family, communicating with him/her is a challenge. The immediate impact of deafness is not only limited to loosing a hearing ability but also on language and communication development of a child i.e. the communicative interaction the child has with parents, family members, and interaction with the outside environment. Recognizing its impact/ influence on the part of the family members is important to identify the hearing difficulty immediately when present. As a consequence, a deaf child will be able to benefit from early and appropriate home linguistic and communication remediation.

However, the results of the present study showed that mothers and family members lack knowledge and adequate information about deafness, the possible causes, and the effect it has on language and communication skill development of the child. This was evident from the mothers' response that no action was taken to provide appropriate language and communicative skill to their deaf children as early as the problem occurred.

Due to lack of early information/experience on deafness, its effect on the dyadic interaction and the interaction the child has with the surrounding environment on the part of the mothers, the negative social attitude and the difficulty deafness imposes, the mothers tend to react negatively towards their child's deafness which had an adverse effect in the quality of mother-child interaction and early psycho-social intervention for the child as well as the family. This also interfered with making an early effort to improve communication skill. As a result mothers do not prepare their young deaf child for

entrance into the verbal world where the use of the child's vision will be critical for gathering information and communicating with others.

The entire children understudy (3 male and 3 female) had severe to profound hearing losses. One of them was congenitally deaf and the rest acquired deafness after birth between 0-4 years of age. Different diseases were found to be the major causes for the deafness. Such as meningitis, high fever and other complications and in one case it was occurred as a result of vaccination. During the observation none had any other apparent handicapping condition.

Most of the time mothers were the first to identify that their children are suffering from a hearing difficulty. They identified the condition as a consequence of an inability of their child to respond to sound stimuli of their call, sound of objects i.e. knocks and slamming of doors, etc. The mothers indicated that they had suspicions of their child's hearing ability. But due to lack of knowledge about deafness and its characteristics, cultural beliefs, and the presence of associated (other) diseases which distracts the mother's focus of attention and other factors, the children's deafness was not identified early. As a result deaf children didn't get appropriate early home linguistic and communication stimulus and medical intervention. Even after identification, the mother's (family) effort was to get medical and spiritual help for permanent cure.

Communication of Hearing-Mother Deaf-Child Dyads: - modes and challenges.

Regarding the ways of communication between the dyads, the responses of the participant were consistent and similar. Based on the responses communication is categorized into two phases. The first phase indicated the ways of communication before the children joining school and the 2nd phase showed ways of communication after attending school. The first phase is characterized by absence of communication. Mothers under study indicated that it was difficult for them to say there was communication at all. In the second phase of communication children attended their primary education in special schools for the deaf. In the schools they are learning sign language and other

communication skills. This phase is characterized by better understanding and communication between the dyads. This is because they were exposed to new language and communication skills and interact with other people, peers, teachers etc both deaf and hearing at the school. Their exposure to the outside home environment and thinking ability also increased. Therefore, they understand their mothers better. Moreover, they influence their mothers with new skills. In this phase communication is carried out using multiple modalities, i.e. most mothers used verbal language in combination with non-verbal modalities, home signs and in two of the cases, i.e. case 5 and 6, with 'sign' language. Where as the children used sign language and non-verbal modalities including home signs. Better communication was not only gained after the child entered school but also deaf children became happy and develop a sense of positive feelings.

The study showed that during mother-child communicative interaction, most mothers used verbal language together with non-verbal modalities. The use of a combination of these modalities is important. However, they are not sufficient to express ideas, thoughts, feelings which are internal and far from visible and present in time and space. To express such abstract concepts other than concrete incidents requires language, either spoken/verbal or sign language. Deaf children need care-givers who understand their needs, feelings and who receives (accepts) their affection, happiness, sadness, problems etc. In addition, Deaf children receive information/message which is visual, concrete and present through observing the mother's visual body actions. Where as expressing emotional feelings, ideas that are beyond visible which requires explanation, description, narration, etc through the use of non-verbal ways of communication is not only difficult but also impossible. Deaf children also depended on such modalities to express their needs and feelings. This is because on one hand they can not use verbal language and on the other hand their language, signing, is not easily interpreted by hearing mothers. In the study conducted by Schlesinger (1972, cited by Meadow, 1980) compared the communication of hearing and hearing impaired children. He found that hearing impaired children and their parent's limited communication to topics with visual reference. In comparison hearing children at least made a passing comment referring to a non-visible object or had

a prolonged conversation about something outside their visual range. We can infer from the results of the present study that the dyads lack optimal (favorable) communicative environment. Understanding is limited on basic needs and issues of a child like the need for food, drink, cloth, sleep and on expressions of love, anger, happiness, etc. with the use of non-verbal methods in combination with spoken language or 'sign' language. Even though non-verbal modalities are restricted to convey message/information or feelings and emotions fully, they play a vital role in communicative interaction between the dyads and the interaction with hearing world.

In order to communicate efficiently over abstract ideas, thoughts, past events, explanations etc, language either spoken or sign is required. Deaf children need to acquire language in a natural progression stages and it is acquired most efficiently in a highly interactive total communicative environment. Some of the best ways to encourage language development are to provide children many opportunities to interact with other deaf and hearing counterparts, to encourage child's play, to engage them in natural language activities and to encourage them express their ideas and feelings. Moores (1996) states that more than 90% of hearing impaired children are born to hearing parents. This means that the child has difficulties of various degrees to learn the spoken language used by his/her parents. The parents knowing nothing of hearing impairment and sign language before their child was born must make far-reaching choices concerning the communication mode of the child and the whole family, in a situation where they already feel anxious and depressed due to the diagnosis of the hearing impairments.

It has been discussed that most dyadic as well as familial communicative interaction was conducted through the use of non-verbal communication methods including home signs. It was also evident from the present study that these modalities can not replace spoken or sign language. It is in short of explaining and conveying the dyads wish, attitudes, ideas etc fully.

The hearing condition/difficulty of children under study was not identified early. Even after identification and medical diagnosis they were not exposed to sign language until

they attended school. In addition, most children lost their hearing ability before turning 4 year of age. Therefore, they had no or little memory of verbal language. As a result in both ways they were deprived of early communication, linguistic input and stimulation at home. Bench, (1992) asserted that especially for a deaf child born in a hearing family, effective communication may not be present in the child's home environment. Even with the use of amplification, for oral communication and written language, the linguistic intake of deaf children remains impoverished (McAnaly et al. 1994).

The result of the observation further showed that mostly mothers initiate communication with their deaf children and tried to respond to the child's communication. Except one mother (of case 4) who was passive in either initiating or responding communication, most mothers were found to be active in initiating Communication with deaf children less active. But, deaf children understood their mother's communication better when compared with mothers. This might be attributed to the child's exposure to different mode of communication at school. However the frequency and quality of communicative interaction was low. During successive observation it was noted that the dyads communicated over few and similar issues because they were limited to oral language system and non-verbal methods which restricts communication on a higher concrete basis. Communication occurred with minimal linguistic input. Moreover, they didn't sustain communication and had less shared attention. Webster (1998) indicates deafness interferes with the process such as the sharing of attention between mother and baby, and then the very foundations of language may be damaged. Deafness seem to affect the very basic way in which the mother integrate her vocalizations, gestures, and expressions, with the experience shared with her child. It is further noted that parents may feel it is not worth talking to the child if the child can not hear. Or it may be that parents will try and flood the child with talk. When the dyads fail to understand the information exchanged, repetition of verbal and non verbal modes was carried out. Jamieson (1993, cited in Hodapp, 1998), said hearing mothers often respond to the child's misunderstanding by simply repeating the message. Indeed by using more as opposed to different language,

these (hearing) mothers responded as though their children were hearing, and in need of repetition, rather than as deaf children in need of an altered visual approach.

Out of six hearing mothers under study, four mothers do not use sign at all. Although two of the mothers had began sign language training, had been in the program one to two months only. None of the mothers in this study used sign language with any fluency during the video tape sessions, due probably, to their either length of exposure to the training, or low education background to understand. Sign language was the most difficult way of communication for the mothers. Not only using sign was challenging for conveying their information or feelings to their deaf children but also understanding the child's communication initiated by signing. So the mothers preferred mode of communication was verbal language in combination with non-verbal modalities including home signs. From the observation result it was noted that except one mother (of case 3), all mothers used spoken language for their communication in combination with home sign/non-verbal modes. However deaf children hardly understood information conveyed through verbal means. Because they lost their hearing ability before they acquired or develop spoken language. The study by Alamayehu (2002) also indicated that deaf children relies on visual input to perceive communication, however, their communicative environment was mainly through auditory input. This is not a natural way for the deaf to communicate with hearing people. The sign language input was also absent and limited. Hence, their language intake in both speech and sign language was at risk. The amounts of deaf children's language intake, the amount they perceive depend on the amount of input, the amount of language in the environment (Strong 1995, cited in Alemayehu, 2002).

It is further noted that as a result of absence of early language input from the mothers and family members, these deaf children seem to be without a mother tongue. They didn't acquire verbal language at the critical and optimal language learning period, at the age of zero to five. Besides, all children started learning sign language only from the time they enrolled in their respective schools. Then deaf children preferred to use sign language for

their communication. Therefore, we can infer that there was a mismatch of communication modality between the dyads which was, not surprisingly, evident in the study. Consequently, the dyads frequently encountered problems in understanding each other. For instance when their needs and feelings were not met, and understanding each other was difficult, deaf children responded through showing inappropriate behavior, exhibiting hyperactive behavior, crying, cut off communication, etc.

Regarding the extent of difficulty and the limitation of the use of only non-verbal communication modes one mother said.

"I understand when my child is in some kind of pain or un comfortable situation from his body reactions. But I don't know exactly what he feels and I can't ask him what is wrong with the child."

Similarly another mother expressed

"My child and I have our own way of communicating at home. For example, while he is eating and whenever he wants me to add food, tea or fruits, he showed me through his home made signs. Then I understand him. But, the problem comes, for example, when there is nothing to add I can't explain that there is any. Therefore, what I do is I bring empty pot (cooker) and plastic bag to make him understand it is finished."

It was evident from the research result that deafness had an impact on interpersonal communication between hearing-mother deaf-child dyads. The mothers under study perceived deafness as a challenge in their life. The child's deafness brought various effects, in addition to communicative interaction between them. The negative attitude of peoples, due to lack of awareness, and cultural beliefs towards deafness i.e. stigma creates additional stress on the mothers. According to Tirussew (2005), society's perception and attitude towards children with disabilities are full of myths, misconceptions, fear and rejection. However, apart from the effect deafness poses on communicative interaction between the dyads, it was noted from the study that after the children started joining school, and the mother received counseling service and advice, resulted in mothers became sensitive and loving to their children. Lederberg and Mobely (1990, cited in Hodapp, 1998) for example, found that attachment relations are virtually identical

between hearing and deaf mothers and their infant who are deaf. Although at later ages mother-child interaction may become more troublesome due to the impaired mother-child communication (Ledergerg, Willis, and Frankel, 1991), most mothers be they hearing or deaf have reasonably good relationships with their young children who are deaf. The result of the present study was found to be consistent with this generalization. However, it differs from family to family and depended on other factors.

Mothering and being a mother of deaf children is extremely difficult and challenging. With out speaking the child's language, signing, communication is in jeopardy. Among other factors are lack of awareness and knowledge about deafness, the causes and its impact on communication, lack of psycho-social support for mothers and family members to adjust themselves with the disability and in taking early home intervention. As a consequence, mothers lack the competence to provide enriched early child development and care, to provide appropriate language and communication stimulation

Mekonnen (2005) suggests that children use language and communication to better understand their surrounding, to establish social relationships with others, to express themselves and to their cognitive development. Without adequate communication methods deaf children can not develop different abilities and thinking power fully. Therefore deaf children face a problem in acquisition of adequate information form their environment. The deaf child without adequate system of communication be it oral or sign, experiences decreasing control cover his/her environment. While his/her ideas, needs and wants increase in complexity, his abilities to communicate remains at the primitive level. The end result is helplessness and passivity. The areas of difficulty illustrated by the informants were in understanding the child's needs, feelings, interests etc, in communicating their feelings to the child, in guiding the child to communicate with them and others, in exchanging information, in developing positive relationship with the child, in providing parental help/assistance in school and home tasks, in explaining past and future events and in regulating the child's behavior. The interview and observation result

revealed that the dyads were not engaged in expansion of ideas, abstract concepts, explanations, descriptions of events, places etc.

Due to having a deaf child mothers undergo different psychological states. Knowing the child's deafness was not an easy task for them to immediately accept. Feeling of sadness, despair, anger, depression guilt etc were common to all mothers in the study. They blame others and God for their child's deafness. They felt confused of what to do and where to go, and ultimately life become bleak for them. According to prior et al., (1988, cited in Hodapp, 1998) the mothers of preschoolers who were hearing impaired were more anxious and depressed than were mothers of same age hearing children; the mothers of children who were hearing impaired were also higher over all on a scale of psychiatric symptoms. Lack of social support neither from governmental, NGO's working inline of deaf children nor medical institution where children receive medical diagnosis for parents and family members to come to terms with the disability intensifies the feeling and block to take appropriate early measures. After knowing (learning) their child was deaf, their primary effort was searching for permanent cure either through medical or spiritual means. Later on they began to worry about the presence of appropriate placement or educational alternative for their children. Therefore, mothers were not taking actions for improving communicative skill and providing early optimal language and communicative stimulation during the critical period.

In fact all mothers understudy from the time of identification of their child's deafness to the attendance of the children to school, they didn't receive any sign language and communicative skill training. Moreover they had no access to guidance and counseling service to cope with their child's disability. Mother-child dyads had access for sign language training after the child attended school. Most mothers did not attend though mothers were offered a chance to attend the training from the respective schools, due to many factors, such as many duties at home leaving less time to attend the training, low education level that they can't cope with learning sign language and other factors. One mother who started attending the training in sign language training and social service

organization at Mechanisa school regrettably explained *“if I had had the training as early as the problem occurred, I would have provided my child an optimal language and communicative environment like the rest of the children.”*

It is a mere fact that if mothers had access to such trainings, early intervention programs and counseling services about deafness, the possible causes, its impact on language communicative development of the child, they would have provided quality mother-child interaction and they would have been motivated and enthusiastic to interact with the child. Moreover, they would develop more socio-emotional affect and better shared attention, understanding and fully responsive to the child's interaction and needs. Not only the mothers but the entire immediate and extended family members would be benefited and communicate with the child. This was evident from the observation result of case 4. As a result of the presence of signing sisters and brother (Siblings) at home, the deaf child had a conducive environment to efficiently communicate and fulfill his needs and interests. When signing family members are available at home, a deaf child benefits and become an integral part of the family participating in all spheres of family life. Regarding the importance of early intervention for mothers of deaf child, the results of the experimental study conducted by Tirussew, (2001) on 49 families in Addis Ababa, indicated that mothers who were provided with psycho-social intervention (experimental group) based on the MISC (Mediational intervention for sensitizing caregiver) program were engaged in more focusing, significantly more expansion of ideas, explanation, story telling than mothers who did not receive the intervention program (control group). Moreover, the quality of mother child interaction was higher. But, if this condition is lacking, the child is an isolated person. Therefore, learning sign language by the mother and other family members is beneficial. Because the results of the present study indicate the life of deaf children becomes much easier and joyful when the mother's mode of communication matches with them.

Social supports do contribute to the adjustment of parents with their child's disability. All the informants of this study indicated that at least they came to terms with the disability

and try to manage the family life after their children started going school. This was because, on one hand they received counseling service and advice from the schools and on the other hand their children become exposed to different communication modes. In line with this Hodapp (1998) said social support appears to help parental and familial adaptation.

In sum, the early childhood years are a remarkably active period for acquiring language and learning about it. Home environment have a significant effect on children's language and communication development. The linguistic and social environment of home, parent's knowledge, beliefs, and attitudes about deafness, language acquisition development, the type of early intervention and support etc all seem affect the opportunities deaf children have, to emerge as fluent and confident communicator with in the society.

Child deafness, without adequate means of communication, can have a very negative effect on mother-child, family interactions and also holistic development of the child. From the result of the present study it was understood that the dyads experience many challenges in different areas. However, the interview result consistently showed that communication and interaction between the dyads increased after the children entered school (receive education). There fore, one can say the challenges and difficulties can be avoided if language and communication skill learning and development begin as early as possible in the child's life and if the parents are helped in their acceptance of their child's deafness.

The Future

Apart from the challenges and stress deafness imposes on the mothers and the family life; all the mothers hoped they will communicate better in the future. They believe they will communicate in every aspects of the child's life, as they do with other hearing children. The reason for this is that they noticed the changes in communicative interaction between them and on the feelings of their children. In the school deaf children learn language and communicative skill. Therefore, this will develop as they grow and learn more. Moreover,

through the counseling services and advices gained from the schools, mothers developed the awareness about the impact of deafness on communication and their role in giving the children optional communicative environment. The prime factor for the change of focus is that mother's acceptance of their child's disability after the counseling service. In addition, mothers and family members started and plan to attend sign language training. From the discussion in the course of interview, mothers indicate that they very much need support in this area and they regret they didn't have it earlier.

Therefore, currently even though communication is still difficult between the dyads and the negative attitude of peoples towards deafness is irritating, the mothers indicated that they are trying hard to manage their and family life by accepting the disability

5.2 Discussion of the quantitative results

The present study attempted to assess whether there was a significant difference between loving and demanding mother groups on communication and psycho-emotional feelings of hearing mothers of deaf children.

The results showed that communication by the mothers in each group (that is the mode of Communication used and the Challenges they experience) were identical. Similarly mothers in each group feel the same way psychologically. This might be attributed to the parenting style items that were designed in the context of normal children. The observation made through Kruskal-Wallis Test on the variables generally showed that there was no significance difference among the groups at $P < 0.05$.

Therefore, the presence of deaf child at home does bring the same effect on mothers (loving or demanding) on both variables. Most literatures and researches existed compares hearing-mother of deaf-children (HD), hearing-mother of hearing-children (HH), and deaf-mothers of deaf-children (DD). These studies indicated that generally there are differences in the ways of parenting style among these three groups in communication and psychological feelings. The matched groups, that is, hearing-mother hearing-children (HH) and deaf-mother and deaf-children (DD) are different from hearing-mother and deaf-children (HD). The matched groups tend to be flexible, loving

etc. But, in the mismatch group mothers tend to be over protective, directive and controlling. Schlesinger and Meadow (1971, 1972, cited by Meadow, 1980), reported that in comparisons with mothers of younger hearing children, mothers of young deaf children are rated as more controlling, more intrusive, more didactic, less flexible, and less approving or encouraging. Moreover the study of Collins (1969, cited in Meadow, 1980) reported that 40% the behaviors of mothers of deaf children was directing; 13 out of 15 mothers could communicate with their children only about things or events that were present in time and space.

In addition, the result indicated that hearing mothers of deaf children in each parenting style group experienced similar psycho-emotional feelings. The present finding was not inline with other studies on this issue. In the present study all mothers were from the families that were coping (surviving) with a deaf child. In their study Prior et al., (1988, in Hoddap, 1998) found that the mothers of preschoolers who were hearing impaired were more anxious and depressed than were mothers of same-age hearing children. The mothers of children who were hearing impaired were also higher overall on a scale of psychiatric symptoms.

Mother's perception of deafness and the children's characteristics, their self-perceptions of their own competence, the assistance provided by the family and the social support and other factors also all seem to have a decisive influence on mother's feelings of stress. Smith et al. (1994) also described such different factors that play the crucial role in the resolution process: the magnitude of the event, the family's general level of vulnerability to outside stress, perception of the seriousness of the event, and the family's regenerative abilities.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

As it is stated in the statement of the problem section of chapter 1, the main purpose of this study was to explore the communicative interaction between hearing-mother deaf-child dyads: the methods they use and the difficulties (challenges) they encounter in their dyadic communication. From the results of the study, the following conclusions are drawn.

- Results in this study showed that hearing mothers did not discover their child's deafness when it occurred. Therefore, the child's deafness was not identified as early as the problem occurred. Even after identification, the mother's effort was for searching for medical or spiritual cure. As a result, deaf children under study lack early home intervention opportunities. The finding suggested that all these problems appears to be related with lack of adequate information/knowledge and awareness about deafness, sign language and the absence of accessible social support services.
- Mothers under study were not using sign language adequately and/or not at all. Deaf children were not exposed to sign language stimulation. Due to this and the inability of deaf children to process verbal language, most dyadic communicative interaction and information exchange was carried out by non-verbal modalities including home signs such as gestures- body and hand movement consisting of indicating, locating, doing etc. The findings indicated that the method used are not efficient for interactive communication and restricts the dyads to engage in expanded and explanation of ideas and shared attention. Clearly deaf children are deprived of optimal language input limiting their exposure to the environment. Hence, it affects their social interaction and cognitive development.

- Early experiences will affect the building of more complex social relationships with parents, others in the family, and eventually, with those beyond family. With in these earliest experiences, language typically plays a central role. Deaf children require that mothers (parents) be competent language users in what ever mode(s) is most accessible to their child. However, the results of the study revealed deaf children lack the opportunity of either spoken or sign language competent model at home. With respect to this, the observation result of case 4 proves that the presence of signing family members at home facilitates communicative interaction. It provides enriched environment for the child's adjustment in the family.
- A particularly interesting finding was that communication pattern between the dyads; the children's feelings and mother's coping style have improved after deaf children attended special schools. The progress might be attributed to the children's exposure to different modes of communication and the provision of counseling service for mothers at the schools. The study, however, revealed that regardless of the progress gained, hearing mothers of deaf children experience a great magnitude of difficulties in communicating with their deaf children. Lack of knowledge and awareness, inability to speak the child's language, signing, the absence of counseling service to cope with the disability, etc. made mothering a deaf child difficult. The challenges mainly are in terms of providing assistance/guidance in the child's home and school activities, in regulating the child's behavior and in understanding the child's needs, feelings etc. Moreover, associated factors like low economic status and negative social attitude complicate the challenge.
- Hearing mothers of deaf children, whether they love/warmth or demanding, experienced similar psychological state of mind and communication with their deaf children. Kruskal-Wallis Test was processed to check whether there is significant difference among the parenting style group means of the mother on communication and on psychological aspects. The result of the study showed that

hearing mothers of deaf children do not differ significantly on mean scores of communication with their deaf child and on their psychological state of mind at $P < 0.05$.

- All the hearing-mothers interviewed indicated that they experience different psycho-emotional feelings when they come to know their child was deaf, which in turn resulting negative attitude towards the child's deafness. Here also lack of knowledge and awareness and social support appeared to be related with coping style of the mothers with the child's disability.
- In general, childhood is a critical point for children to acquire language beyond their needs (for development of language and communication skill), children also has social and emotional needs that must be met. These needs are often magnified in importance where there is a deaf child at home. The result of the study indicated that apart from the challenges mainly due to the mismatch in communication modality between hearing-mother deaf-child dyads, the mother's effort to avoid the communication barrier was little.

6.2 Recommendations

In light of the above conclusions the following theoretical and practical recommendations are forwarded.

- The findings revealed that mothers didn't use sign language for their communication with their deaf child. The inability causes gap in efficient communication between them. Therefore, basic sign language training should be in place for mothers and family members.
- The children's joining (attending) schools have brought change in dyadic communicative interaction and the feelings of children. The result suggests the establishment of pre-schools and provision of pre-school education to deaf children. The present schools for the deaf are limited in number and may not meet

the standards and needs of deaf children in the region and in the country as well. Therefore, the government (including ministry of Education and Education Bureaus), Non-governmental Organizations, Private Sectors (Investors) should include this area in their organizational program.

- Due to lack of necessary early information/knowledge among hearing mothers about deafness and its impact, early identification of child's deafness and early appropriate intervention measures were not taken place. Even though some sensitizing activities have been carried out by the national association for the deaf and non-governmental organizations, much is left on practical efforts in advocacy, dissemination of information and creating awareness, educating the public and professionals, providing social support in different forms for deaf children and their parents. Therefore, such institutions should build their organizational capacity to address these issues; for instance, through organizing and providing deaf awareness training and campaigns in schools, social and civic institutions etc regularly and continuously aimed at bringing a positive public attitude about deafness and persons with disabilities in general.
- Establishment of a Disability Center at national scale is required. In the area of deafness (hearing impairment), if established, will help in advocacy, research and project works on development and promotion of sign language as another medium of communication, education, employment opportunities, resource center and publication. Moreover, it will help in provision of hearing (auditory) test, hearing aid, sign language and communication skill training services etc. It would be helpful to reduce and gradually eradicate the challenges hearing families of deaf children face, the problems deaf children themselves encounter and the stigma attached to deafness among the public. Therefore, the government, non-governmental organizations including the Ethiopia national deaf association, professionals, local and international donors, and concerned stakeholders and partners should work jointly in the realization of the center.

- Schools, social service providers, community based rehabilitation centers can do much in assisting parents to create a more supportive and nurturing linguistic environment that offer the opportunity needed for deaf children to participate in communicative interaction in different settings. A primary way in which they can provide more accessible communicative environment for deaf children is to involve and working with mothers (parents), inviting them as valuable resources of information and provide them with the skills by sharing the ways in which they can mediate optimal language and communicative environment through early home intervention.
- The finding of the study indicated that the presence of signing family members helped the deaf child to benefit from and become an integral part of the family, participating in every sphere of family life. But, majority of mothers and family members of deaf children (neither the sample dyads nor other than the dyads) are not attending sign language training at the schools due to various reasons. Therefore, the respective schools, stakeholders and partners need to devise operational techniques (methods) to sensitize and motivate them to join the training.
- In general, in order for deaf children to feel a sense of identity, to belong to, to be understood by and communicate with significant others, and to succeed in environments in which they are accepted, mothers and family members can make a difference in the lives of these children by simply develop language and communication skill (both the child's and themselves) through attending sign language trainings. By doing so, they can mitigate the challenges and provide a nurturing and linguistically stimulated home environment.

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Appendix-I
Addis Ababa University
School of Graduate Studies

Dear Madam,

First of all, I would like to thank you for your willingness to participate in the study.

The purpose of this research is aimed at understanding and gathering information on the communicative interaction between hearing mother and deaf child. The study will help various professionals and organizations working in the area of special children with hearing impairment.

Semi-structured Interview Schedule for Hearing Mothers

I. Bio-data of the Mother

1. Age _____
2. Educational background
 - Grade completed _____
 - Certificate (12+ 1) _____
 - College diploma _____
 - Degree or above _____
3. Occupation _____
4. Family size _____
5. Marital status _____
6. Monthly income of the family _____

II. Bio-data of the child

7. Sex _____
8. Age _____
9. School _____
10. Grade _____

III. Communication: Process, methods and challenges

1. At what age did the deafness occurred?
From birth – 3 years
From 3-5 years
Above 5- years
2. What do you think is the cause of your child's deafness?
 - Hereditary causes
 - Damage to the inner ear in the womb
 - Damage to the inner ear during birth
 - Ear infections
 - Certain antibiotics and trauma
 - Maternal disease (like rubella, meningitis etc.)
3. Who made the identification?
A. Mother C. Other family members
B. Father D. Professionals
4. How was the problem identified?
5. Which method of communication your children acquire early in life?
A. Sign language
B. Home sign language
C. Spoken/oral language
D. Combination of A&B/B&C
E. Any other _____
6. By which ways do you communicate with your deaf child?
 - How do you express your emotions, feelings, wishes etc to your child?
 - How your deaf child does express his/her feelings, emotions, interests, desires etc.A. Sign language
B. Home sign language
C. Spoken/oral language
D. Combination of A&B/B&C
E. Non-verbal communication methods (gesture, body contact, facial expression etc)

7. How efficient is that communication?

- Highly efficient
- Moderately efficient
- Some what good
- Not efficient

8. What is the most difficult way/mode of communication for you?

- A. Sign language
- B. Home sign language
- C. Spoken/oral language
- D. Combination of A&B/B&C
- E. Non-verbal communication methods
- F. Any other _____

9. How frequently do you have a problem in communicating with your deaf child?

- Always
- Sometimes
- Rarely
- Not at all

10. How difficult is that communication with your deaf child?

- Very difficult
- Difficult
- Less difficult

11. In what areas are the difficulties?

- In understanding the child's needs, feelings and interests.
- In communicating my feelings to the child
- In guiding the child to communicate with me or others.
- In developing positive relationship with the child.
- In providing parental help/ assistance in school and home tasks.

12. Have you tired to help your child to learn communication skills as early as the problem has happened? How? If 'no' why?

13. How often do you help your deaf child in doing school assignments and tasks at home?

Always

Sometimes

Rarely

Not at all

14. Have you received support like early diagnosis, sign language and communication skill training etc, from any institution?

Yes

No

15. If 'yes' what kind of support?

16. Which methods of communication do you prefer to use when communicating with your deaf child? Why?

A. Sign language

B. Home sign language

C. Spoken/oral language

D. Combining A&B/B&C

E. Any other _____

17. Do you think that your child understands your preferred mode of communication?

Always

Sometimes

Rarely

Difficult in understanding

18. Do you have any information/early experience on the possible causes of deafness?

19. Do you think deafness has an impact on communicative interaction between you and your child? How?

20. Do you encourage your child to participate in communicative interaction with you and other members of the family?

21. Does other family member participate in communicative interaction with the deaf child?

22. What measures you have taken to improve the communication skills of your deaf child after identification.

- I took part in language and communication skills trainings
- Involve the child in family communication interactions
- Involve in home and play activities with my child
- I received guidance and counseling service to tackle communication problems deafness imposes.
- I felt confused and didn't know what to do
- I developed appropriate communication skills and understating of deafness for easy communication between me and the child

23. Is mothering a deaf child difficult?

Not difficult

Little difficult

Much difficult

Much more difficult

24. What feelings do you experience when learning your child is deaf?

25. What is your feeling of having a deaf child?

26. Can you say some thing about your child/how do you express your child.

27. How much do you give love and warmth to your deaf child compared to other children?

28. How do you foresee your communication interaction with your deaf child in the future

- Child will learn appropriate skill and become component in communication
- I and other family members will learn how to communicate with the child
- It is very bleak to think of being able to communicate
- I am hopeful to be able to communicate each other
- Things may be better as my child meets with different peoples (students, teachers etc) at the school

29. What was your marriage status before the birth of a deaf child?
30. Does the presence of deaf child affect your marriage? How?
31. Do you receive support from the rest of the family?
32. How do you see the social life you had before having a deaf child?
33. Do you have a satisfactory social relation after having a deaf child?
34. If not, what problems do you face in your social interaction?
35. How much you try to come to terms with the disability and manage your and the family life?

Appendix II
Addis Ababa University
School of Graduate Studies

Dear Madam,

First of all, I would like to thank you for your willingness to fill-up this questionnaire.

The purpose of this research is together information and understanding on the communicative interaction between mother and her deaf child. It is also aimed at understanding on what mothers think and feel about themselves. The study will help various professionals and organizations working in the area of special children with hearing impairment.

This questionnaire has some statements in 2 parts, for each statement, you can respond in any of the five ways such as:

Strongly Agree (SA), Agree (A), Disagree (D),
 Strongly Disagree (SD) Undecided (U)

You may respond to each statement by marking a tick (✓) in the appropriate column against the statement, as you think or feel about it. There are no right or wrong responses. What ever way you respond will be considered as your genuine thinking or feeling. Hence you are requested to respond as you genuinely think or feel. Your responses and other information will be strictly treated confidential and only for research purpose.

Thank you

Please put a tick mark (✓) against each of the statement in one of the column

No	Statement	SA	A	U	D	SD
1	I consider my self a worthy mother to my deaf child					
2	I allow my child to use a mode of communication he/she prefers					
3	I usually use sign language to communicate with my child					
4	It is OK for me for having a deaf child					
5	I Usually do not understand the needs and feelings of my child					
6	People disappoint me because I have a deaf child					
7	I insist my child to speak words (oral language) than using other communication modalities					
8	I face a problem in communicating with my deaf child					
9	I have doubts about my competence in raising a deaf child					
10	I communicate fluently (with out difficulty) with child's preferred mode of communication					

11	I am not happy with my deaf child compared to my other children				
12	For communication, I speak (use oral language) with my deaf child				
13	I often have a satisfactory social relations with members of the family, neighbors etc.				
14	I try to help my child to learn communication skill as much as possible				
15	It makes me feel said, when another person says something negative about my deaf child				
16	I try to communicate verbally and non-verbally with my deaf child				
17	I feel that I am unlucky of having a deaf child				
18	I am not good a communicating with my deaf child as compared with other children				
19	Peoples in general look down at me for having a deaf child				
20	I feel I should go away from the troubles of having a deaf child				
21	I lack enough information about the impact of deafness on communication and interaction				
22	I feel frustrated when things get hard in my interaction with the deaf child				
23	I try to involve my child in reciprocal interaction				
24	I feel lonely and depressed at all times				
25	I sometimes cry alone about my deaf child				
26	I believe optimum communicative environment at home for the deaf child is lacking				
27	I feel I have more troubles in bringing up my deaf child				
28	I believe it has no use talking to a child once he/she is deaf				
29	I blame God band others for having a deaf child				
30	I wish I get rid of my deaf child				
31	I have my own way of communication with my deaf child				
32	I enjoy life with my deaf child				
33	I deliberately initiate and sustain communication with my child				
34	Though life is difficult with deaf child, I am trying hard to manage				
35	Because of the communication difficulty with my deaf child, I don't have warm and emotional relation-ship				
36	It makes me feel horrible, when I heard about another mother having a deaf child				
37	I encourage my child to communicate with me and other members of the family				
38	I feel guilty and shame for having a deaf child				
39	I consider my life is a failure				
40	I create rich social opportunities for my deaf child communicate				
41	I feel, carrying my deaf child is a way of knowing God				
42	I wished that I give more love to my deaf child				

Part 2: About Your Normal Children

For each statement, you can respond in any of the five ways such as:

Strongly Agree (SA), Agree (A), Disagree (D),
Strongly Disagree (SD) Undecided (U)

You may respond to each statement by marking a tick (✓) in the appropriate column against the statement, as you think or feel about it. Your genuine responses will be highly appreciated

Please put a tick mark (✓) against each of the statement in one of the column

No	Statement	SA	A	U	D	SD
1	I want my normal children to do their best in what ever they do					
2	I try to know who my normal children's friends are					
3	I allow my normal children to tell me if they think their ideas are better than mine.					
4	I often supervise and monitor my children					
5	I always speak to my normal children with a warm and friendly voice					
6	I really know where my normal children to do something, I explain why					
7	When I want my normal children to do something, I explain why					
8	I try to know what my normal children do with their free time					
9	I am involved with my normal children's schooling-like helping with home work, helping in selecting courses or streams and attending school programs for parents					
10	I really know whether my normal children go to school or not					
11	I enjoy staying home with my normal children more than going out with friends					
12	I try to know where my normal children are in most afternoons after class					
13	I give a lot of care and attention for my normal children					
14	I really know what my normal children do with their free time					
15	I tell to my normal children that my ideas are correct and that they shouldn't question them					
16	I emphasize that every member of the family should have some say in family decision					
17	I act cold and unfriendly when my informal children do some thing I don't like					
18	I allow my child to play with other children					
19	I often try to know whether my normal children go to school or not					
20	I often encourage my normal children to express their individuality and consider their opinions in making decisions that affect them					

Appendix-III

ክፍል 1

መመሪያ:- ከዚህ በታች ስለ ግልጽ እና ስለልጅዎ አጠቃላይ መረጃ የሚጠይቁ ጥያቄዎች ተዘርዝረዋል። ለጥያቄዎቹ አስፈላጊውን መልስ በተሰጠው ክፍተት በታላይ ይሙሉ።

I. የእናት ድህረ ታሪክ

ሀ. እድሜ -----

ለ. የትምህርት ሁኔታ -----

- ያጠናቀቁት የትምህርት (የክፍል) ደረጃ ----- የኮሌጅ ዲፕሎማ

- ስርተፍኬት (12+1) ----- ዲግሪና ከዚያ በላይ -----

ሐ. የሥራ ሁኔታ

መ. የቤተሰብ ብዛት

ሠ. የትዳር ሆኔታ (ያገቡ/ያላገቡ)

ረ. ወርሃዊ የቤተሰብ ገቢ

II. የልጅ ድህረ ታሪክ

ሀ. ያታ -----

ሐ. ትምህርት ቤት -----

ለ. ዕድሜ -----

መ. የክፍል ደረጃ -----

III. መግባባት:- ሂደቱ፣ ዘዴውና ችግሮቹ

ተ.ቁ	አረፍተ ነገሮች	በባም አልሰማም	አልሰማም	መውሰን አልችልም	እስማማለሁ	በባም እስማማለሁ
1	መስማት ለተሳነው ልጄ መልካም እናት ነኝ ብዬ አስስባሁ።					
2	ልጄ የመረጠውን የመግቢያ ዘዴ (የመንገድ) እንዲጠቀም					
3	ከልጄ ጋር ለመግባባት በአብዛኛው የምልክት የቋንቋ አጠቃላይ።					
4	መስማት የተሳነው(ናት) ልጄ ስለአለኝ ምንም አይሰማኝም					
5	አብዛኛውን ጊዜ መስማት የተሳነው ልጄን ፍላጎትና ስሜት መረዳት አልችልም።					
6	መስማት የተሳነው ልጄ እናት በመሆኔ ሰዎች እንድበላጩ (እንዳዘን) ያደርጉኛል።					
7	ልጄን ሌሎች የመግባቢያ ዘዴዎችን ከመጠቀም ይልቅ የንግግር ቋንቋን እንዲጠቀም (ትጠቀም) አስገድደዋለሁ(ዳታለሁ)።					
8	መስማት ከተሳነው (ናት) ልጄ ጋር የመግባባት ችግር ይገጥመኛል።					

9	መስማት ከተሳነው (ናት) ልጄን በአግባቡ የማሳደግ ብቃቴን እጠራጠራለሁ።				
10	መስማት የተሳነው (ናት) ልጄ ለመግባባት በመረጠው (ችው) የመግባቢያ ዘዴ(መንገድ) ያለምን ችግር እግባባለሁ።				
11	ከሌሎች መስማት ከሚችሉ ልጆቼ ጋር ሳነፀረው መስማት በተሳነው ልጄ ደስተኛ አይደለሁም።				
12	መስማት ከተሳነው (ናት) ልጄ ጋር ለመግባባት የንግግር ቋንቋ እጠቀማለሁ።				
13	ብዙውን ጊዜ ከቤተሰቤ፣ ከጎረቤቶቼና ከሌሎችም ሰዎች ጋር የሚያካማህበራዊ ግንኙነት አለኝ።				
14	ልጄ የመግባባት ችሎታ እንዲማር (እንዲያዳብር) የቻልኩትን ያህል ለመርዳት እሞክራለሁ።				
15	ሌሎች ሰዎች ስለመስማት ስለተሳነው ልጄ መልካም ያልሆኑ ነገሮችን ሲናገሩ ስለማ በጣም እከፍለሁ።				
16	መስማት ለተሳነው (ናት) ልጄ ጋር በንግግር ቋንቋና ድመፅ አልባ የመግባቢያ ዘዴዎች ለመግባባት እሞክራለሁ።				
17	መስማት የተሳነው (ናት) ልጄ ስለአለኝ እድለኛ እንዳልሆንኩኝ ይሰማኛል።				
18	ከሌሎች ልጆቼ ጋር ሳነፀር መስማት ከተሳነው (ናት) ልጄ ጋር ጥሩ የመግባባት ግንኙነት የለኝም።				
19	በአጠቃላይ ሰዎች መስማት የተሳነው (ናት) ልጄ እናት ስለሆንኩ ዝቅ አድርገው ይመለከቱኛል።				
20	መስማት የተሳነው (ናት) ልጄ እናት በመሆኑ ምክንያት ከሚመጡበኝ ችግሮች መሸሽ (መራቅ) እፈልጋለሁ።				
21	መስማት መሳን በመግባባትና በእናትና ልጄ ግንኙነት ላይ ስለሚያስከትለው ተፅዕኖ በቂ እውቀት የለኝም።				
22	መግባባት ከተሳነው (ናት) ልጄ መግባባት ሳንችል ስንቀር ተስፋ እቆርጣለሁ።				
23	ልጄን በሁለታችን የመግባባት ግንኙነት ላይ ተሳታፊ እንዲሆን እሞክራለሁ (አጥራለሁ)።				
24	ሁልጊዜ የብቸኝነትና የጭንቀት ስማት ይሰማኛል።				
25	እንዳንድ ጊዜ መስማት ስለተሳነው ልጄ ሳስብ አለቅሳለሁ።				
26	ቤታችን ውስጥ መስማት ለተሳነው (ናት) ልጄ ምቹ የነ የመግባቢያ ሁኔታ ተፈጥሯል (አለፀ ብዬ አላስብም)				
27	መስማት የተሳነው (ናት) ልጄን ለማሳደግ ከፍተኛ ችግር እንደገጠመኝ አስባለሁ።				

ክፍል 2:- ስለ መስማት የሚችሉ ልጆች

ለእያንዳንዱ አረፍተ ነገር (ጥያቄ) ከተዘረዘሩት አምስት አማራጮች በአንዱ ላይ ይመለሱ። አማራጮቹም፡-

በጣም እስማማለሁ፣ እስማማለሁ፣ አልስማማም፣ በጣም አልስማማም፣ መወሰን አልችልም።

በእርስዎ እንዳሰቡት ወይም እንደተስማዎት መልስዎን በእያንዳንዱ ጥያቄ ቀጥታ በሰንጠረዥ ውስጥ ከተሰጡት አምስት አማራጮች በአንዱ ላይ የ “✓” ምልክት ያድርጉ። ለመልስዎ በጣም አመሰግናለሁ።

ተ.ቁ	አረፍተ ነገሮች	በጣም አልስማማም	አልስማማም	መወሰን አልችልም	እስማማለሁ	በጣም እስማማለሁ
1	ልጆቼ ማንኛውንም አይነት የትምህርትም ሆነ ሌላ ስራ ሲሰሩ በተሳለ ጥራትና ብቃት እንዲሰሩ እፈልጋለሁ።					
2	የልጆቼ ጓደኞች እነማን እንደሆነ ለማወቅ እሞክራለሁ።					
3	የልጆቼ ሃሳብ ከእኔ የተሻለ ሆኖ ከተገኘ እንዲነግሩኝ እፈቅድላቸዋለሁ።					
4	አብዛኛውን ጊዜ ልጆቼን እከታተላለሁ አቆጣጠራለሁ።					
5	ሁልጊዜ ልጆቼን የማነጋገራቸው በፍቅርና የጓደኛነት ስሜት በተሞላበት ሁኔታ ነው።					
6	ከትምህርት ቤት በኋላ ልጆቼ የት እንደሚውሉ በትክክል አውቃለሁ። ልጆቼ የሆነ ነገር እንዲሰሩ ስፈልግ ለምን መስራት እንዳለባቸው ምክንያቱን እገልጻለሁ።					
8	ልጆቼ ትርፍ ጊዜያቸውን በምን እንደማያሳልፉ ለማወቅ እሞክራለሁ።					
9	በልጆቼ የትምህርት ስራ ላይ እሳተፋለሁኝ (ለምሳሌ የቤት ስራ ሲሰሩ በመርዳት፣ ክርሶችን ወይም የትምህርት መስኮችን በመምረጥ፣ ለወላጆች ለሚዘጋጁ የትምህርት ቤት ፕሮግራሞች ላይ በመሳተፍ ወዘተ.)					
10	ልጆቼ ወደ ትምህርት ቤት መሄዳቸውን ወይም አለመሄዳቸውን በትክክል አውቃለሁኝ					
11	ከጓደኞቼ ጋር ወደ ውጭ ከመወጣት ይልቅ ከልጆቼ ጋር እቤት መቆየት ያስደስተኛል።					
12	ከትምህርት ቤት በኋላ ልጆቼ የት እንደሚውሉ ለማወቅ እሞክራለሁ።					
13	ለልጆቼ ከፈተኛ የሆነ እንክብካቤና ትኩረት እሰጣለሁ።					
14	ልጆቼ ያላቸውን ትርፍ ሰአት ምን እየሰሩ እንደማያሳልፉ በትክክል አውቃለሁ።					

15	የእኔ ሃሳብ ሁልጊዜ ትክክል እንደሆነና ጥያቄ ውስጥ ማስገባት እንደሌለባቸው ለልጆቼ እነግራቸዋለሁ።					
16	ሁሉም የቤተሰብ አባላት ቤተሰብን በሚመለከት ውሳኔ ላይ የተወሰነ ተሳትፎና ድርሻ እንዲኖራቸው አደርጋለሁ።					
17	ልጆቼ እኔ የማልፈልገውንና የማልወደውን ነገር ሰያይርጉ ቀዝቀዝ ያለና ቀና ያልሆነ ስሜትን አሳያቸዋለሁ።					
18	ልጆቼ ከሌሎች ልጆች ጋር እንዲጫወቱ እፈቅዳለሁ።					
19	ልጆቼ ወደ ትምህርት ቤት መሄድ አለመሄዳቸውን ለማወቅ እጥብቅራለሁ።					
20	ልጆቼ ራሳቸውን እንዳገልጹ አበረታታለሁ እነርሱን በሚመለከቱ ውሳኔዎች ላይም ሃሳባቸውን እቀበላለሁ።					

Appendix IV

Observation Check List

Name of the child _____ Name of Observer _____

Date of observation _____ Place of observed _____

Round of observation _____ time of observation from _____ to _____

1. Mother initiate communication of deaf child

Always Some time Rarely Not at all

2. Encouraging and motivating deaf child to communicate

Excellent Very good Good Poor

3. Frequency of mother's communication with a deaf child

Frequently Sometime Rarely Never

4. Mother using sign language

Always Some time Rarely Not at all

5. The mother responds to communication (both verbal and non-verbal) emitted by the child

Always Some time Rarely Never

6. Mother encourages the child to use different mode of communication

Excellent Very good Good Poor

7. Mother's competence in helping the child to communicate

Excellent Very good Good Poor

8. Giving assistance/ help in assignment and tasks

Excellent Very good Good Poor

9. Involving the child in house hold activities and/or family conversations

Always Some time Rarely Not at all

10. The child initiates communication

Always Some time Rarely Never