

**EFFECTS OF EARLY CHILDHOOD EDUCATION ON CHILDREN WITH
HEARING IMPAIRMENTS IN SPECIAL SCHOOLS IN KIAMBU,
MURANG'A AND NYERI COUNTIES, KENYA**

BY

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DECLARATION

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To the members of my family and all people out there who made it easy for me to get this far. May God bless you all for the role you have played in any part of my life.

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ABBREVIATIONS AND ACRONYMS

ASL	-	American Sign Language
CRC	-	Convention on the Rights of the Child
DICECE	-	District Centre for Early Childhood Education
ECDE	-	Early Childhood Development and Education
EFA	-	Education For All
FPE	-	Free Primary Education
HI	-	Hearing Impairment
IIEP	-	International Institute for Educational Planning- Newsletter
KCSE	-	Kenya Certificate of Secondary Education
KISE	-	Kenya Institute of Special Education
KIE	-	Kenya Institute of Education
MDGS	-	Millennium Development Goals
MoE	-	Ministry of Education
MoEST	-	Ministry of Education, Science and Technology
NACECE	-	National Centre for Early Childhood Education
SNE	-	Special Needs Education
UNESCO	-	United Nations Educational, Scientific and Cultural Organization
USA	-	United States of America

ABSTRACT

The purpose of this study was to find out the effects of Early Childhood Education on children with hearing impairment (HI) in Kiambu, Murang'a and Nyeri counties, Kenya. Vigotsky's theory of cognitive development guided the study. The specific objectives were to (i) find out the enrollment trend of children in special schools for HI in the counties. (ii) Determine the type of ECE services provided to children with HI and their effect on the children with HI. (iii) Investigate the role played by the parents and the teachers of the children with HI in ECE. (iv) Identify the constraints experienced by the teachers of the children with HI in ECDE. The study employed descriptive survey method whereby the target population included children with HI between ages 3-6 years in special schools for the children with HI from the selected districts, their teachers, the headteachers and their parents. Purposive sampling was used to select the schools, classes, children, teachers and headteachers while convenience sampling was used to select the parents. The research instruments were interview schedules for headteachers, pre-primary teachers and for parents. The instruments were pre-tested for validity and reliability at Racecourse Primary School's HI unit, Nairobi. The unit was representative sample that was not included in the study. Split-half technique was used to assess the instruments' reliability while their validity was determined after it was read through with the representative respondents. The findings revealed that 70% of children with HI are enrolled for ECD when they are over age that is, at the age of 6 years and above. Those enrolled benefit especially in acquisition of social skills. Teachers exposed the children in ECDE activity areas effectively, however parents delayed in their roles of identification of HI, taking intervention measures and enrolment of their children for ECDE. Teachers faced communication problems as the main constraints in the teaching and learning of ECDE children. Therefore, in conclusion, it was found that although the teachers played their role effectively, the delays by the parents in enrolling their children for ECDE during the required early child years curtailed adequate effect of ECDE on the children with HI. Recommendations were made to parents to enrol their children for ECDE during the early childhood years i.e. 3-6 years, the teachers to organize opportunities for remedial teaching for sign language and the government to subsidize ECDE. Further research needs to be done on smooth transition of children from home to pre-schools.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The early years of a child are quite important in laying the foundation of adulthood. During this time, children undergo fast growth changes in mental, physical, social, emotional and spiritual development (NACECE, 1999). Therefore, high quality early childhood development and education (ECDE) programmes particularly for children at risk produce far reaching benefits not only to the individual but also to the society. According to Young and Richardson (2007), enhanced early childhood development leads to improved health and wellbeing population and prosperous society. They claim that ECDE has a great impact on the physical and mental health and wellbeing in the later stages of life. They continue to argue that in the early years, the experienced brain and biological development sets, basic competence behaviour, and learning that lasts throughout the lifecycle. It also influences how individuals cope and contribute to the society in which they live and work. It is for this reason that every child needs to undergo effective early childhood development and education (ECDE) to foster holistic development and hence become a useful member of the society.

The importance of education in the early years of a child has been further emphasized the world over and it is particularly outstanding in three documents, that is the Convention on the Rights of children (CRC) of 1989, which states that all children have a right to free education, Conference on the Education for All (EFA) and world summit for children (KISE, 2007). This implies that every child should be provided

with education regardless of who the child is in order to give them a firm foundation for their future lives.

A focus on the various parts of the world indicates that every culture has had and still does have the task of socializing and educating their young. For instance in France, women and other members of the family are responsible for the education of the child. With the coming of the industrial development in the 19th century, women sought employment away from home and family. Shelters then referred to as “asylums” were established for the children. These asylums were later integrated into educational systems or nursery schools. Today, the nursery schools are considered essential for greater chances of success in schools (Cochran, 1993). Hence schooling of all children from 2 to 6 years old takes place everywhere (UNESCO, 1997). Teachers of the children with HI are consulted on matters of the curricula and assessment procedures (Gregory, 2002). The early enrolment of children in ECDE is recognized to have a great effect of the success of the children in primary schooling. Similarly in the United States of America (USA), educational progress for young children provided enrichment and socialization mainly for the middle and upper-middle income families. Then in the 1960s, the national headstart programme was established for economically disadvantaged children (Cochran, 1993). In USA, Early childhood special education is a blend of early childhood and special education. It concentrates on the development and education of children from birth to eight years (Deiner, 2005). Gregory (2002) states that, the education goal in the USA for majority of deaf children is learning English. Teaching is done using pure auditory-oral methods and signs from the American Sign Language (ASL). Teachers are encouraged to provide appropriate language models and opportunities for learning language in their work with pre-school children with HI. The enhancement of

language for both teachers and children has a great effect of ECDE on the learners with HI. Although Vigotsky believes that language is crucial to the development of one's thought processes, concentrating on learning English alone blocks the children from benefiting in other learning areas.

While in India, child caring was traditionally a family responsibility until the technological and social development in the 20th century. These brought drastic changes to child rearing and education pattern as family members sought paid labour. This led to pre-schools establishment which enroll children between 2½ to 5 years of age. Unfortunately, they serve children from middle and upper class families as those from low income groups lack awareness and place education as a low priority (Cochran, 1993). According to Chowdhury (2002), pre-school education in India is a neglected chapter. He claims that there is a great deal of confusion regarding programmes in pre-schools. On the same, Gregory (2002) contends that many Asian children with HI suffer considerable frustration and confusion related to their identity leading to problems. She also asserts that hearing Asian parents experience difficulties in instilling values, behaviour and knowledge in their children with HI.

In support Chowdhury (2002) points out that 60% of children under six years are left in each other's care in India and lose out on proper stimulation and educational opportunities. Thus, the underprivileged child such as the one with HI suffers insurmountable education handicap from the time he/she is born due to lack of Early Care and Education (ECE). The objective of the pre-schools in India is mainly to prepare children for primary education and provision of nutrition and care. Those with disabilities (below 5 years) are referred to district hospitals as there are no government programmes at village level to meet the special needs of children with disabilities. Those above 5 years are referred to mainstream schools. Children with

disability are thus not accepted in pre- school although identification and referral is one of the components in the training of the workers (UNESCO, 1997). This theory shows that the young children with HI are not exposed to early childhood education and thus they are denied its benefits or effects such as instilling of various skills at the appropriate age.

Similarly, Australia's pre-primary services are the responsibility of state governments. The pre-schools are available only to children in the year before school entry. Most of them offer half- day sessions per week and are closed during the school holidays (Cochran, 1993). Chile on the other hand, aims to expand the coverage of pre-school education of children between 0-6 years. Her pre-school educational system plays a major role in integrating children with special needs (UNESCO, 1997).

In the past, education of children in the African community setup was paramount and a community affair. This was done at an early age through stories, riddles, tongue twisters, proverbs and on-job training. However, this order has been interrupted by socio-economic and socio-cultural changes. These have led to broken extended family systems with dire consequences on the positive development of the child and education.

Education in the African setup has also been affected as a result of children being born and growing under extremely difficult conditions due to rapid social and environmental transformation which has given rise to socio-cultural disintegration. The traditional setup has considerably changed due to various factors which include; increased number of women in labourforce and households headed by women

(NACECE, 2000). On the other hand, men have moved to urban areas, mines or large-scale farms for wage employment thus dumping their traditional roles of overseeing family duties. Africans have also been affected by wars, population growth and rapid urbanization adding to problems of provision for children, childcare and informal education practices making the condition of children pathetic. For instance, Ethiopia and Sudan have had years of drought, which have taken toll on the children. These interruptions made it necessary to equip the children with formal education and care in central institutions leading to establishment of the Early Childhood Development and Education (ECDE) centres (NACECE, 2000). In Zimbabwe, education of children with HI started in 1940s and this education is on the rise (Gregory, 2002).

In Kenya, education and socialization of the young took a natural process carried out by members of the extended family. Members of the family lived together and thus monitored the growth of children. They enforced rules, discipline and apprenticed them in what they would be occupied in as adults. However, the introduction of the cash economy and changed settlement patterns, have eroded the stable and secure environment within which the child grew up. Disintegration was further quickened by the emergency in the 1950s which resulted to detention of men. Women had to shoulder the roles of men as breadwinners and mothers. This led to the emergence of ECDE institutions in the agricultural plantations prior to 1940. The ECDE institution for the African children with hearing impairments was first started in Mombasa in 1958, that is, Aga Khan Special School (Ndurumo, 1993). Today, child-rearing, socialization and education have been replaced by paid classroom ECDE teachers and untrained child minders. This is due to established formal education and other factors such as rural-urban migration (NACECE, 2000). This is an indication that most

parents are busy in paid employment and have no time for child-rearing. Therefore, if children are not enrolled for ECDE, their opportunities for learning important skills are blocked. Thus, the study assessed the enrollment trend of children with HI in Kiambu, Murang'a and Nyeri counties, Kenya.

ECDE in Kenya caters for holistic development of children between the ages of 0-6 years. The relevant services are offered in institutions such as nursery schools, kindergartens, crèches, pre-units, pre-schools, pre-primary schools and other out-of-school settings (NACECE, 2000). Pre-school education for children with HI takes place in units in some regular public schools and ECDE classes in public schools for children with HI. According to Ndurumo (1993), traditionally, children with HI spent their first 3-4 years in oral designated communication schools if they fail to develop oral skills. This study sought to find out whether this is the case to date. Ndurumo, argues that children with HI should be allowed to follow the regular school curriculum.

1.2 Statement of the Problem

Despite the fact that Early Childhood Development and Education (ECDE) plays a major role in the holistic development of children in Kenya, it is not compulsory, nor is it subsidized hence attendance in pre-school is not a prerequisite for joining standard one. Some parents lack awareness on the importance of the ECDE curriculum and hence keep their children at home until they attain the age of 6 years when they join standard one. This denies the children an opportunity to be exposed to enriched environments in pre-school during their critical stage of development, that is, 3-6 years. During this time, the learners are most receptive to learning new experiences. Lack of exposure to ECDE leads to limitation of the intended EDCE

effect on the children with HI. The introduction of free primary education (FPE) and prohibition of conducting interviews on children to join standard one have made unwilling parents to view ECDE as redundant especially because they have to pay levies for ECDE unlike the primary school education. While it may be easy for children without hearing impairments to catch up with their peers to undergo ECDE, the situation can be quite harmful to children with hearing impairments. This study exposed the effect of ECDE on children of ages 3-6 years with hearing impairments in special primary schools in Kiambu, Murang'a and Nyeri counties, Kenya.

1.3 Purpose of the Study

The purpose of this study was to assess the effects of ECDE services on children aged between 3-6 years with hearing impairment and its effect on their learning.

1.4 Objectives

The study was guided by the following objectives:

- i. To investigate the enrolment trend of children with HI in primary schools for the deaf in Kiambu, Murang'a and Nyeri, counties, Kenya.
- ii. To assess the type of Educational ECDE services provided to children with HI and its effects to their learning.
- iii. To investigate the role played by the parents and teachers of the children with HI in ECDE in enhancing the effects of ECDE.
- iv. To identify the constraints experienced by teachers of the children with HI in ECDE.

1.5 Research Questions

The study attempted to answer the following questions:

- i. What is the enrolment trend of children with HI for ECDE?
- ii. What type of ECDE services are provided to children with HI?
- iii. What are the roles played by (a)teachers; (b)parents in ECDE in the counties?
- iv. What are the constraints in teaching and learning process of ECDE to children with HI?

1.6 Significance of the Study

The findings of the study will create awareness to the assessment officers on the delayed enrolment of children with HI. Make follow-ups on the cases they place for ECDE in special schools. They will also reveal to the public the educational ECDE services offered in pre-schools and their effects on the children with HI and hence encourage parents to enrol their children during the appropriate ages, that is 3-6 years. The parents will also be motivated as well as the teachers of this children to play their roles adequately. This leads to enhanced learning of the children with HI. Consequently, the children will get equipped with useful skills to prepare them for basic education and their social lives.

1.7 Scope and Limitations

1.7.1 Scope

During the study, the researcher dwelt on special primary school for children with HI in Kiambu, Murang'a and Nyeri counties. The study also focused only the children who were undergoing ECDE plus their teacher and parents. In that case, the researcher had access to the respondents in the three schools, only during the normal

school days apart from parents who were interviewed during their monthly visiting days.

1.7.2 Limitations

Since the children with HI at ECDE level were young and still in the process of learning sign language, the researcher relied on their teachers and parents to collect data. The research also hoped to take only one day in administering interviews to all the respondents and recording the information in each school. However, it was not possible to get the parents during the school days and had to wait until the parents on monthly visiting day to interview them. The visiting days also posed a problem when two of the schools held the visits on the same date. A reschedule had to be done and this led to spending more time than expected.

1.8 Research Assumptions

The research assumptions comprised the following:

- i) The children with HI are enrolled for ECDE during the appropriate ages, i.e 3-6 years.
- ii) The children are provided with ECDE services as recommended in the new ECDE syllabus.
- iii) The parents are able to identify HI in the children early enough to seek medical and educational intervention early enough to curb deterioration and hence help the children to benefit from ECDE adequately.
- iv) The special schools for children with HI are fully equipped to deal with constraints that may affect the teachers in teaching and learning in ECDE.

1.9 Theoretical and Conceptual Framework

1.9.1 Theoretical Framework

The study was based on the theories of psychologists Lev Vygotsky of cognitive development. He propose that children learn through interactions with their surrounding culture. He stresses the importance of guidance from adults or more competent individuals in enhancing the children's cognitive development. He propose the concept of Zone of Proximal Development (ZPD) in which he believes most sensitive instruction or guidance can help children to attain higher levels of thinking. He theorises that for adequate cognitive development to take place, the child must interact with other people. He further contends that children learn through social interaction with a skillful tutor. He says this role can be played by a parent or a teacher. Cognitive development is affected by the intellectual stimulation a child experiences. The activities practised and social patterns a child is exposed to have a great effect on the cognitive skills and thinking patterns of a child.

The theory posits that children have innate basic abilities that are developed into most sophisticated and effective mental process through social interaction. Hence language is crucial to the development of a child's thought process since thoughts are displayed through words. The young child needs to be actively involved in his or her own learning. He also contends that interaction with the peers is an effective way of gaining knowledge and skills. Play is an important way in children develop child initiated, self-directed activities whereby they exercise self-control. In play, they operate at a higher level. This theory shows that, a good education stresses on what children can do as their capability begins to emerge with the appropriate help. Concentrating on what children can do without help undervalues the emerging

competencies. Instructions help to bring consciousness and deliberate mastering to the child's abilities (Tina, 2005). According to Vigosky, the merging of thought and language takes place between 3-7 years of age and involves talking to oneself. He claims that children must use language and communicate with others before they focus inward to their own mental processes. He points out that the chronological age is not an indicator of potential. On disabilities such as hearing impairments, he states that social interaction are essential to a child's social development. The influence of a child impairment on his/her ability to engage in social interactions affects their development. He argues that the social consequences of the disability have more impact on the child than the disability itself. Therefore, full potential development can be acquired with the help of social interaction with adults and the peers. He supports consistent and effective guidance by an instructor to help a child progress to his/her their potential level and be able to carry out the learnt skills on their own in future. This shows that children with HI need an early exposure to environments that provide social interactions with teachers and peers in order to realize full potential development. They also need skilled instructors i.e. the teachers for an adequate effect to their learning.

1.9.2 Conceptual Framework

For Early Childhood Education to have a positive effect on children with HI, it is important to enrol them at the appropriate age that is 3-6 years in the special schools for the hearing impaired. It is, therefore, the role of the parents to identify the hearing impairment, seek intervention measures and consequently enrol them for educational ECDE services. The teachers, on the other hand, have the role of providing the appropriate educational ECDE services such as syllabus coverage, preparation of

teaching and learning materials, inculcating fundamental skills to the learners with HI, preparation of documents such as progress records and assessing the learners.

When the children access ECDE after enrolment, they will benefit from social interaction with the peers and instructions from skillful teachers in special schools.

The effect of the exposure to ECDE will enable the children to acquire fundamental skills, a firm foundation for education in future, good performance in activity areas/curriculum and proper preparation for primary schooling. This is illustrated in

Figure 1.1

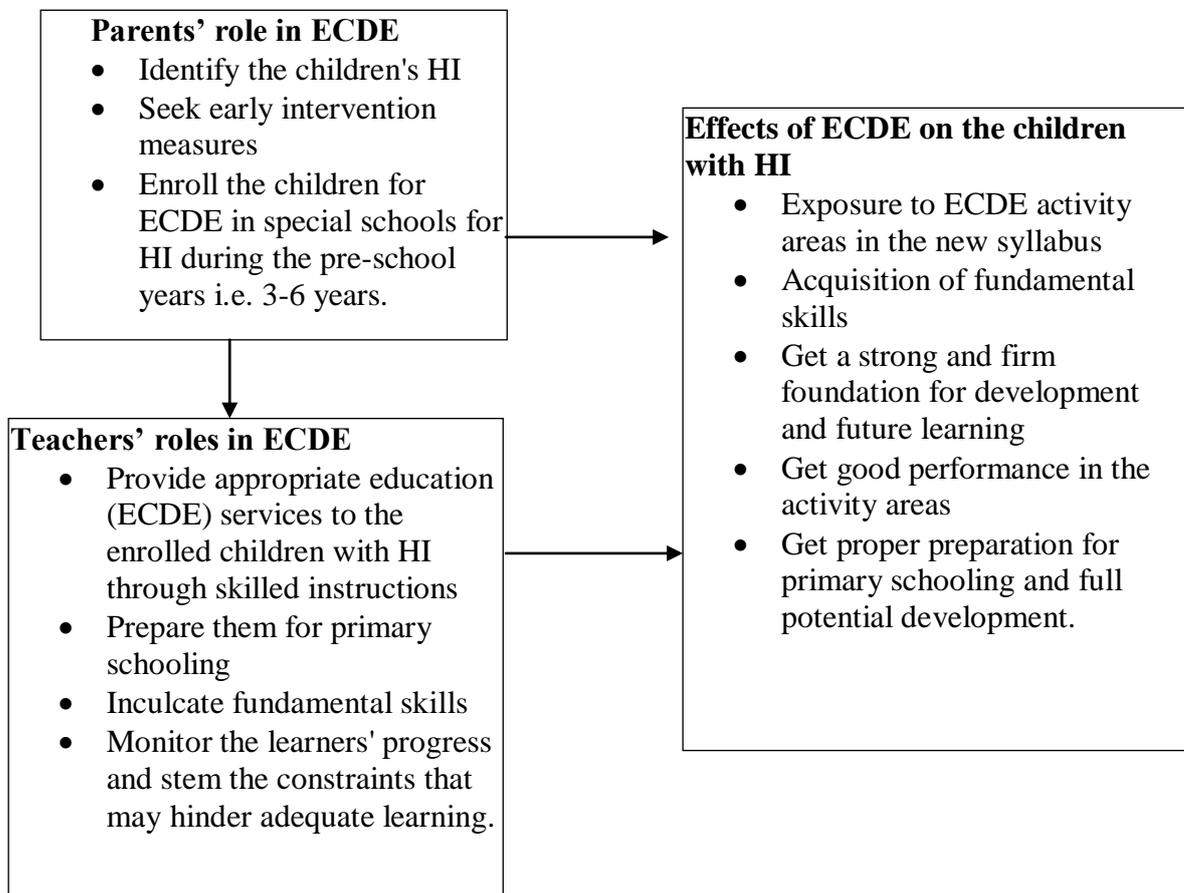


Figure 1.1: Effect of Early Childhood Development and education on children with hearing impairment (HI).

Source: Researcher (2012)

As indicated above, a properly coordinated networking between the stakeholders is needed to realize great effects of ECDE on children with HI. This will then culminate into focused individuals and a productive society.

1.10 Operational Definitions of Terms

Care givers: refers to all the people providing various services to the young children of ages 3-6 years, in schools. These include teachers, house mothers and class assistants.

Constraints: these refers to factors that interfere with the teachers' efforts in teaching the children with HI.

Early childhood development and education: refers to educational experiences / curriculum offered to children at pre-school level.

HI: this refers to hearing disorders affecting children during their early childhood.

Holistic development: is the development of a child in all aspects, that is, physical, cognitive, language, spiritual and social emotionality.

Impact: this refers to the extent to which ECDE services have been effectively provided to pre-school children with hearing impairments and the notable changes it has brought about.

Intervention measures: refer to the services provided to children with hearing impairments to curb deterioration of the impairment or reduce its impact on the development of the individual children.

Pre-school: refers to centres of early childhood and education for young children between 3-6 years.

Regular schools: refer to centres of early childhood and education for children without HI.

Untrained children minders: refer to housemaids who are commonly entrusted in house holds of working mothers/fathers to take care of young children.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviewed literature related to early childhood development and education under the following subheadings: Enrolment of Early Childhood Development and Education (ECDE), The general situation of enrolment for ECDE, enrolment for ECDE in Kenya, ECDE educational services, importance of ECDE educational services, effects of ECDE, roles of parents and teachers of children with HI in ECDE and constraints experienced by teachers of ECDE in Kenya.

2.1 Importance of the Enrolment for Early Childhood Development and Education

The early childhood years are the most significant period in the life of an individual. According to Chowdhury (2002), it is during the early childhood years that the foundation for later development is laid through appropriate stimulation and a conducive learning environment. The child is highly receptive to all that prevails in his/her environment and his/her learning potentials are at their peak. Whatever is assimilated in this foundation period gradually stabilizes later on. On the other hand, damage or impoverishment suffered at this stage is likely to be irreparable. In support of the same was the world conference on Education For All (EFA) held in Jomtien, Thailand, 1990, where the great importance of the early years as the foundation for the life of an individual was acknowledged. Ministry of Education (2006) also emphasizes that the environmental experiences during this period can enhance or inhibit realization of one's potential in life. In line with this observation, this study

created awareness on the importance of the enrolment for early childhood development and education.

According to MoE (2006), brain development is most rapid in the early years and that at this period, the children are able to learn and acquire certain knowledge, skills and attitudes with minimal effort. In addition, Chowdhury (2002) argues that at no other time in the lifespan is imitation of speech and actions of others more pronounced than during these early years. In that case then, this period is appropriate to enrol children with hearing impairments for ECDE services. As Garwood (1983) states, it is during the early years that the impact of deafness on the developing child can be minimized through carefully and wisely planned experiences in which the caregivers and teachers have roles to play in their various ECDE programmes. He claims that an appropriate ECDE programme should expose the individual child to peer group models, language models, opportunities for social interaction with peers, preparation for basic education and later integration into high school, adequate teacher preparation and training and others like parental participation and support. When children are enrolled for ECDE, they get exposure to experiences that enhance their cognitive development contrary to when they are kept at home during the early childhood years i.e. 3-6 years. Once enrolled, they get opportunities to interact with their peers which is an effective way of gaining knowledge and skills as purported by Vigotsky's theory which are some of the benefits of ECDE.

Another observation by Kirk (1972) shows that the major purpose of ECDE for children with HI between ages 3-6 years are among others to help the child take advantage of his/her residual hearing through the use of hearing aids and amplified

sounds, to develop in the child elementary number concept, to develop a readiness for reading words and phrases and to develop language, speech and speech reading ability. It is, therefore, with these findings in mind that the study endeavoured to unearth the age appropriateness of children with HI enrolled for ECDE services.

2.1.1 The General Situation of Enrolment for ECDE

Although enrolment at the right age has far reaching benefits in the life of children with hearing impairments, various international organizations have expressed concern over the care, growth, development and education of children. These include the convention on the rights of children (CRC) of 1999, world declaration on education for all (EFA) of 1990, and others like Salamanca statement and framework for action on special needs education of 1994, (UNESCO, 1997). A review on special needs education carried out by UNESCO between 1993 and 1994 shows a general lack of attention to this issue and gaps in the provision for young children with special educational needs in many parts of the world. Translating the guidelines and recommendations into action seems to be quite a challenge. In view of this, the study identified and put to light the challenges and constraints encountered by the teachers in enrolment and provision of ECDE services to the children with hearing impairments.

In connection to this, IIEP (2007) points out that in Asia, enrolment in ECDE programmes varies widely across the region from over 90% in countries such as Malaysia and Thailand to under 10% in Lao and Cambodia. She reports that in Australia, children with special needs have access to early childhood services at pre-school level. Funds are also provided to pre-schools for specialist support for special

needs. However in India, disability is perceived as a medical problem thus preventing provision of services to meet the pre-school educational needs of children with disabilities.

On Mauritius, UNESCO (1997) reports that there has been lack of trained staff in pre-schools and that neither figures on children with special needs nor a policy on the same are available. That with an increasing number of working women, children with disabilities are left at home without access to education. Another place where ECDE children have not received adequate attention is Eastern Cape in South Africa. UNESCO (1997) reports that, very few children receive appropriate ECDE services and thus have an abrupt introduction to formal education. The report states that, children with disabilities are even more disadvantaged as most families in the rural areas have limited access to early identification and intervention services. Some areas are said to benefit from community-based rehabilitation services but the children with special educational needs receive very little support in the educational settings.

In Jordan, children are traditionally cared for at home until the age of six years. This is done by mothers, older siblings and sometimes by neighbours. Fathers are either absent or slightly involved in raising of their children (UNICEF, 2002). These findings reflect a general lack of adequate attention to matters regarding ECDE services to children globally. They also show lack of commitment to the various declarations made by the international organizations. As earlier indicated family structures in various communities have changed due to the monetary system. Unlike in the past when children received informal education, nowadays family members are committed to paid jobs. Therefore, child rearing lacks the attentions, it deserves and children may lack skilled tutors to help them instill important

fundamental skills. The study, therefore, assessed whether this lack of commitment to early enrollment of children for ECDE services affects children with HI in the areas of study. UNICEF (2002) cautions that, to fulfill their obligation under the convention on the rights of the child (CRC), states have to stop seeing early childhood care as an issue of concern to families alone, as an optional or a soft alternative. That, investing in ECDE should be viewed as second to nature for the human family as natural and inevitable to our lives as the sun and the rain on a field of rice.

Blenkin and Kelly (1988) argue that a child's cognitive growth does not proceed by simple motivation. It will only occur if the appropriate kinds of educational experience are provided. These include consideration of the child's role in learning and development, how these may be promoted and how the experiences can be presented in order to support that learning. This study investigated the type of ECDE educational services provided for the children with hearing impairments.

2.1.2 Enrolment for ECDE in Kenya

ECDE in Kenya is primarily funded by parents, the local community and non-governmental organizations. The government has paid increased attention to improve the welfare of the Kenyan child. However, the efforts have been fragmented and with little impact (MoEST, 2006). According to Swedener (2000), some households do not participate in ECDE programmes and services. In support of this, MoE(2009), claims that majority of learners with special needs and disabilities in Kenya do not access educational services. Worse still, the community and society in general has a negative attitude towards people with special needs. On gender balance, MoE (2009) states that, the situation is worse for girls than boys with special needs and disabilities.

Lack of proper participation by the stakeholders results in decline in enrolment. This is depicted by the Global Monitoring Education For All (2000) which states that approximately from 1990, 35% of children aged from 3.0 – 5.11 years have been accessing ECDE services. On the same, the Ministry of Education statistics done in the year 2003 reveals that there has been a recent decline in enrolment as a result of introduction of Free Primary Education (FPE), since parents have to pay for ECDE which does not benefit from the FPE. The decline in enrolment is also caused by the fact that pre-school education is not compulsory and hence its attendance is not a prerequisite for joining standard 1 (MoE, 2006).

In realization that an effective ECDE programme enhances a country's social economic growth and political stability, a comprehensive ECDE policy framework was developed and dispatched to DICECE centres (MoE, 2006). The framework targets all children including children with special needs between 0 to 8 years who should be grouped as shown in Table 2.1.

Table 2.1: Educational ECDE groups

Age (yrs)	½ - 2	3	4	5	6	7	8
Group	Play group	Baby class	Pre primary I	Pre-primary II	Std 1	Std 2	Std 3

Source: MoE (2006)

The study focused on the trend of enrolment of children with hearing impairments with an aim to assess whether the children with HI are being exposed to EDCE.

2.2 Early Childhood Development and Educational Services

Early childhood development and education (ECDE) covers the same activity areas for all children. The activity areas include language, mathematics, out-door activities,

science, social studies, creative, music and movement, religious education and life skills (KIE, 2008). However, for children with hearing impairment, there are additional activities that are put in place mainly in language, socialization, motor skills and cognitive development. These include, sign language, activities of daily living, speech training and motor coordination activities.

2.2.1 Importance of ECDE Educational Services

ECDE aims at developing the whole child, that is, physically, socially, emotionally, morally and cognitively. Its overall goal, as Lead, (1993) states, is to provide a child with an environment that will promote optimum development at a time when growth is rapid and the child is most vulnerable to inappropriate experiences. Thus, the study tried to highlight the type of ECDE educational services.

There are many benefits for children enrolled for ECDE services. For instance, a firm foundation is laid for their future lives. Allen (2002) asserts that the children get opportunities to acquire a broad range of skills in all developmental areas while in school. That the experiences obtained are of special benefit to the children at risk of developmental problems. For these children, it is like opening a door to both the present and the future.

Allen (2002) also states that imparting of knowledge at the ECDE level is of major importance in that children undergo developmentally sensitive or critical periods. During these periods, children are more responsive and able to learn from specific kinds of stimulation. The same stimulation at other times may have little or no impact on their development. It is, therefore, important that all children be in enriched and

responsive learning environments during these periods. This is even more essential for children with disabilities so that the defects can be rectified as soon as possible.

In addition, ECDE centres are ideal for observation of the children in their individual and social activities. Sifuna (1988) asserts that, it is during the ECDE activities that the children's holistic development is monitored to identify the potentialities of the individual children and to identify any handicaps. In case of any handicaps in children, intervention measures are taken to curb deterioration and also reduce the defects if possible. On the other hand, at home, parents may not recognize the critical learning periods of their children. By contrast, teachers in schools are able to pick up on the children's behaviour variations and give it the attention that it deserves.

According to Allen (2002), critical learning periods that are not recognized and not utilized are common among children with hearing impairments. Without special assistance and opportunities, these children are isolated from everyday events. This is because language acquisition appears to be linked to a critical period in development. She states that, a child with a hearing impairment may never acquire adequate communication skills if the hearing loss is not treated prior to the critical period for language development adding that a child whose hearing impairment is identified early may experience fewer difficulties in language development. On the same Rono (1996) adds that the most affected area of development in an individual with HI is the comprehension and production of the surrounding language. She advises that a child with HI needs extensive and intensive training to curb the language deficit.

UNICEF 2000, supports this by stating that during the early childhood years is the time when the greatest possibilities for breaking through intergenerational cycles of chronic poor health and sub-optimal human development. This is when the foundation can best be set to ensure that children are physically healthy, mentally alert, emotionally secure, socially competent and intellectually able to learn by the time they reach primary school age.

2.2.2 Effect of ECDE Educational Services on the Children with HI

Garwood (1983) states that special education in early childhood is important in providing meaningful and appropriate educational experiences to young children. These children may not benefit from regular pre-school educational experiences. In relevant special schools, children receive relevant attention where professionals in special education ensure acquisition of appropriate instruction according to their abilities and needs.

Hegarty and Alur (2002) also concur with this by pointing out that pupils with HI in regular classes often struggle with social and learning problems which are overlooked by the teacher. On the same, Bala and Rao (2004) claim that special schooling is needed for children with hearing impairments. They purport that nursery education helps to increase self confidence in children and creates a clear cut avenue for the child's successful integration into regular schools. This study tried to investigate the effect of early childhood development and education on children with HI.

According to Kirk (1972), schools for the deaf children admit them when as young as 2 ½ to 3 years of age. He argues that their programmes should start at an early age so

that the services are provided as a means of intervention. Children get opportunities to practice socialization in a group situation and to develop skills in communication. Play activities, for instance, foster growth in communication skills through various ways such as speech reading. He asserts that at age five, the child begins to respond to words and phrases written on flash cards or on the board. This kind of reading is initiated earlier with children with hearing impairments than with children without HI. The child with HI relies heavily on vision, hence the emphasis on beginning to read at the earlier age.

2.3 The Role Played by the Parents and Teachers of Children with HI in ECDE

Both teachers and parents play major roles in early childhood development and education. For instance, the teachers have a duty to implement the ECDE activities that prepare children in their holistic development. Parents, on the other hand have a duty to provide their children with enabling environment to grow and develop (MoE,2006).

2.3.1 Role of Teachers on Children in ECDE

In a bid to streamline provision of quality ECDE, the new policy guidelines prepared by the government of Kenya require a teacher of children in ECDE to have a minimum of a D+ grade at Kenya Certificate of Secondary Education (KCSE) examination and a professional qualification (MoE, 2007). An ECDE teacher is required among other things to prepare young children for primary school and guide them in interesting activities as required by the ECDE syllabus and hard book. The

activity areas include language number work out door, science, social studies, creative, religious education, life skills and music (KIE, 2008).

The teacher's role also includes; providing early stimulation for the future development of the child. They provide learning and play materials (MoE, 2006). They play a major role in providing children with stimulating activities that arouse the children's curiosity and enhance various skills in them such as discovery and observation (KISE, 2003). Other than that, the teachers have a role in identifying children with special needs and carrying out early intervention measures plus assessing and recording children's progress in acquisition of skills.

Other roles include taking case history of children with special needs and to monitor the progress of the individual child's wellbeing plus the progress in acquisition. The teacher also acts as a parent by giving love, attention assistance, guidance and comfort. He/she develops and maintains up-to-date professional records as well as organizing recreational activities for the children (KISE, 2003).

KIE (2008) adds that the teachers have a role of applying approaches that are child-centred, motivating and those that sustain interest. Children need to be involved in participatory activities and manipulation of play materials. One such method is thematic approach whereby learning takes place based on a theme. KIE (2008) claims that, the teachers' role is to provide relevant, adequate, safe and age appropriate play materials. Therefore, for ECDE to have adequate effect on the children with HI, they need a skillful teacher. This is supported by Vygotsky's theory which states that a child's potential development requires social interaction with the teachers and the

peers. This study investigated the roles played by teachers instilling fundamental skills in the learners with HI.

2.3.2 Role of Parents of Children in ECDE

Parents are the primary care, health and nutrition providers to their children. They are, therefore, involved in various services of ECDE. This ensures that their children receive appropriate care and enhanced development. (KISE, 2003). Parents provide security and socialize their children to fit in their immediate society. In addition, they inculcate in them life principles, spiritual and moral values for character development.

They also have a major role of early identification of disabilities, assessment and intervention as well as linking their children to various services (MOE, 2006).

According to KIE (1991), parents have a role to identify learning and developmental problems early enough so that corrective action can be taken. In addition, a parent has the ability to identify early language, visual or auditory problems. In support, Sifuna (1988) claims that a child whose hearing impairment is identified early may experience fewer difficulties in language development. It is the role of parents to be sensitive to their children's smooth transition from home to pre-school. Parental involvement in their children's education increases the children's interest in school and improvement in their development (KIE 1991). The aim of this study was to investigate the role the parents played on the learning of their children in ECDE and especially in their commitment to early identification of HI in their children, early intervention measures and early enrolment of the children for ECDE.

2.4 Constraints Experienced by Teachers of Children in ECDE in Kenya

Various constraints have hindered 100% enrolment for ECDE. When children are not enrolled for ECDE, they miss out on the benefits of ECDE, for instance, as cited earlier high poverty levels have led to some children missing ECDE services. This has led to disparities in terms of proper introduction to learning and good start in life. Children from vulnerable families bypass ECDE and progress direct to primary schools where they enjoy the benefits of FPE (MoE, 2009). Also, parental attitude towards ECDE has hindered the provision of quality services at ECDE level. Some parents view the ECDE programme as unimportant and only meant for children to pass time and grow prior to joining standard one, hence they do not need to pay for it (MoE, 2009).

The other constraint emanates from the centre management committees whose members lack the basic management and financial skills for effective and efficient service delivery. The climatic, social cultural and economic diversities are also other problems to the progress of ECDE. For instance, the communities that practice nomadic lifestyle fail to enrol their children in permanent schools leading to lack of proper learning. Long distances to the available schools contribute to lack of access for ECDE services. Furthermore, coordination and implementation of the ECDE policy, enforcement of service standard guidelines and disparities in the quality of ECDE are also major problems (MoE, 2009). MoE (2007), on the other hand, adds that the constraints in the provision of education to children with disabilities include lack of adequate tools and skills in identification and assessment plus others like a common curriculum that is not tailored to meet special needs. The study sought to find out the constraints being experienced by teachers in ECDE centres for the

children with HI, in a bid to create awareness to the stakeholders with the hope of improvement. The study sought to find out whether the adequacy of ECDE on children with HI was being hindered by such constraints.

2.5 Summary

From the findings of various scholars, the importance of the early years of an individual and enrollment for ECDE has been emphasized. However, ECDE has not received the adequate support it deserves. Implementation of the provision of ECDE services as per the international organization declaration is as yet to be felt fully. In Kenya, there have been attempts to revamp ECDE. For instance, the policy framework implementation is intended to ensure enhanced financing, increased access, quality and equity. While this is useful to the educationists, it is still not clear on the remedy to the declined enrollment or the measures to be taken to ensure that all households participate and cooperate. Owing to this, the study therefore sought to find out the effects of ECDE on children with hearing impairment in Kiambu, Murang'a and Nyeri Counties, Kenya.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This chapter presents research design, the variables, location of the study, target population, sampling techniques and sample size, construction of research instruments, pilot study, data collection techniques, methods of data analysis and logistical and ethical considerations.

3.1 Research Design

The study adopted survey research design to investigate the effect of ECDE on the children with HI. This is an unexperimental design which is characterized by the collection of data using interview schedules. According to Muijis (2004), situations can be easily described as well as study relationships between variables. He adds that survey method does not set up an artificial situation and is thus easier to generalize findings to real world settings. It makes it easy to gather amounts of data at reasonably low cost and effort. On the same, Orodho (2005), states that a comprehensive school survey explores and evaluates many aspects of the schools' systems. Hence, this being an educational study, the design was the most appropriate in gathering data from the respondents in its natural form without manipulating the variables. This involved asking the same questions to different respondents to obtain the required data by considering the frequencies of their responses.

3.1.1 Variables

3.1.1.1 Independent Variables

The independent variables were the roles of the parents in ensuring that their children had access to ECDE. This is by early identification of HI in their children, seeking for early intervention measures and early enrolment for ECDE. The other independent variables were the roles of the teachers in provision of ECDE educational services. These were to provide skilled instructions or teaching, preparing the children for primary schooling, inculcating fundamental skills, to monitor the learner's progress and stem the constraints that may hinder a positive effect of ECDE on the children with HI.

3.1.1.2 Dependent Variables

The dependent variables were the effects of ECDE on the children with HI. These include acquisition of fundamental skills, laying a strong and firm foundation for their development and future learning, getting good performance in the activity areas gets proper preparation for primary schooling and have potential development.

3.2 Location of the Study

The research was carried out in primary schools for the learners with HI in Kiambu, Murang'a, Nyeri and counties Kenya. These were chosen in consideration of the distribution of schools of children with HI, that is, one school in each county. Other considerations were manageable distance, accessibility and familiarity.

3.3 Target Population

In this study, the researcher focused on selected special schools for children with HI, that is, those in pre-primary classes. Three schools were identified representing the three counties mentioned above. These were Kambui School for the Deaf in Kiambu, Murang'a in Murang'a and Tumu tumu in Nyeri counties. All the ECDE classes in the three schools, classes 6 in number, i.e 2 in each school were involved. The total number of children was 67 that 21 in Tumtumu 27 in Kambui and 39 in Murang'a. Information was gathered from 6 pre-school teachers i.e 2 from each school, 3 headteachers. The parents of 67 children were targeted to provide data about their children.

3.4 Sampling Techniques and Sample Size

3.4.1 Sampling Techniques

The researcher used purposive sampling to identify of special schools for the children with HI in the counties. This was due to the nature of the children being studied, that is, children with HI who were in the special schools for the deaf in the counties. This means that, research was carried out in those schools offering ECDE services to the children with hearing impairments. The schools are the only ones of their kind in the counties. It was also used to collect data from headteachers and pre-primary teachers in those schools. Convenient sampling was done on the parents. In this case, data were collected from those parents of pre-primary school children with HI who were easily available during the parent's visiting days.

3.4.2 Sample Size

To be able to generalize the findings, Muijis, (2004) states that an unbiased sample of the population is selected to be representative of the study population. Hence, the

researcher collected data from the special schools for the deaf, that is, Kambui in Kiambu, Murang'a in Murang'a and Tumu Tumu in Nyeri, counties, Kenya, that is, 3 in number. Pre-primary classes were sampled depending on the number in each school, that is, 2 making them a total of 6. Each school had 2 pre-primary teachers whereby both were sampled making them a total of 6. The head teachers were 3, one from each school, while 5 parents were interviewed from each school hence 15 of them. These also represented 15 children. The total number of respondents was 24. This is illustrated below in Table 3.1 below.

Table 3.1: Sample size of the districts, schools, classes and the respondents

County	School	Classes	No. of h/teachers	No. of ECDE teachers	No. of parents	Total no. of respondents
Kiambu	Kambui	2	1	2	5	8
Murang'a	Murang'a	2	1	2	5	8
Nyeri	Tumu Tumu	2	1	2	5	8
Total size	3	6	3	6	15	24

3.5 Research Instruments

The instruments used in this research were mainly interview schedules. However, where the enrolment of children was required information was derived from the class and admission registers. A statistical data form showing the age of children admission was also filled with the help of the teachers.

3.5.1 Interview Schedule

An interview schedule makes it possible to obtain the data required to meet the specific objectives of the study (Orodho, 2005). In this study, interview schedules were very effective in collecting data from respondents face-face using structured questions. These were interview schedules for the headteachers, the teachers and the

parents. The schedules for the head teachers had 7 items which focused on the number of pre-school classes, the number of teachers, the age at which the children are enrolled for ECDE, the enrolment trend and constraints experienced in enrolment and teaching.

The schedule for the teachers had 9 items in which data collected were mainly on educational services that is expose children to ECDE activity areas, methods used, professional records, the constraints that the teachers experience in teaching/learning process and the notable effects of ECDE on the children. That of the parents had 9 items which dwelt on the age at identification of HI in their children, intervention and enrolment for ECDE. It also focused on the notable effects of ECDE on their children.

3.5.1.1 Registers

Admission and attendance registers were used to support the data collected from the headteachers and the teachers. The admission registers were useful in gathering data of the age at which the children were admitted in the schools as well as the enrolment trend from 2003-2009. The attendance registers helped to get data on the number of children in each class as well as to identify the classes in which the sampled children were.

3.5.1.2 Statistical Data Form

Statistical data form were also used to support the teacher's data by filling in the age of the children, their classes, age on admission, whether teachers were trained, in training or untrained and the age of children who had joined standard 1 the previous year.

The research instruments were constructed in consideration of the objectives of the study, the type of population/sample, geographical distribution of subjects and nature of the research items. As recommended by Orodho (2005), the items were easily understood and interpreted by the respondents.

3.6 Pilot Study

The interview schedules were pre-tested in order to capture the required data. In support of this, Muijis(2004), argues that the single most effective strategy to minimize problems is to make sure the instruments are piloted. Pre-testing was done at Racecourse Primary school's unit for learners with HI, Nairobi. This pilot school was not included in the study. The headteachers, pre-school teachers and parents of children with hearing impairments were required to respond and give correct and appropriate answers during the interviews. The school was selected through convenient sampling, that is, familiarity and manageable distance.

3.6.1 Validity

In this study, each of the representative teachers and the headteachers were asked to read through the items on interview schedules and give their comments regarding each item. Their comments were verified to ascertain content validity. The same exercise helped to ascertain the inclusion of all the items necessary to collect the intended data.

3.6.2 Reliability

In this study, split-half technique was used to assess the instrument's reliability. This was in consideration of the fact that it would take one testing session in order to save time. In computing split-half reliability, the test items were divided into two halves,

each half scored independently with the other items of the two halves matched on content and difficulty (Orodho, 2005). In this study, the instruments items were split into two halves, that is, even and odd numbers and each separate half administered to the representative respondents. Their responses were analyzed to clarify the items acuity in production of the required data every time they were administered. In this case, the items measured accurately determined the reliability of the instruments.

3.7 Data Collection Techniques

The researcher personally visited the selected special schools for the deaf to collect data. She had face-face interviews with the headteachers, ECDE teachers and parents of children with HI and recorded the information given. The interviews were carried out on different days as the parents could only be available during the visiting days. This was achieved due to the cooperation of the headteachers.

3.8 Data Analysis

The researcher analyzed data quantitatively and qualitatively. Quantitative data analysis is based on numerical data collected during research to explain a particular phenomenon being analyzed using mathematical methods (Muijis, 2004). The quantitative analysis was done by computing the numerical data in tables, pie charts, graphs and percentages manually and by Excel. These were useful in quantifying the percentage of children with HI who had managed to access ECDE services.

Qualitative analysis was employed to complement quantitative analysis by giving a descriptive report on the findings based on the themes, that is, in form of text. It was also used to give a descriptive report generated from the interviews and other data from the school records, such as those for enrolment. Data interpretations were also

made and analyzed quantitatively. According to Orodho (2005) textual data may describe practices, perceptions, attitudes, opinions, beliefs and knowledge. Thus, the method was useful in the analysis of the data given from the interviews.

To succeed the researcher sought an introduction letter from the Director Board of Postgraduate Studies, Kenyatta University to take to the Ministry of Education, Science and Technology (MoEST) to obtain a research permit. Consent of the respondents was also sought through letters of introduction and description of the study. Decency, politeness, punctuality, and confidentiality were observed.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.0 Introduction

In this chapter, the findings of the study have been analyzed and the results discussed under various themes. These themes were derived from the following objectives:

- i. To investigate the enrollment trend of children with HI in ECDE in public primary schools for the deaf in Kiambu, Murang'a and Nyeri counties Kenya.
- ii. To assess the type of ECDE educational services and its effect on their learning.
- iii. To investigate the role played by the parents and teachers of the children with HI in ECDE in the counties.
- iv. To identify the constraints experienced by teachers of the children with HI in teaching and learning in ECDE.

The research was done in three special schools for children with hearing impairments (HI) schools from the sampled districts. The schools are hereby coded schools A, B and C that is Tumutumumu (A), Muran'ga (B) and Kambui (C). In these schools, data were obtained from the headteachers, 2 ECDE teachers from each school and 5 parents from each school. This was done by conducting interviews to each one of them. Thus, the respondents were all 24 in number.

The various themes under which data have been analyzed are; the enrolment trend of children with HI in special schools for the HI for ECDE, ECDE educational services provided to children with HI and their effects on learning, the role played by the

parents and teachers of children with HI and constraints experienced by teachers of children with HI in teaching and learning process of children with HI in ECDE.

4.1 The Enrollment Trend of Children with HI in Special Primary Schools for the Deaf

In this study, the researcher investigated the trend of enrolment of children with HI in public primary schools for the deaf. This was in a bid to find out whether the children with HI access early childhood education during the appropriate years/period i.e. 6 years and below. The following Table 4.1 illustrates the findings.

Table 4.1: Children's enrolment trend from 2003-2009 in schools A, B and C

Year	School A			School B			School C		
	Total	<6yrs	%	Total	<6yrs	%	Total	<6yrs	%
2003	13	6	46.2	6	2	33.3	13	4	30.8
2004	12	5	41.7	13	6	46.2	23	7	30.4
2005	11	5	45.5	14	9	64.3	16	2	12.5
2006	12	2	16.7	11	9	81.8	33	7	21.2
2007	11	4	34.4	12	2	16.7	31	3	9.7
2008	11	5	45.5	14	5	14.7	23	6	26.1
2009	12	5	41.7	19	2	10.5	16	1	6.25
Total	82	32	39	89	35	39.3	155	30	19.4

As the data in table 4.1 show, out of the number of children who accessed ECDE education during the years 2003-2009, those in the pre-school years that is 6 years and below was less than half the total number. School B enrolled the highest percentage with 39.3% followed by school A with 39% while school C had 30%. Only 30 % of the children were enrolled at age of 6 years and below. In the duration of 7 years, only school B was able to enrol more than half of children of 6 years and below out of the total number of children in 2005 with 64.3% and 2006, that is, 81.8% .

According to Bala and Rao (2004), early childhood education helps to increase self-confidence and creates a clear, cut avenue for successful integration into regular

schools. However the findings show that 70% children with HI are enrolled for ECDE when they are over 6 years. This is contrary to the requirement of the education policy in Kenya whereby children at age 6 years should be enrolled in standard one. This indicates that children do not get opportunities for social interaction with teachers and their peers early enough to benefit adequately in cognitive development, as recommended by Vigotsky. This is also confirmed by an earlier observation by MoE(2009) that access to special education for those with special needs remains limited. MoE(2006) on the other hand claims that a report by the Global monitoring Education for all showed that only 35% of children aged 3 years to 5.11 years have been accessing ECDE services since 1990. Thus, going by this research study, the situation for children with HI is even worse with only 30% accessing ECDE services at pre-school level.

4.2 ECDE Services Provided to Children with HI and the Effect n Their Learning

The other task in this study was to establish the ECDE services provided to these children and the impact on their learning.

4.2.1 ECDE Services Provided to the Children with HI

Although there are various services provided to children with HI, the researcher was mainly interested in the educational activity areas that make up the curriculum in ECDE. These include language, number work, outdoor, CRE, Science, social studies, life skills, creative arts and music.

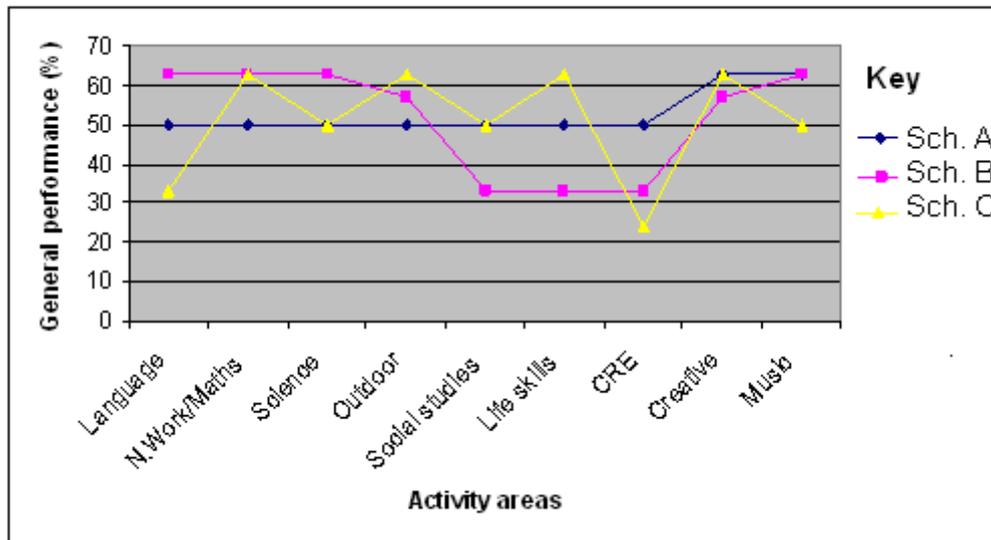


Figure 4.1: ECDE activity areas

Figure 4.1 shows the findings of the research on how the children in schools A,B and C were performing in the various ECDE curriculum activity areas. The findings show that all the three schools, that is, A, B and C were offering all the activity areas as per the ECDE curriculum and involving the children in relevant activities. From this observation, the general performance of the children can be said to be fairly good. According to the data in Figure 4.1 only four areas were reported to be below average in performance. These were language in schools C, Social Studies and Life Skills in school B and Christian Religious Education (CRE) in school B and C.

The teachers in the schools reported that activities in these areas were poorly done due to problems of teaching some concepts especially in CRE. The children in the three schools appreciated and performed well in creative activities. They all reported that the general performance in this activity area was good. Science on the other hand was fairly done in the three schools.

According to Ndurumo (1993), children with HI should be allowed to follow the regular school curriculum. This shows that exposure to a stimulating environment at an early age can help them improve their performance in the various activity areas effectively. The fact that the learners were able to perform fairly in most of the areas shows that if given an early start in pre-school, they can perform better. Otherwise as long as they are exposed to ECDE when over age, it may not have the intended effect on the children with HI.

4.2.2 Effects of ECDE Services on Children with HI

The study sought to establish the effect of the ECDE services to the children with HI. Five parents from each school were interviewed making them a total of 15.

Table 4.2: Impact of ECDE services on the children with HI

Skills	Total number of respondents	Frequency	%
Sign language	15	9	60
Writing	15	9	60
Reading	15	6	40
Social skills	15	12	80
Life skills	15	8	53
Discipline	15	9	60

Table 4.2 shows the various benefits that children get from the ECDE services as reported by their parents. Out of the skills identified, acquisition of social skills seemed to be the most outstanding. Eighty percent of the respondents who were interviewed had noticed it in their children. However, 60% identified acquisition of sign language, writing, and improved discipline. Fifty three percent identified life skills in the children. Therefore, ECDE has a positive impact on the children with HI. On the other hand, only 40% of them had identified reading skills in their children.

Garwood (1983) claims that, children in early childhood receive relevant attention in relevant special schools from the professionals in special education. In the case of the children with HI, Bala and Rao (2004) claim that early childhood education helps them to increase self-confidence. Kirk (1972) concurs with this by arguing that the schools for children with HI provide opportunities to practise socialization to develop communication skills and reading.

The researcher confirmed that the children benefit a great deal. During the study, the parents who were interviewed reported that ECDE had helped their children to acquire various skills which included sign language, writing, reading, social skills, life skills and discipline. These findings have been supported by Vigotsky who points out that instruction helps to bring consciousness and deliberate mastery of the child's abilities. Acquisition of skills that is cited here shows a positive effect of ECDE on children with HI. This indicates that if they can get enrolled early, the effect can be higher. Vigotsky recognizes parents and teachers as tutors of young children. However, an earlier observation shows that parents are usually engaged in paid a job hence they have no time for tutoring the learners and that is why they need to enrol their children at the appropriate time to get tutored by the teachers.

4.3 The Role Played by the Parents and Teachers of Children with HI

Data was gathered on the role of two major stakeholders, i.e. parents and the teachers of children with HI who were interviewed separately. That is, 5 parents from each school making them a total of 15 parents and 6 teachers, that is, two from each school.

4.3.1 The Role Played by Parents

During the study, the researcher investigated the role played by parents of children with HI, in ECDE level. Those interviewed cited roles such as identification of HI in their children, taking intervention measures developing sign language, enrolment, socialization, seeking medication attention.

Of major concern in this study were the ages at identification of HI, intervention and enrolment in ECDE. The researcher gathered data in connection to the same by interviewing parents from schools A, B and C. The findings were as shown in Table 4.3.

Table 4.3: Roles of parents

Roles	Ages of children								Total No. of respondents
	Below 1 yr	1yr	2yrs	3yrs	4yrs	5yrs	6yrs	Above 6 yrs	
Identification	2	2	4	4	3	-	-	-	15
Intervention	1	2	4	4	1	2	-	1	15
Enrolment	-	-	-	-	2	1	6	6	15
Total number of children	3	4	8	8	6	3	6	7	

The data collected during the research study; show that most parents were not able to identify their children's HI before the onset of language development. That is, only 4 out of 15 or 27% of those interviewed were able to identify HI in their children before the age of 2 years.

The findings show that delays in identification of HI in children spill over to more delays in intervention and linking them to various services such as ECDE. Table 4.3 shows that only 3 parents, (20%) sought intervention measures for their children with

HI before they were 2 years. Out of the 15 parents 8 of them i.e 53% sought intervention measures when their children with HI were age 2 years-3 years while 1% delayed until the child was over 6 years old.

In this study, the earliest enrollment for ECDE services was done at age 4 years by only 2 participants, that is, 13% followed by 1 at age 5 years that is, 7%. The others, 80% were enrolled at age 6 years and above. Most of the delays in identification and intervention were mainly as a result of ignorance and denial of the parents that their children had HI. However, the children's major delay for appropriate enrolment for ECDE was a result of spending time in regular schools of the hearing children. That is, in school A, 3 out of the 5 respondents had taken their children to regular schools of the hearing, school B also had 3 of them and all of the 5 in school C, meaning 73% of the children spent part of their early childhood years in inappropriate placement, that is, the regular ECDE centres. In these schools, they wasted crucial time that could have been otherwise fruitful in development if they spent it in special schools for the children with HI. According to Hegarty and Alur (2002), pupils with HI in regular classes struggle with social and learning problems which are often overlooked by the teachers in the regular class. Garwood (1983) also points out that, these children may not benefit from regular pre-school educational experiences unlike in relevant special schools where they receive relevant attention from professionals.

These findings about the delays are supported by MoE (2009) which states that one of the challenges that hinders quality services at ECDE level is parental attitude. That some parents view the ECDE programme as unimportant and only meant for children to pass time and grow prior to joining standard one. On the same, MoE (2006) reports

that, some parents keep their children at home until they attain the age of 6 years when they join standard one.

On intervention, MOE (2006) report that parents have a major role in early identification for the purpose of assessment and intervention but the findings showed that most of the parents are not keen on identifying the HI in their children early enough to take the necessary action. Various authors have expressed the importance of early identification of disabilities in children by parents. For instance, Sifuna (1988) declares that a child whose hearing impairment is identified early may experience fewer difficulties in language development. Vigotsky, on the other hand, declares that language is crucial for cognitive development. He also argues that children are capable of higher levels of functioning when given the right help than when they are left without assistance. Thus, parents should take immediate action as soon as they identify HI in their children in order to acquire language before the onset of language development age, i.e 2 years and consequently help them to benefit from ECDE. Therefore, if delayed to acquire language, this development is limited and hence ECDE may not have the intended effect on children with HI.

Kirk (1972) states that schools for children with HI admit them when they are as young as 2 ½ to 3 years of age. This he says helps to offer various services as a means of intervention. Bloom (1964) concurs with this by claiming that 3 years old children profit more from enriching experiences than 7 or 8 years old children. He adds that 2/3 of a child's ultimate cognitive ability is formed by the time he/she is 6 years old, this is the age when children enter school. Thus, an early exposure to ECDE can produce more benefits or adequate effect on children with HI.

4.3.2 The Role Played by Teachers in Teaching and Learning in ECDE

The roles carried out were coverage of ECDE syllabus, development of teaching and learning resources, using relevant methods of teaching plus developing and keeping relevant records. Table 4.4 shows the findings:

Table 4.4: Teacher's roles

Roles	School A	School B	School C
Coverage of syllabus	Satisfactory	Satisfactory	Inadequate
Development of teaching and learning resources	Adequate	Adequate	Adequate
Use of relevant methods of teaching	Adequate	Adequate	Adequate
Keeping of relevant records	Adequate	Adequate	Adequate

As the data on table 4.4 show, the teachers in schools A, B and C carried out their roles in development of resources, use of relevant methods of teaching and keeping of relevant records. For instance in development of resources, school A had material such as charts, real objects, flash cards and pictures. School C had charts learning corners and outdoor materials. The findings also showed that there was adequate use of relevant methods of teaching in all the three schools which included taking children for nature walk and play. They also used demonstration and participatory methods. There was also adequate keeping of relevant records by the teachers in the three schools however; the coverage of the syllabus in schools A and B was satisfactory but inadequate in school C. Thus, the teachers were found to be devoted to their roles in enhancing a positive effect of ECDE on the children with HI.

Unfortunately, adequate coverage of the syllabus was a challenge in all the three schools. This not only hinders the teachers efforts but also limits enhancement of skills in the children. Although Ndurumo (1993) argues that children with HI should be allowed to follow the regular school curriculum, implementation on the ground seems to be challenging to the teachers. The teachers reported that inadequate coverage of the syllabus was mainly caused by the nature of the learners, i.e HI and their being in different levels of ability caused by late enrollment.

For ECDE to have the intended effect such as laying a firm foundation for the children, it is important to have an adequate coverage of the syllabus. This can only be possible when the learners have adequate time with their teachers during their critical early childhood years, that is, 3-6 years. Exposure of children to ECDE activities late in the term when over age interferes with teaching and learning process. These children also lack opportunities of acquisition of skills at the appropriate time in their lives. This is supported by Vigotsky's theory that a good education stresses on what children can do with the appropriate help as their capability begins to emerge. It states that concentrating on what children can do without help under values the emerging competencies. Therefore, the children need to be provided with early stimulation in schools by their teachers in order to have a rewarding effect of ECDE.

4.4 Constraints Experienced by Teachers in the Teaching and Learning Process of the Children with HI in ECDE

In this study, the researcher carried out the task of identifying the constraints experienced by the teachers of the children with HI in ECDE. This was aimed at finding out whether there were hindrances or limitations to adequate effect of ECDE

on children with HI. During the research, study the teachers complained of various constraints relating to provision of quality education to children with HI. Figure 4.2 shows the findings as follows:

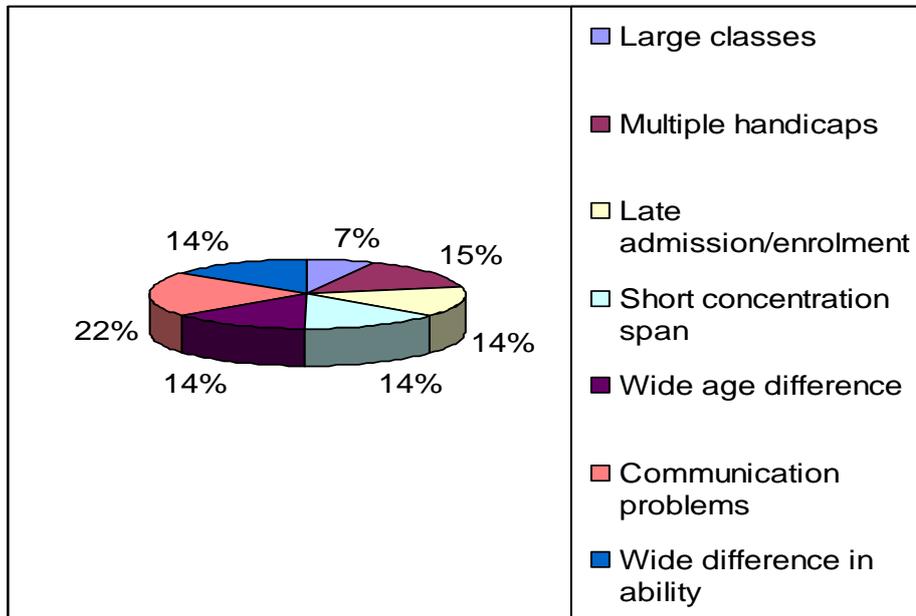


Figure 4.2: Constraints experienced by teachers of children with HI in ECDE

Out of the 7 constraints, communication problems were found to be the leading constraints in the three schools with 22%. Multiple handicaps were identified in schools A and B while late enrolment of children, short concentration span, wide age differences and children's abilities were identified in schools B and C taking 14% each. Large classes were a constraint in teaching and learning only in school B taking 7%.

Thus, these constraints interfered with the efforts of the teachers to obtain the intended effect of ECDE on the children with HI. Top of the list was communication problems which show that the hindrance to effective teaching and learning in ECDE activities and lack of proper communication can lead to delays in progressing in various activities. Thus, the delays that were noted in this study such as in

intervention affected the children adversely especially in communication skills. This clarifies Allen's (2002) observation that a child with HI may never acquire adequate communication skills if the hearing loss is not treated prior to the critical period for language development. On the other hand, she adds that a child whose hearing impairment is identified early may experience fewer difficulties in language development.

A closer look at the constraints, shows that, 4 out of 7 were related to delays in early identification, early intervention and enrolment. These are late enrolment, wide age differences, communication/language problems and wide differences in ability. Hence if the children with HI can be attended to early enough and provided with the appropriate placement, over half of the constraints would be done away with. This would in turn lead to greater effects of ECDE services to the children with HI. Vigotsky points out that language is crucial to the development of one thought process as children learn through social interaction with a skillful tutor. This shows that children need to access ECDE early in order to be introduced to a common sign language to curb these constraints which can cause hindrances in effective ECDE.

The findings show that the leading constraint was communication problems. On the other hand, large classes are shown to be not much of a problem. However, the others that is multiple handicaps, late admission, short concentration span, wide age difference and children's inabilities were common problems experienced by teachers in the schools.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 Introduction

In this chapter, the summary of the study, conclusion and recommendation are discussed.

5.1 Summary of the Study

The problem that prompted this study was that although ECDE plays an important role in the development of the child, some children are not enrolled for it as it requires payment of levies. This study, therefore, sought to find out the effect of ECDE on the children with HI. The study focused on finding out whether the children accessed ECDE at their appropriate ages through enrolment at the age of 3-6 years, the type of educational services being offered, the role their teachers and parents played and constraints that the teachers experience in teaching and learning. Survey research design was adopted whereby interview schedules and administration records were used to obtain data. According to the findings, most children with HI are enrolled in special schools for the deaf for ECDE when over age, that is, at the age of 6 years and above. However, the curriculum or activity areas in ECDE are carried out in the schools accordingly except that social studies, life skills, and religious education pose quite a challenge to the teachers due to communication barriers. Teachers cited problems in lack of some concepts especially in religious education where pictures cannot be used for instance, for the concept of the term “spirit”. As a result, the learners’ general performance in these areas was found to be below average unlike the other areas.

ECDE was found to have a great effect on the children with HI especially in acquisition of social skills. Parents, unfortunately, were found to be failing on their role in early identification, seeking for the intervention measures and early enrolment of their children for ECDE services. Majority (80%) had delayed their children which led to late enrolment to schools. On the other hand, teachers were using the required methods of teaching and kept the required records but they were not conversant with the thematic approach method of teaching which is highly recommended for teaching children in ECDE level.

The teachers were trained for SNE and had a unit in ECDE during the course. All the same, they experienced various constraints during the teaching/learning process which included large classes, multiple handicaps of children, late admission/enrolment of children, short concentration span of children, wide age differences in the abilities of children in class. Communication problems came as the major constraint for these teachers due to the nature of the children.

5.2 Implications of the Findings

5.2.1 Enrolment Trend

The study shows that majority of the children do not access ECDE services during the critical early childhood years, that is, six years and below. This limits the children's opportunities which they need to have the intended effect of ECDE considering that out of all the children who were enrolled for ECDE services at pre-school level between year 2003 – 2009, only 30 % were 6 years and below.

It was noted with a lot of concern that majority of the children lack early educational intervention. In all these parents bear the largest part of the blame considering their

role in the enrolment of their children with HI. For example, MoE 2006 states that some parents keep their children at home until they attain age 6 years to join standard one wherein they avoid payment of levies in pre-school and prefer the privilege of enjoying free primary education in standard 1. In this study, the parents of the children with HI had problems in identification of the HI in their children. For instance, the fact that only 27% of the parents could identify HI in their children before age 2 years shows that majority of the parents lack awareness of identification skills. The problem cascades down to lack of seeking early intervention help and eventually to late enrolment of their children for ECDE services.

5.2.2 Educational ECDE Services provided to Children with Hi and Its Effect On their Learning

5.2.2.1 Educational ECDE Services

The study findings showed that children in the three schools were exposed to the relevant activity areas in ECDE. That is language, number work, out door, science, social studies, creative, music, life skills and Christian Religious Education (CRE). The teachers rated the general performance of the children in 6 of the activity areas as slightly above average. That is, with the exception of social studies and life skills in which the children's performance was below average in one school. CRE, on the other hand, seemed to pose a major problem as the children performance in two of the schools was below average. The teachers had a problem in the mode of helping the children to understand some concepts such as the term "spirit". This shows the need for the learners to have an early start with their teachers in order to instill such concepts.

The children were exposed to the relevant activity areas but had problems in grasping some concepts especially those that were not locally available or familiar to them.

5.2.2.2 Effect of Educational ECDE Services

The research study revealed that educational ECDE services have a relatively positive effect on the children with HI. The children particularly benefit in acquisition of social skills. Other benefits include acquisition of sign language, writing and good discipline. However, only 40% of the parents could identify acquisition of reading in their children. Kirk (1972) claims that at age five years, a child begins to respond to words and phrases written on flash cards or on the board. He adds that this should be initiated earlier with HI child than those without HI since the former relies heavily on vision thus the need for the emphasis on beginning to read at an early age.

Delay in identification, intervention and consequently in enrolment of some children seems to be affecting their acquisition in reading negatively. In all, apart from social skills where 80% were reported to have benefited greatly, the acquisition of skills in the other areas was average. This implies that given an early start of educational ECDE services, they would be in a better position in the acquisition of major skills in life.

5.2.3 The Role of Parents and Teachers of Children with HI in ECDE

5.2.3.1 The roles of parents

Parents are the key role players in their children welfare. They ensure that their children receive appropriate care and enhanced holistic development (KISE, 2003). However in this study, the roles they played in identification, intervention and enrolment lacked the urgency they deserve. For instance, the findings show that the

earliest enrolment was at age 4 years. Delays in identification and intervention were also noted. This implies that majority of children with HI may not be accessing educational ECDE services during the appropriate or developmentally sensitive and critical periods due to delays in identification, intervention and eventually for relevant enrolment or placement. Parental delay in seeking professional help for their children interferes with the teaching and learning process when the children access ECDE when passed the stage appropriate for pre-schooling. The learner's abilities of acquisition of skills are also affected by the delays. This leads to inadequate effect of ECDE.

5.2.3.2 The Roles of Teachers

Teachers on the other hand, played the role of teaching, developing materials, keeping records, taking case history of children and monitoring children's behaviour. All the teachers in the special schools were trained in SNE. Hence, they carried their roles effectively.

During the research study, coverage of the syllabus was portrayed to pose some challenges because of status of the children's auditory abilities. The children were also reported to be at different levels of ability though in the same classes due to some reporting/enrolling late while others were over age.

This indicates that if given adequate time with the children, the teachers are professionally equipped and ready to play their roles effectively. Adequate time can be realized only when the children are enrolled at the appropriate time, that is, when at least in their pre-school years, 3-6 years of age.

5.2.3 Constraints Experienced by Teachers of the Children with HI in ECDE

The study showed that there were some constraints that are a hindrance to the teachers' efforts in teaching. These included large classes, multiple handicapped children, late enrolment, short concentration span, wide age differences, language/communication problems and wide differences in ability. Out of these constraints, the obvious one that is, and communication/language problem was leading. This constraint was experienced by the teachers in all the three schools. This implies that the effect of ECDE on children is hindered by communication problems since effective learning can only be realized through interaction between the teachers and the learners.

5.3 Conclusion

The findings of the research study have highlighted various issues in connection to the effect of ECDE in schools for children with HI. On enrolment, it was clear that most children are enrolled for ECDE services when they attain the age of 6 years and above. At this time, they are supposed to be entering standard one according to the standard guidelines by MoE(2006). The pre-school years according to the standard guidelines are from 3 years to 6 years of age.

This study showed that majority (73%) of children thus the majority, spent part of their early childhood years in regular pre-schools/ECDE centres. These same children are later placed in the special schools for HI and enrolled for ECDE services at age 6 years and above. Therefore, most children with HI are missing ECDE services during the appropriate or crucial years of development at ages 3 to 6 years.

The research study also portrayed that children with HI were being offered the required educational ECDE services as recommended by MoE in conjunction with KIE. However, social studies, life skills and religious education posed challenges due to lack of well-defined concepts, for instance, the concept of the term “spirit” in religious education. The children are exposed to the appropriate activities in ECDE but unfortunately, this is done when most of them are well past the age of ECDE level. Thus, lack of exposure to the learning activities at the appropriate time, denies them enough experience and hence limits their general performance. This indicates that if enrolled for ECDE activities in the appropriate schools at the appropriate time they would benefit much more.

ECDE was also found to be of great importance to the development of children with HI. The learners acquired skills in various areas that included sign language, writing readiness, reading readiness, social skills, life skills and good discipline. Most children benefit a lot in acquisition of social skills. However, less than half acquire reading skills at ECDE level. Kirk (1972) points out that at age 5 years, the child begins to respond to words or phrases written on flash cards or on the board. This kind of reading he says is initiated earlier with HI children than those without. Since the former rely heavily on vision. Therefore, acquisition of reading skills may be hampered by lack of initiating reading to the children at an early age. A focus on the roles played by the parents and teachers showed that the teachers were trained for SNE and had done a unit on ECDE in their SNE course. They played their roles effectively but had problems in the use of one of the recommended teaching/learning methods that is thematic approach.

Adequate coverage of the syllabus was challenging to the teachers due to various constraints among which language/communication problem was the major one. This confirms an earlier observation by Allen (2002) that a child with hearing impairment may never acquire adequate communication skills if the hearing loss is not treated prior to the critical period for language development. This indicates that acquisition of adequate communication skills by the children was being hampered by delayed intervention.

In all this, the majority of the parents had not played their roles effectively. Major delays in identification of their children's HI, seeking for intervention and enrolment for ECDE services were noted. Majority of the children are enrolled for ECDE services at age 6 and above when they should be joining standard one.

Although the government and the teachers are playing their parts effectively in offering educational ECDE services to children with HI, the intended effect is yet to be felt. The parental participation and support are not adequate which leads to children lacking crucial preparation at ECDE level. Precious time when the children's critical periods of intellectual development are at the peak is spent by majority of the children in regular pre-schools. In these schools, they struggle with social and learning problems. Eventually, the children are enrolled for ECDE educational services in special schools when over age. Thus, majority of the young children with HI do not access ECDE services during the required early childhood years, that is, 3-6 years. Consequently adequate and appropriate preparation of the children is curtailed. Although the teachers expose the children with HI to the relevant ECDE service, the effect on the children is limited. However, if they can be given an early start by being enrolled for ECDE during the crucial stage of development i.e 3-6, years it can have a

great effect on them. Children can benefit more especially in acquisition of fundamental skills, adequate preparation from primary education and adequate potential development.

5.4 Recommendations

To realize a positive effect of ECDE on children with HI, various stakeholders need to play their roles effectively. These include the Ministry of Education, teachers, the parents, the non governmental organizations, the health service providers and others like assessment officers.

5.4.1 Ministry of Education

Owing to the large number of children with HI who do not access ECDE services during the early childhood years, the ministry needs to make ECDE compulsory for all children between 3-6 years. This is to ensure that all the children access ECDE services at the developmentally appropriate time. The ministry can also organize ECDE in-service courses for the teachers of children with HI. This will equip them with teaching methods in ECDE such as thematic approach which is still elusive to them. The ministry should also deploy teacher who are trained in SNE to regular schools to identify and cater for children with special needs such as HI.

5.4.2 Teachers

The study revealed that communication problems are the leading constraints that interfere with teaching and learning process. Therefore, the school management committees should focus on ways to help the learners to acquire a common sign language. Programme on seminars for parents should be organized to learn sign

language. Teachers can also organize opportunities for remedial teaching of sign language in order to reduce the problem of communication in learning and teaching.

5.4.3 Parents

Considering that most parents delayed their children for intervention help and proper placements, arrangements should be made to create awareness to parents on the importance of early intervention. This will mobilize the parents of children with HI to seek intervention help for their children as soon as they identify HI in their children. Consequently, they should have them enrolled for appropriate educational experiences during their pre-school year, which is 3-6 years so as to lay a firm foundation for the children from an early age.

5.4.4 Health Service Providers

One of the major constraints experienced by teachers of children with HI was dealing with children who had multiple handicaps. Owing to this, the health officers should link their efforts with teachers in special schools for the children with HI. This will ensure that the teachers are properly equipped on health matters of the children to minimize cases of chronic health problems that can keep children away from school. They should also educate the public on how to identify children with defects and where to seek intervention.

5.4.5 Assessment Officers

The study revealed that 73% of the parents placed their children in regular schools for the better part of their early childhood. In those schools, they became over age but miss out in inculcating of skills due to their auditory status. It is, therefore, important for the assessment officers to assess the children and advise the parents on the

appropriate placement. To ensure this is done, they should follow up the cases in the various placements in order to avoid cases of some children being kept at home or wasting their time in regular schools.

5.4.6 Non-Governmental Organizations

Considering the fact that the parents' ignorance and denial of HI in their children are some of the contributing factors to the delay in identification, intervention and placement of children with HI, various stakeholders need to combine their efforts to educate the public on children's special needs. For instance, the non-governmental organizations should mobilize the public on the same and offer help in provision of various services and equipment such as hearing aids and for play.

5.5 Further Research

This study focused mainly on the children with HI who are already enrolled for educational ECDE services. However, further research is needed to find out whether all the children with HI access opportunities of placement for appropriate educational experiences. That is, whether they are assessed and placed in public or other special schools for children with HI. Further research also needs to be done on smooth transition from home to pre-school and from pre-school to standard one in order to find out whether there is proper retention of children with HI. in pre-schools.

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APPENDIX I

INTRODUCTION LETTER

CHEGE LOISE W.
KENYATTA UNIVESITY,
DEPARTMENT OF SPECIAL NEEDS EDUCATION,
P.O BOX 43844 -00100
NAIROBI.

TO

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THRO'

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REF: RESEARCH

I am a Masters Student at Kenyatta University, Department of Special Education and hereby request your permission to carryout some research in your school. The research data needed are on ECDE and hence will be required from the pre-primary children, their teachers and the headteachers. Hoping for a favourable response.

Yours faithfully,

Chege Loise.

APPENDIX II

INTERVIEW SCHEDULE FOR PARENTS

School _____ District _____ Date _____

Instructions: The following are questions related to the education of your child, with an aim of creation of awareness for better services and timely placement of ECDE children. Please answer them correctly. The information given will be treated as confidential

1. What is the name of your child?
2. How old is he/she?
3. In which class is your child?
4. (a) At what age was your child when you learnt he/she had hearing impairment?

To be ticked as appropriate.

- | | |
|--------------------|-------------------|
| ½ -2 years [] | 4-5 years [] |
| 2-3 years [] | 5-6 years [] |
| 3-4 years [] | Above 6 years [] |

5. What intervention measures did you take?
6. At what age did he/she get assessed?
7. At what age was he/she placed in the institution?
8. (i) Did you face any challenges/difficulties in the placement?
(ii) Which ones?
9. (i) Are the services being provided essential or beneficial to your child?
(ii) How?

APPENDIX III

INTERVIEW SCHEDULE FOR ECDE TEACHERS

School _____ District _____ Date _____

Instructions: Please answer the following questions in the spaces provided. The information given will be used in a research study with an aim to highlight the importance of ECDE for improvement. Information given will be treated as confidential.

1. a) Are you trained to teach ECDE? Yes [] No []

b) If not, why? _____

2. For how long have you taught the ECDE children?

3. How many girls and how many boys do you have?

Boys _____

Girls _____

4. (a) Which of the following ECDE syllabuses do you use? Tick as correct

New [] Old []

(b) How would you rate the syllabus coverage so far?

Inadequate []

Satisfactory []

Adequate []

(c) New syllabus has 9 major activities areas. How would you rate the children's general performance in these areas. Tick as appropriate.

Activity area	10-20	21-30	31-40	41-50	51-60	61-70	71 and above
Language							
Mathematics							
Science							
Outdoor							
Social studies							
Life skills							
CRE							
Creative							
Music							

Key

Very weak (10-20)

Weak (21-30)

Below average (31-40)

Average (41-50)

Above average (51-60)

Good (61-70)

Excellent (71 and above)

5. Which other teaching/learning resources do you use?

6. Which of the following methods do you use in teaching? Tick as correct

Method	Not at all	Rarely	Mostly
Thematic			
Lecture			
Group discussion			
Child centred			
Nature walk/field			
Play			
Demonstration			
Participatory			

7. Which of the following records are available? Put a tick

Lesson plans []

Schemes of work []

Class register []

Progress report []

Health record []

Others (specify) _____

8. Which are the major constraints encountered during the teaching/learning process?

9. What are the major achievements of ECDE services to the children?

APPENDIX IV

INTERVIEW SCHEDULE FOR HEAD TEACHERS

School _____ District _____ Date _____

Instructions: The following are questions concerning ECDE for HI. Please answer them as appropriately as possible. The information will be used in a research study on pre-school children with HI. The information provided will be treated as confidential.

1) How many ECDE classes do you have? Tick the correct one(s)

Baby Class [] PP1 [] PP2 []

2) How many teachers are allocated in each class? Please also indicate the number of children in each class and those between 3-6 years.

Class	Teachers	Total No. of children		Total No. of children between 3-6 years	
		Boys	Girls	Boys	Girls
Baby class					
PP1					
PP2					

3) At what age are children brought for enrolment in ECDE your school? Tick the correct one.

Ages (years)	None	Very few	Many	Most of them
½-2				
2-3				
3-4				
4-5				
5-6				
Above 6				

4) a) Do you enrol all those children recommended for ECDE services in your school? Yes [] No []

b) If not why? _____

(c) What has been the enrolment trend from 2003-2009 for pre-school children with HI? Fill in the table provided.

Year	Boys	Girls	Total	No. of children below 6 years		
				Boys	Girls	Total
2003						
2004						
2005						
2006						
2007						
2008						
2009						

5) (a) At what age do most children join standard 1? _____

(b) Do you allow some children to join Std I before undergoing ECDE?

Not at all []

Rarely []

Always []

6) Do you encounter any resistance from parents/children in enrolment for ECDE services? Yes [] No []

(b) What is the parents' general attitude towards ECDE?

Negative []

Light []

Positive []

7) Which are the major challenges experienced in the enrolment and teaching of ECDE to children with HI?

APPENDIX V**STATISTICAL DATA FORM FOR TEACHERS****Instructions: Please fill the following data form accordingly.**

DISTRICT _____

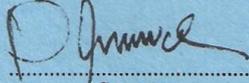
SCHOOL _____

SPONSOR _____

	SEX	AGE	TOTAL NUMBER	CLASS	AGE ON ADMISSION		
Children Enrolment	Boys	3 years and below					
		4 years					
		5 years					
		6 years					
		Any other					
	Total						
	Girls	3 years and below					
		4 years					
		5 years					
		6 years					
		Any other					
Total							
	Grand Total						
Joined std 1	Boys	6 years					
		7 years and above					
	Girls	6 years					
		7 years and above					
Total children							
		Trained					
Teachers	Male	In training					
		Untrained					
	Total male						
	Female	Trained					
		In training					
		Untrained					
Total number of teachers							

APPENDIX V1

RESEARCH PERMIT

<p>PAGE 2</p> <p>THIS IS TO CERTIFY THAT:</p> <p>Prof./Dr./Mr./Mrs./Miss..... LOISE WANGUI CHEGE</p> <p>of (Address)..... KENYATTA UNIVERSITY P.O. BOX 43844, NBI</p> <p>has been permitted to conduct research in Mathira..... Location Githunguri, Murang'a North District, Central..... Province, on the topic Impact of Early Childhood Education in Schools for Deaf.... Children in Githunguri, Murang'a North & Mathira Districts, Central Province, Kenya..... for a period ending 31ST MARCH....., 20..11.</p>	<p>PAGE 3</p> <p>Research Permit No..... NCST/RRI/12/1/SS/915 Date of issue..... 2/11/2010 Fee received..... SHS 1,000</p> <div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Applicant's Signature</p> </div> <div style="text-align: center;">  <p>Secretary National Council for Science and Technology</p> </div> </div>
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