

COPYRIGHT

All copyright reserved. No part of this dissertation maybe reproduced, stored in any retrieval system, transmitted in any form or by any means electronic recording, mechanical photocopying or otherwise without prior permission in writing from the author or the University of Zambia.

DECLARATION

I, Charity Mushole, hereby declare that the work contained in this dissertation is typically as a result of my own individual effort and that all the work from other researchers has been acknowledged. I further certify that this dissertation has not been submitted for a degree award in any university or similar institutions.

APPROVAL

The University of Zambia approves this dissertation of Charity Mushole as fulfilling part of the requirements for the award of the degree of Master of Education in Special Education.

Examiners:

1. Signature Date

2. Signature Date

3. Signature Date

DEDICATION

Special thoughts go to my late father Mr. Zaccheaus Mushole Mungwala, my brother Mr. Aggrey Mukale Mushole and my sisters Lizzy, Catherine, Marthar and Jenny. It was indeed a great family. May their departed souls rest in everlasting peace.

ACKNOWLEDGEMENT

This dissertation would not have been completed without the tireless efforts made by other people. My special appreciation goes to the following people: Dr. A. Cheyeka my supervisor and Dr. J.T. Phiri for their contribution, guidance and commitment; my beloved husband Capt. Moses Lungu (Rtd); Mr. and Mrs. Munalula; and my children Mervin, Omar, Kasinje-Michael and Precious for their unfading support and patience.

ABSTRACT

The purpose of the study was to explore the role Home Based Education plays in the development of children with severe and multiple disabilities. A survey design was used in conducting this research. Data was collected through questionnaires, semi-structured interview schedules, document analysis, observations and focus group discussions. The target population comprised all basic school teachers, parents, children and programme coordinators in the Home Based Education Programme under study in Lusaka district. The sample size was twenty-five respondents comprising ten home based teachers, ten parents/caregivers and five coordinators from the home based education programme.

The objectives of the study were:

- (i) To examine the type of training provided to teachers as home visitors.
- (ii) To explore the type of training offered to parents in terms of skills, roles and values in taking care of the children.
- (iii) To examine the impact of the home based education programme on children with severe and multiple disabilities.

The study used both qualitative and quantitative methods in the collection of data.

The Statistical Package for Social Sciences (SPSS) was used to analyse quantitative data from which frequencies, percentages and tables were generated while qualitative data obtained through interviews, observations and focus group discussions were coded and grouped by establishing the emerging themes.

The study found out that the training provided to home based teachers was very important in the planning and implementation of the educational programme for children with severe and multiple disabilities. It helps teachers to understand the development of children with disabilities in order to provide appropriate educational experiences and help the parents as well.

The study has also recognised the value of the skills, values and knowledge provided to parents. The training is significant in the provision of education to children with severe and multiple disabilities because in most cases children with severe disabilities have failed to secure early

access to school in special and/or inclusive schools due to the severity levels of their disabilities. Therefore, parental involvement in the education of children with severe and multiple disabilities is cardinal as such disabilities have no cure and thus warrant long-term care and support.

The study revealed that the activities provided in the home based education; socialisation, cognitive, language development, infant stimulation, motor/physical development and activities for daily living have a huge impact in the development of children with severe and multiple disabilities

The study recommended that:

- (i) There is need to train more Home Based Education teachers by MoE to cater for the ever increasing number of children who have severe and multiple disabilities.
- (ii) MoE should introduce and intensify training for parents who have children with severe and multiple disabilities.
- (iii) Policy makers and care providers in various levels of government and within the community should adopt a rights-based approach to the provision of health and education services to all types of disabled children.
- (iv) The Home Based Education Programme should be recognised as an effective strategy or approach for rehabilitation of children with disability, since it has proved that it is fairly easy to use and monitor.

TABLE OF CONTENTS

	Page
Copyright	i
Declaration	ii
Approval	iii
Dedication.....	iv
Acknowledgements	v
Abstract.....	vi
Table of Content.....	viii
List of Tables.....	xi
Abbreviations.....	xii

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study	1
1.2 Statement of the Problem	3
1.3 Purpose of the Study	3
1.4 Research Objectives	4
1.5 Research Questions	4
1.6 Significance of the Study	4
1.7 Definition of Terms.....	4

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction.....	6
2.2 Origins of Community Based Rehabilitation (HBR).....	6

2.3 Training of Teachers as Home Visitors.....	9
2.4 Training of Parents/Substitutes in Terms of Knowledge, Skills and Roles.....	17
2.5 The Impact of Home Based Education on the Children with Severe and Multiple Disabilities.....	21
2.6 Summary of Related Literature.....	27

CHAPTER THREE: METHODOLOGY

3.1 Introduction.....	29
3.2 Research Design.....	29
3.3 Target Population.....	30
3.4 Sample Size.....	30
3.5 Sampling Procedure.....	31
3.6 Research Instruments.....	31
3.7 Pre-testing of Research Instruments.....	33
3.8 Data Analysis.....	33
3.9 Limitations of the Study.....	33
3.10 Ethical Considerations.....	33

CHAPTER FOUR: PRESENTATION OF FINDINGS

4.1 Introduction.....	35
4.2 Training of Teachers as Home Visitors.....	35
4.3 Type of Training Offered to Teachers in Terms of Skill and Knowledge in the HBEP.....	36

4.4 Impact of the Home Based Education on Children with Severe and Multiple Disabilities.....	36
4.5 Whether Children were Assessed Before Enrollment.....	37

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.1 Discussions.....	43
5.2 Training of Teachers as Home Visitors.....	43
5.3 Training for Parent/Substitutes in Terms of Knowledge, Skills, Roles and Their Value.....	45
5.4 The Impact of the Programme on Children with Severe and Multiple Disabilities...	46

CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction.....	49
6.2 Summary.....	49
6.3 Conclusion.....	50
6.4 Recommendations.....	50
6.5 Implications for Future Research.....	50

REFERENCES.....	51
------------------------	-----------

APPENDICES:

Appendix 1: Questionnaire for Home Based Teachers.....	57
Appendix 2: Focus group discussion Interview Schedule for.....	59
Appendix 3: Interview Schedule for CBIA Co-ordinators.....	60
Appendix 4: Home Based Education Programme Assessment Checklist.....	61

LIST OF TABLES

Table 1: Sufficiency of the Training Received by the HBE Teachers.....	35
Table 2: Types of Skills and Knowledge Received by the HBE Teachers.....	36
Table 3: Age Range of Children Enrolled on the Programme.....	36
Table 4: Improvements Observed by Teachers on the Children.....	37
Table 5: Teachers' Responses on the Benefit of the HBEP.....	37

ABBREVIATIONS

ADD	Action on Disability and Development
CBIA	Community Based Intervention Association
CBR	Community Based Rehabilitation
ECCDE	Early Childhood Care, Development and Education
GRZ	Government of the Republic of Zambia
HBE	Home Based Education Programme
LAD	Language Acquisition Device
MoE	Ministry of Education
MoH	Ministry of Health
PCC	Portage Classroom Curriculum
PGEE	Portage Guide to Early Education
PHC	Primary Health Care
SPSS	Statistical Package for Social Sciences
UN	United Nations.
UNESCO	United Nations Educational Scientific and Cultural Organisation.
UTH	University Teaching Hospital
WHO	World Health Organisation
ZAFOD	Zambia Federation of the Disabled
SEN	Special Education Needs

CHAPTER ONE

1.0 INTRODUCTION

The Zambian Government has a responsibility of providing quality education to all children despite their unique conditions, that includes children with severe and multiple disabilities. The state must provide infrastructure that will make service accessible, affordable and acceptable. The Home Based Education Programme is one such service that has the role of providing early interventional opportunities in terms of education and physiotherapy to children with severe and multiple disabilities.

The study sought to identify the role the Home Based Education Programme played in the development of children with severe and multiple disabilities in one particular city of Zambia. A survey research design was used to guide the study. The convenient and purposive sampling procedures were employed to select the respondents. A questionnaire and focus group discussion were used to collect data. It is expected that the findings of the study will be beneficial to the education management, policy makers and the severely disabled children.

1.1 Background to the Study

Education is a right for every human being as declared by Article 26 of the United Nations Charter of 1945, which states that: 'Every child has the right to education and this right should be guaranteed by government by making education free in the elementary and fundamental stages of schooling' (UNESCO, 1968: 17). Zambia is committed to providing education to her citizens. The Ministry of Education (MoE) through its current educational policy dubbed '*Educating Our Future*' upholds the principle that every individual has an equal right to educational opportunity. This means that every individual child has a right of access to, and participation in the education system. The policy document expresses the Zambian government's recognition of the basic right of every Zambian to good quality education.

In Zambia education services are under severe pressure given the large number of children desiring to access education, understaffing as well as limited physical resources exacerbated by

population growth. However, there are still large inequalities between disabled children and their non disabled peers, with those with disabilities being marginalised the most. The 2010 Housing and Population Census revealed that the population of Zambia stands at 11.8 million out of which 1 million or 10% are people with disabilities and are among the poorest (Central Statistics Office, 2011). The reason for this state of affairs is that very little has been done to enable people with disabilities to take part in the building of the economy of the country.

Physical barriers and prejudice against the disabled stand in the way, i.e. a lot of disabled children have been excluded from getting an education. Research indicates that the percentage of disabled children who attended school is three times lower than for non-disabled children. However, regardless of these problems, education remains universally important and creates the need to provide high quality educational programmes for children with disabilities.

In Zambia, creation of community-based rehabilitation programmes has been adopted as a strategy of empowering the disabled in society. These are programmes aimed at the provision of health care rehabilitation, education, economic empowerment and awareness creation about disability at community level. One such programme in Zambia is the home-based education programme. Home-based education is an educational programme for children with disabilities, which aims at supporting the development of young children, play, communication and relationship; and encourage full participation in day-to-day life within the family and beyond home. It is a service committed to securing inclusion in the wider community for all children and families in their own right.

Action on Disability and Development (ADD) (1999) defines Home Based Education also referred to as 'portage' as a system which involves teaching/providing education to children with disabilities in their own environment/home with the help of home teachers/visitors, physiotherapists and parents/caregivers. According to White (1987), Home Based Education provides educational and physiotherapy services to severely disabled children between the ages of 0 and 6 years who have failed to attend normal (public) schools due to the multifaceted complications that come with their disabilities. Holland (1985), postulates that HBE offers early intervention in terms of infant stimulation, cognitive, socialisation, self-help and language, and

motor/physical development. It works with its partners to enable families to create a caring environment, rich in stimulation, attention, affection and interaction between children and caregivers that is responsive to the needs of growing children, particularly within the first six years.

The major objective of this study, therefore, was to find out if home based education in the community rehabilitation programme of Lusaka central zone played a significant role in the development of children with severe and multiple disabilities. The pertinent issues addressed were whether the activities in the HBE programme contributed significantly in the development of children with severe and multiple disabilities

1.2 Statement of the Problem

There has been a marked increase of the home based education programme for children with disabilities in Zambia (ADD, 1999). However, despite the increase, little has been done to analyse the impact of the HBEP on children with severe and multiple disabilities at community level. This is a serious and notable oversight considering that children with severe and multiple disabilities, represented approximately 1% of the Zambian population (CSO, 2011), have constrained educational options/strategies due to the severity of their disabilities. This has left these children in the periphery of their disabilities and without access to any type of educational provision. The issue of lack of education for severely and multiple disabled children raises concern about the impact of the home based education programme activities. If the severely and multiple disabled children are not well cared for in their educational needs, their available opportunities in society would be shattered.

1.3 Purpose of the Study

The study sought to investigate the role home based education intervention programme plays in the development of children with severe and multiple disabilities.

1.4 Research Objectives

The following were the objectives of the study:

1. To examine the type of training home visitors (teachers) go through before embarking on home based education programmes.
2. To explore the type of training for parents/or substitutes in terms of; knowledge, skills, roles and their value in taking care of children with severe and multiple disabilities.
3. To examine how the activities have impacted on children with severe and multiple disabilities.

1.5 Research Questions

The study addressed the following questions:

1. What sort of training do teachers of the severely disabled undertake before engaging themselves in the home based education programme?
2. What type of knowledge/skills is imparted to parents/substitutes taking care of children with severe and multiple disabilities?
3. How has been the impact of the skills offered to the children in HBEP?

1.6 Significance of the Study

It is hoped that the study findings will influence decision makers in the field of education to improve the delivery of home based education among children with severe and multiple disabilities in all communities. It may also help home based education stakeholders to plan home based activities for children with disabilities appropriately to promote holistic development among the children. The research may also contribute to the body of scholarly literature in the area of child development, especially for children with severe and multiple disabilities.

1.7 Definition of Terms

Attachment: Strong affectionate tie that children have with special people (i.e. parents, caregivers or any other family members) that leads them to feel pleasure and comfort during interaction.

Canalisation: The tendency of heredity to restrict the development of some characteristics to just one or a few outcomes.

- Caregiver:** Any person who takes care of the child other than the biological parents.
- Developmental Readiness:** Determination of when learning can and should take place.
- Childhood:** Stage in the life of an individual ranging from 0-12 years.
- Early Foundations:** Attitudes, habits and patterns of behaviour established during the early years.
- Early Intervention:** Systematic efforts designed to prevent deficits or to improve an existing disability in children between birth and age five.
- Home Visitor:** A specially trained person who provides services to disabled children by visiting them in their respective homes i.e., teachers, physiotherapists and CBIA administrators.
- Language Acquisition Device (LAD):** An innate system that permits children as soon as they have acquired sufficient vocabulary, to combine words into grammatically consistent, novel utterances and to understand the meaning of sentences they hear.
- Learning:** Development that comes from exercise and effort on the individual's part.
- Multiple Disabilities:** A combination of impairments such as mental retardation, blindness or orthopedic impairment that result in severe educational needs that require special services.
- Maturation:** A genetically determined, naturally unfolding course.
- Parent Substitute:** A person who takes the role of a parent in raising a child, especially cases where parents may be deceased.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

The chapter discusses the literature on home-based education programmes for children with multiple and severe disabilities. Research findings and conclusions made by others on home-based programmes are presented according to themes. The themes are: Training of home visitors; parents/substitutes in terms of knowledge; skills and roles and the impact of the programme on children with severe and multiple disabilities.

2.2 Origins of Community Based Rehabilitation (CBR)

Koistein (2008) postulates that, people with disabilities face challenges no matter where they live. Geographical and economical barriers make it hard for most of them to access rehabilitation services, which tend to be institution based, and only affordable to wealthier families and also those who live in urban areas and near these facilities. Coleridge (1996), points out that these services for the disabled were initially provided for in institutions, with emphasis on the medical approach, where after assessment interventions were prescribed. The focus was typically on the individual only and not on social barriers.

However, this approach has been widely criticised over the years and alternative approaches have been suggested (Jackson, 1988; McConkey, 1988; Helander, 1993; Coleridge, 1996; Compo, 1995; O'Toole and McConkey, 1995). O'Toole and McConkey (1995) argued that specialised institutions are very expensive for national budgets to maintain. Once external funding ceases to arrive, only more affluent people benefit. To make matters worse, these centres are located in urban areas; therefore, serve a very small minority of those needing help. This is the most common scenario in developing nations like Zambia.

Coleridge (1996) acknowledges the concept of the least restrictive environment, which recognises settings that are closest to a regular school programme but can be provided in any environment as long as it meets the special education needs of the child. Serpell *et. al.*, (1993) pointed out that there are much broader sets of needs faced by children with learning disabilities,

which include personal development, independent living, participation in the community and acceptance in society.

Serpell *et. al.*, (*ibid*) suggests that training should be more than the mere provision of cognitive skills. It should focus on issues such as self-esteem and competence; provide skills for independent living, with focus not only on the individual but also on family, friends and the wider community. These are the approaches commonly used in community based rehabilitation which includes the Home Based Education Programme (HBEP).

According to Helandar (1993), Community Based Rehabilitation (CBR) first emerged in industrialised nations of Europe and North America in the 1960s and early 1970s. The concept was formalised as a strategy for developing nations by the World Health Organisation in 1976. The CBR concept is based on principles similar to those followed in Primary Health Care (PHC) namely; principles of accessibility, availability, acceptability and appropriateness. Abbat and McMahon (1985) indicate that these principles hinge on three pillars namely; equity, participation and inter-sectoral collaboration. This involves a denunciation of existing inequalities and at least implicitly resolves to redress such imbalances.

MacDonald (1993), points out that CBR seeks to ensure that community structures and resources are available and accessible to all, including marginalised groups. At the same time ensuring that all individuals contribute towards their own personal as well as community development. The main goal of Community Based Rehabilitation is to enable persons with special needs to take charge of their own affairs by ensuring that all social/economic and physical facilities and services are accessible and available as well as appropriate to their needs and acceptable to them.

Thomas and Thomas (2002) postulate that in the 1980s and 1990s, there was substantial growth in the number of CBR programmes; along with the quantitative growth, there were major changes in the way it was conceptualised. From the medical model, it gradually began to add on inseminations such as education and this saw the emergency of programmes like Home Based Education.

Home Based Education (Portage)-Global Perspective

Sampson *et.al.*, (1998) states that the development of Home Based Education, 'portage', as it is referred to worldwide is traced to Portage, a small town in Wisconsin in America where it began. It was developed from an original study carried out in Portage, Wisconsin in the late 1960s and is now in use in the United Kingdom, United States of America, Japan and some developing countries such as Zambia, Zimbabwe, Kenya, Tanzania and many others.

White (1987) says that Portage was introduced into the United Kingdom in the late 1970s. In 1985, a department of education support grant was made available to the programme. By 1991, ninety-three of the ninety-seven local education authorities in England had portage projects. The portage project began as a demonstration project funded by the United States Department of Education. The purpose was to develop a model to support the development of young children with disabilities.

White (1987) observed that since 1972, the portage project has developed, published and distributed three developmental assessments, the Portage Guide to Early Education (PGEE), the Portage Classroom Curriculum (PCC) and Growing from Birth to Three. The Portage Guide to Early Education has been translated by universities and early childhood experts in over thirty countries. According to Kierman (2003), a new portage guide was put in place in 1993 due to several factors such as new research on brain development and the relationship between social emotional development and early learning, recognition of the importance of embedding intervention into daily routines and development of early learning standards.

With the above development, Terwindt (1992) noted that the new portage guide reflected input from numerous educational experts, especially early childhood experts and builds upon current research in the field. It is an assessment and curriculum planning tool to support individuals working in various settings that offer programming to young children and their families. Most importantly, this tool is designed to support relationship based intervention, which is family centred, ecological and strength based.

Home Based Education Programme (Portage) in Zambia

The first person in the history of Home Based Education in Central and Southern Africa was Lillian Malika, a Zimbabwean woman. She was the first African woman in this region to be trained in special education. She set up special education in Zimbabwe and Swaziland. The Zambian concept of portage was adopted from the Zimbabwean programme that Malika started.

In Zambia, the Home Based Education Programme was started in 1993 as a philanthropic project by Mrs. Archie Hinchcliff who was the British High Commissioner's wife at that time. Mrs. Hinchcliff was a volunteer physiotherapist at the University Teaching Hospital (UTH). Upon her departure in 1995, she persuaded Action on Disability and Development (ADD) to take over the running of the programme. The Community Based Intervention (CBI) under ADD was registered in 1995. In the same year, Elizabeth Dawson of the Sacred Heart Sisters, a lecturer at the Zambia Institute of Special Education at that time and Sarah Diar an occupational therapist at the University Teaching Hospital joined their efforts to strengthen the programme. Sister Elizabeth's interest was the provision of independent living skills to the children with severe disabilities, while Sarah Diar was to provide occupational therapy. By the year 2001, over 1 500 children had benefited from physiotherapy and education provided by the programme against the initial target of 600 children. This indicated that the programme was growing at a very fast rate (Ncube, 1999).

The Zambian Home Based Education Programme was taken over by ADD, an international Non-governmental Organisation, with its headquarters in Frome, in the United Kingdom. ADD is a development agency supporting development work exclusively for the disabled people in Africa and Asia. The ADD initiated this Community Based Intervention programme to provide education and effective physiotherapy as early as possible for children with cerebral palsy and related conditions. ZAFOD (2004) states that the programme works with mainly parents (especially mothers) or caregivers, teaching them the importance of early handling of disabled children as a means of therapy and the importance of play for early learning with the help of home visitors who are trained home based teachers and physiotherapists.

2.3 Training of Teachers as Home Visitors

Vanden Daele (1974) states that development implies qualitative change, which means that development does not consist merely of adding inches to one's height or improving one's ability, instead it is a complex process integrating many structures and functions. A human being is never static from conception to death. Change is constantly taking place in physical and psychological capacities. It can then be said that development is a progressive series of change, which occur as a result of motivation and experience. According to Berk (2007), child development is the human constancy and change from conception through adolescence including the entire life span. There are various definitions of periods in child development. Each period is a continuum with individual differences regarding start and ending.

Thomas and Thomas (2002) give the following approximate outline of the developmental stages in children; new born (0-1 months), infant (1 month-1 year), toddler (1-3 years), pre-scholar (4-6 years), school age (6-13 years), adolescent (13-20 years). Havighurst (1972) argues that since these developments are changes in a child, it is then true that these changes may be influenced by genetic factors, which includes pre-natal factors. Therefore, pre-natal developments are usually included as part of child development.

According to Lahey (2009), child development is divided into three main domains namely: physical, cognitive and emotional and social development. These domains are not really distinct, they form an integrated whole of child development. The periods of child development are segmented in five distinct periods as already alluded to, each of which brings with it new capacities and social expectations that serve as important transitions in major child development theories.

Zajonc (1975) postulates that a maturing organism undergoes continued, progressive changes in response to experienced conditions. This results in a complex network of interaction. The goal of developmental change is to enable people to adapt to the environment in which they live to achieve self realisation or self-actualisation. This is the desire to do what one is supposed to, to become the person they want to be both physically and psychologically. Piaget (1972: 5) agrees with this statement saying that 'the purpose of all behaviour or all thought is to enable the organism (child) to adapt to the environment in ever more satisfactory ways'. Skinner (1974)

also shares the same view that the fundamental drive behind all human as well as non-human behaviour is to 'survive'. All actions are designed to promote the survival of both the individual and the species.

Since self-realisation plays an important role in positive mental health, children who make good personal and social adjustment must have opportunities to express their interests and desires in many ways that give them satisfaction, but at the same time, conform to accepted standards. Lack of these opportunities will result in frustrations and generally negative attitudes towards people and life in general.

Influences on the Course of Child Development

Thomas (2000) states that there are basic issues on which child development theories take a stand as they highlight on different aspects of the child's development. Some of these issues are whether development is a continuous process or follows a series of discontinuous stages. Whether the general course of development characterises all children or do many possible courses exist depending on the context in which children grow up. Is development primarily influenced by nature or nurture? Many child development theories reveal different perspectives on child development; they are major forces in understanding child development. They vary in their focus on different domains of development, their strengths and limitations.

According to Berk (2007), theories have revealed that development takes place in stages, which involves an increase in learned behaviours. Others suggest that development is continuous, which consists of gradually adding more of the same type of skills that were there before and discontinue processes in which new ways of understanding and responding have emerged. Rogoff (2003) and Shweder *et. al.*, (1998) argue that some theorists believe in one course of stages idea while others believe that there are many possible courses.

Watilsen (1994) states that some studies have revealed that a unique blend of heredity and environmental experiences lead to both similarities and differences in children. He notes that canalisation, a concept in child development, explains that heredity has a tendency to restrict the development of some characteristics to just one or a few outcomes. This concept is highly

adaptive in terms of behaviours constrained by heredity. A child develops certain species or typical skills under a wide range of rearing conditions, thereby promoting survival.

Gottlieb (2003) argues that the relationship between heredity and environment on a child's development is not a one way street, from genes to environment to behaviour. It is rather bi-directional, where genes affecting children's behaviour also affect gene expression. Internal and external stimulation to the child (home, neighbourhood, school, community) triggers gene activity. In addition, Vanden Daele (1974) states that development implies qualitative change, a complex process of integrating many structures and functions.

The nature-nurture concept in child development is very important in order to improve environments so that children can develop as far as possible. Such studies serve as a reminder that development is best understood as a series of complex exchanges between nature and nurture. The success of any attempt to improve development depends on the characteristics to be changed, the genetic makeup of the child and the type and timing of our intervention. With this in mind, assistance for children facing problems can be provided, believing that with the help of favourable life circumstances, they can recover from early negative events.

Basic Foundations of Child Development

Several psychologists have revealed that childhood is often referred to as a critical period in the development of personality. It is at this time that the foundations are laid upon which the adult personality structure will be built. Hurlock (1980) agrees that early foundations are critical; attitudes, habits and patterns of behaviour established during the early years determine, to a large extent, how successfully individuals will adjust to life as they grow older. Bijou (1975) points out that the pre-school years from about two to five years are among the most important of all the stages of development. Unquestionably, this is the period during which the foundation is laid for the complex behaviour structures such as patterns, attitudes and emotional expressions in a child's life time. Gagne (1973) states that foundations laid in childhood are important because children do not outgrow undesirable facts as they grow. Instead, patterns are established early in life and persist regardless of whether they are good or bad, harmful or beneficial. If undesirable

patterns of behaviour or unfavourable beliefs and attitudes have started to develop, the sooner they can be corrected the easier it will be for the child.

Early scientific interest in the importance of these foundations comes from the work of Freud (1974), who maintained that personality maladjustments in adulthood originate from unfavourable childhood experiences. Erikson (1982) contends that childhood is the scene of man's beginnings, as man, the place where particular virtues and vices slowly, but clearly develop and make themselves felt. How babies are treated will determine whether they will develop basic trust or basic distrust - that's viewing the world as safe, reliable and nurturing or as full of threat, unpredictable and treachery.

Elkind (1976) alludes to childhood as an age of rapid growth and change. Children grow rapidly both physically and psychologically; with this growth come change in appearance and capacities. Intellectual growth occurs parallel to physical growth, especially in babyhood. Before babyhood comes to an end, babies are able to understand many things and can communicate their needs in ways that others can understand.

White (1976) contends that the foundations laid during the early years of life are the most critical; the origins of human competence are to be found in this critical period, between eight and eighteen months. It is clear that the child's experiences during this time do more to determine future competence than any other time. Erikson (1972) adds that babyhood is the period when children learn general attitudes of trust or mistrust depending on how parents gratify the child's needs for food, attention and love. These attitudes remain more or less persistent throughout life and colour the individual's perception of people and situations.

Bijou (1975) argues that early patterns do tend to persist, but that they are not unchangeable. Change may come about when the individual receives help and guidance in making the change. Parents/teachers may succeed to train the child to do more adaptive activities. Change is likely to occur when significant people treat the child in a new and different way. Children who have been trained to believe in themselves can be encouraged to express themselves because they are made to feel worthy.

According to Thomas (2000), environmentalists believe that an optimum environment will result in maximum expression of genetic factors. Change can occur where there is a strong motivation on the part of children themselves to make change. This can only be achieved if the environment in which the child is growing is offering such incentives. Skinner (1974) in his social learning theory emphasised the need for behaviour to be rewarded in order to persist. Rewarding strengthens tendencies to act; non-rewarding weakens tendencies to act. Eventually, the non-rewarding acts are dropped or disappear.

The knowledge that early foundations are critical because they tend to persist enables one to predict with a fair degree of accuracy what a child's future development is likely to be. This is very critical to children with disabilities. Katwishi (1985) supports the view that early identification and intervention services are very critical in the development of children with impairments.

Views on How Children Learn

Lahey (2009) states that motivation and learning plays a very important role in child development. Maturation, which is the unfolding of the individual's inherent traits, involves phylogenetic functions common to the human race such as creeping, sitting and walking. Maturation sets limits beyond which development cannot progress, even with the most favourable learning methods and the strongest motivation. Failure results from either genetic or environmental adversities that reduce the genetic potentials of development.

Gagne (1973) alludes to development as learning that comes from exercise and effort on the individual's part. In ontogenetic functions, learning in the form of training is essential, without it development cannot take place. There is a definite timetable for learning, the child cannot learn until it is ready. Developmental readiness or readiness to learn, determines the moment when learning can and should take place.

Ellis and Logan (2001) emphasise the importance of providing an opportunity to learn when the individual is ready. Piaget (1973) has outlined clearly the stages a child goes through to be ready to learn effectively. Therefore, understanding how children learn will help to plan their learning,

which will enhance development. It is likely that a person who comes late to his/her training will never realise the full measure of his/her potential.

Development, therefore, follows a definite and predictable pattern. There are orderly patterns of physical, motor speech and intellectual development. Unless environmental conditions prevent it, development will follow a pattern similar to all, irrespective of conditions. There is no known evidence that some individuals have their own individual patterns of development, though Young (2003) argues that it is evident that the rate of development varies from child to child. Every child is indeed biologically and genetically different from every other child. Batshaw and Perret (2002) indicate that even in the case of identical twins, no one is exactly like the other.

Based on the argument above, as individuality increases, so does the necessity for treating each child as an individual. No longer can one child's training techniques be expected to work well for all children. Children are individuals and they need to be treated so. The understanding of development as a process that is definite and predictable, will make it possible to predict what children will do at a given age and plan their education and training to fit into this pattern. If development was not predictable, it would not be easy to plan ahead for any period in life.

Children with Multiple and Severe Disabilities and Learning

According to Kirk *et. al.*, (2009: 357), severely disabled children are 'those children with multiple and severe disabilities, who possess such diverse combinations of characteristics that it is difficult to give a clear statement that includes them all.' These children require extensive ongoing support in more than one life activity in order for them to participate in integrated community settings and enjoy a quality of life that is available to other citizens with fewer or no disabilities.

The teaching of children with severe and multiple disabilities is based on functional, age appropriate skills in integrated school and non-school settings (Billingsley and Kelly, 1994). The teaching is practical and based on ongoing systematic evaluation of the child's progress. Falvey (1989) argues that these children are cognitively normal and are capable of mastering the regular curriculum when they receive the necessary support. Ware (1989) supports this statement by

stating that all children, no matter how severe their disability, are capable of learning and can progress. However, the focus of the HBE is on those children who cannot follow the regular school curriculum and have not mastered the self-help skills that lead to independence in early years of life.

Bates (1979) and Drome (1994) point out that there is need to recognise that development starts before birth and that it continues rapidly in the early years and that the individual is more flexible and more easily influenced by environmental input during the early years. The major goal of early learning in severely disabled children is to move them forward so that they will begin to act on the environment by manipulating objects, making requests to satisfy their needs and exercising their natural curiosity. The skills should relate to communication, mobility, social and self management.

Pugach and Warger (1993) indicate that the goals for education are the same for all children. However, Ware (1989) argues that for many children with severe and multiple disabilities, neither economic productivity nor independence as an adult is a reasonable expectation except in very limited ways. The argument is that goals of education need to be considered realistically because some goals maybe unrealistic for many children with severe disabilities. Based on this argument, some authors like Stieler (1994) have an optimistic stance that curriculum for these children should not be based on hypothetical sequences of normal development, but should instead be focused on functional skills as they will be used in real life. Albright, Vandeventer and Jorgensen (1989) acknowledge that learning characteristics of children with severe disabilities mean that their instructional needs are different from those of their non-disabled peers. This gives rise to differences in the core curriculum goals and content.

Sailor (1989) states that the appropriate setting for the severely disabled to learn in is in special schools. Lacey (1991) however, points out that there is a decreasing likelihood that educational needs of severely and multiple disabled children will be met in the classroom context, whether special or regular because of the difficulties these children have in transfer and generalisation of skills. Skills need to be learnt in environments where they will be used, which could be in a child's home or community.

2.4 Training of Parents/Substitutes in Terms of Knowledge, Skills and Roles

Support offered through portage is based on the principle that parents are the key figures in the care and development of their child. Portage aims to help parents to be confident in this role, whatever their child's needs maybe. Thorburn (1979) contends that the involvement of the child's family as active participants is critical to the success of any home based intervention programme. The involvement of parents as partners in the enterprise provides an ongoing system which reinforces the effect of the programme while it is in operation and helps it to be sustained. Ncube, (1999) states that in order to do this, the portage home visitor (teacher/physiotherapist) work alongside parents or parent substitute referred to as caregivers offering practical help and ideas to make learning fun for all the family, encourage a child's interests and address problematic situations.

Sylvia *et. al.*, (2004) maintain that what parents do with their children is more important than who parents are and, therefore, recommend strongly that the incorporation of parents support and education in all initiatives aimed at enhancing normal development in children cannot be over emphasised. These learning opportunities can be provided through the way parents and caregivers engage with their children during everyday actions and conversations. The importance of a caring and nurturing adult is paramount in the healthy development of a severely disabled child. Parents (or their substitutes) are the child's first and most important teachers and the greatest influence on the child's development.

Child relationships have universal features across cultures, regardless of differences in specific childcare practices. They are characterised by children being well fed and kept safe and by consistent affection, responsiveness, conversation, stimulation and opportunities to learn about their world (WHO, 2004). Emphasis is on the way caring practices are performed, which is critical. There are many factors that affect caregivers/parents' ability to be sensitive and responsive, such as socio-economic conditions, social support, knowledge about children's development, caregivers/parents' emotional states and skills and characteristics of the child.

Ellis and Logan (2001) state that portage works with weekly visits to the family by trained portage home teachers (home based teachers). The teachers are given training in different areas

of child development and the understanding of different disabilities. ADD (1999) notes that teachers, especially regular classroom teachers do not have vast knowledge on how to handle children with severe disabilities when they leave their initial college training. Snelson (1990) also echoes the same sentiments by stating that without properly trained teachers, teaching would remain a waste of time.

Tanya (2004) reveals that parents share with the home visitor their understanding of their child's individual gift, abilities and support needs. Profiles or developmental checklists help with this process of identifying strengths and goals for future learning when portage visits begin. The emphasis is on the positive, finding out and building on what a child can do. Parents take the lead in planning their goals, ensuring that portage support is relevant to the needs of their child and family. Goals may focus on developing movement, learning, play, communication and participation in the activities of everyday living.

Tanya (*ibid.*) stresses that the aim of each home visit is to decide on an activity that the family can practice and enjoy together. The activities are based on playground, in everyday situations to provide fun and success for the child. This means that each activity could represent a small step (task analysis) towards one of the planned goals. Families using portage usually practice activities between weekly visits. Parents and teachers use diaries as a reminder of the activity and a record of what happens between visits. In this way, a family builds a shared record of their child's involvement in portage. Precisely, portage offers a framework of support that respects each family and their own individual priorities. It is a model that adapts flexibly to individual child and family needs.

The Child's Environment in Home Based Education

Early environment is limited primarily to the home. Family relationships play a dominant role in determining the future pattern of a child's attitudes and behaviour in relation with others. Although this pattern will unquestionably be changed and modified as children grow older and as the environment broadens, the core of the pattern is likely to remain with little or no modification. During childhood years, child-parent relationships are more important than any other family relationships (Bishop and Nally, 1993).

WHO (2004) reveals that the home learning environment has an effect on children's development. It involves activities that offer learning opportunities to the child, e.g., reading to children, teaching songs and nursery rhymes, playing with letters and numbers, painting and drawing, having friends round to play with and many more are strongly associated with children's intellectual and social development. Sylvia *et. al.*, (2004) believe that what parents do with their children is very critical for early learning and development. Their argument is that what family members do with the children is more important than who they are and, therefore, recognise the need for incorporating parents' support and education in all initiatives aimed at enhancing normal development in children. These learning opportunities can be provided through the way parents/caregivers engage with their children during everyday activities and conversations.

Abadzhi (2006) states that it is not the environment in which the children live that is responsible for the effects on their personalities and behaviour, but the treatment they receive in the environment mainly from mothers/mother substitutes and family. The parents or their substitutes are the child's first and most important teachers and the great influence on his/her development. Nurturing caregivers, child relationships have universal features across cultures, regardless of differences in specific child care practices. WHO (2004) suggests that features are characterised by children being well fed and kept safe by consistent affection, responsiveness, conversation, stimulation and opportunities to learn about their world. It is the way caring practices are performed, which is critical to child development.

Research also indicates that support and warm relationships from a parent/caregiver results in greater social competence in a child (Thorburn, 1979). Children who are given this support have fewer behavioural problem issues and have enhanced thinking and reasoning skills by the time they move on to late child hood (Guralnick, 2005). Strong and supportive caring during the early years of a child's development, parent-child relationship, attachment behaviour is very important and a child needs the continuous care of one person, usually the mother or a substitute (caregiver). Such care not only makes them secure, but shows them the satisfaction of interaction with another person. Erickson (1972) in his psychosocial stage theory of how children form either trust or mistrust during babyhood, believes that the attention and care a child receives at this age bears on the personality of the child.

The caring relationship is the strongest explanation for why some children who grow up in watched conditions, are healthy, able to be productive in school and work and have good relationships with other people (WHO, 2004). Children develop through a series of interactions as observed, with their family, other caregivers and with their environment. These constant interactions shape who the child is and who they are becoming. When early care and environment are optimal, the child's development is enhanced. This is one reason the HBEP is family centred and works to enhance the capacity of family to meet the child's needs. Dunst (2007) points out that when stress enters these dynamic relationships in any way, the child's development maybe compromised.

The Role of Physiotherapists in the Programme

Russell (1978) states that physiotherapists in the HBE are specially trained to carry out physical treatment to help remedy the physical aspects of the disabilities. Treatment methods vary according to the particular problem. According to several researchers, children with severe and multiple disabilities tend to have severe physical disabilities.

Finnie (1974) points out that some children may require passive treatment, which involves palliative or supportive measures aimed at ensuring that paralysed or malfunctioning limbs do not deteriorate. Other children may require active intervention where a variety of techniques are used to work through a rehabilitation programme with the child. ADD (1999) maintains that teachers, parents or parent substitutes are taught how to massage and manipulate limbs in order to avoid the development of deformities and stiffening of joints, especially in children with cerebral palsy.

Weihl (1977) outlines that the first objective is, to identify functional abilities and develop these abilities to the maximum potential. Secondly, the physiotherapist assesses, observes and comments on the development and needs such as aids, appliances, managing day-to-day skills of feeding, dressing and bathing.

In Zambia, physiotherapists are very few (ADD, 1999). Many children would need the attention of a physiotherapist nearly every day, but due to insufficient personnel the children are helped by parents in homes. It is in this view that Jolly (1975) points out these physiotherapists are

important in the programme not only for what they can teach the child but for what they can demonstrate to parents. This includes demonstrations on how to lift and handle disabled children.

2.5 The Impact of Home Based Education on the Children with Severe and Multiple Disabilities

Ramey and Ramey (1999) state that Home Based Education endeavours to support the development of young children with disabilities through play, communication and relationships. It also encourages full participation in day-to-day life within family and beyond home. The Home Based Education services are committed to securing inclusion in the wider community for all children and families in their own right.

HBE (2008) describes the structure and details of the learning experiences offered in the Zambian Home Based Programme. These include infant stimulation, socialisation, self-help, cognitive, language and motor. These describe the main developmental domains of a child.

Significance of Developmental Milestones in Home Based Education

Child development is a process every child goes through. The process involves learning and mastering skills like sitting, walking, talking, skipping and tying shoes. Haviglurst (1972) states that these developmental tasks, also referred to as developmental milestones are tasks which arise at or about a certain period in the life of the individual. Successful achievement leads to joy and success with later developments, while failure leads to sadness and difficulty with later tasks.

Lahey (2009) argues that some tasks arise mainly as a result of physical maturation, e.g., learning to walk; others arise due to cultural pressures of society, e.g., learning to dress or read and others out of personal values and aspirations of the individual. Developmental tasks arise mainly from the outlined forces working together. Abadzi (2006) notes that the brain grows very rapidly during the first years of life and it is during this time, the child learns all sorts of new skills, and because children usually acquire developmental milestones or skills during a specific time frame or window, it is possible to predict when children will learn different skills.

Harris (1998) suggests that it is very important to provide opportunities for learning when the child is ready, using developmental periods or time table. There are definitely blocks of time when most children will meet a milestone, e.g., sitting, walking, and speaking. At an appropriate estimated time, if the child is still lagging behind, then the child could be facing a medical or developmental problem because the age the child could have attained a skill is outside of the normal window or time frame in which children learn that particular task. The HBE programme has focused its educational activities towards the development of the disabled child through the use of these developmental milestones. The following review shows the value of these developmental tasks in childhood.

Infant Stimulation

Abadzi (2006) states that learning depends on whether the brain is able to process information. Brain research over the last few decades indicates that the brain is almost entirely developed by the time a child enters school. Early years experiences have a decisive influence on the architecture of the brain and how it functions. Limited stimulation is one of the effects on a developing brain. Infant stimulation, though not a developmental milestone plays a very significant role in the process of child development.

Bronfenbrenner (1974) argues that the quality of experiences an infant, toddler and young child is exposed to during this time affects their learning capacity. This clearly indicates that development is aided by stimulation. While most development will occur as a result of maturation and environmental experiences, a lot can be done to enhance development to reach its full potential. This can be done by stimulating development through directly encouraging the child to use ability, which is in the process of development.

Hurlock (1980) states that, stimulation has been found to be effective at the time when ability is normally developing, though it is important at all times. Home Based Education Programme has included infant stimulation as one of the major aspects considered in the activities of the children, especially infants identified to have developmental delays. Berky (2006) postulates that the more often parents/caregivers talk to their infants, toddlers and young children, the sooner they learn to talk. Similarly, stimulation of the muscles during early years results in earlier and

better coordinated motor skills. This entails that stimulation is very cardinal in all areas of the child's development.

Socialisation

Buchanan and Cooley (2000) state that the egocentrism characteristic of young children quickly gives way to a desire to become a part of the social group by protesting when left alone for a long time and trying to win attention of others in any way they can. Children engage in attachment behaviour because they seek attention and affection of their mothers or caregivers more than other family members or outsiders. They develop strong emotional ties. It is from the satisfaction of this attachment behaviour that the desire to establish warm and lasting relationships develops. This just confirms that socialisation begins in childhood.

Spock and Needleman (2004) point out that in their earlier years, children learn to develop interest and attitudes that will lay foundation for creativity or for conformity to patterns set by others. This will be largely determined by the treatment they receive from significant adults, especially their parents or caregivers. Erikson (1982) agrees with this point in his psychosocial stages of development of creativity versus inferiority. A child at as early as two years is able to be creative with good guidance or develop a feeling of inferiority in later years if not well nurtured.

Tautermannvova (1973) maintains that early social foundations laid in childhood are very important because the type of behaviour children show in social situations affect their personal and social adjustments, and tend to persist as children grow older. It is at home that the child's life is centred; it is at home that the foundations for later social behaviours and attitudes are laid. According to Haviglurst (1975), conditions can be changed as the child progresses; however, making a change after a pattern of behaviour has become habitual is never easy nor is there guarantee that the change will be complete. However, it is good to consider good social foundations.

Language Development

According to Berk (2006), the child's ability to both understand and use speech is very important. Language develops with extra ordinary speed in early childhood. Lahey (2009) describes speech as a tool for communication. To be able to communicate, children must be capable of comprehending the meaning of what others are trying to communicate to them and the ability to communicate to others in terms they can comprehend. Communication can be in any form of language i.e. use of body parts and gestures, though spoken language is the most efficient. According to Vygotsky (1987), learning to speak involves; learning how to pronounce nouns, associating meaning with words and combining words into sentences. Children learn language by trial and error, mainly by imitating adult speech and vocabulary. He further points out that how great the comprehension will be, depends partly upon the child's own intellectual abilities and partly on how others stimulate and encourage the child to try and comprehend what is being said.

Moerk (1997) postulates that behaviourist psychologists assume that children acquire language through operant conditioning where the child makes sounds; parents reinforce them through encouraging them. The nativist perspective, according to Moerk (*ibid*) reveals that children have a Language Acquisition Device (LAD), an innate system that permits them to understand the meaning of sentences they hear. However, he also agrees that there is need for parents/caregivers to encourage the child, which is referred to as scaffolding in order to facilitate the learning process.

Language and speech development is a basic tool for thought, communication, reasoning and making sense of the world. Cohen (2005) contends that language development is closely related to children's emotional and psychosocial development. Language competence is critical for development of other domains. Problems with language and speech can set a child on a maladaptive trajectory throughout life.

WHO (2004) points out that a stable and close emotional relationship long before the infant learns to speak, enables parents/caregivers to describe and mediate the child's experiences and lays the foundation for the child's language development. Simeansson (1991) adds that at this

age, the foundations are being laid for the development of the tools of communication that will be needed later as social horizons broaden. Delayed speech and language can occur due to low level of intelligence (slow learners), which is very common in children with severe disabilities, lack of stimulation especially in the early years when parents/caregivers fail to stimulate bubbling and early attempts to speak. By contrast, when children are encouraged to bubble and learn to say words, their speech development conforms to the normal pattern and is often accelerated. The more novelty there is in the environment, the greater the baby's motivation to vocalise.

Physical/Motor Development

Berk (2006) describes motor or physical development as fine and gross motor skills. Fine motor skills have to do with smaller movements such as reaching and grasping. This is the ability of a child to use small muscles, especially their hands and fingers to pick up small objects, hold a spoon or use a crayon. Gross motor skills development refers to control over action that help infants get around in the environment such as crawling, standing, walking and running. It involves the use of large muscles.

Abadzi (2006) states that rapid development of the nervous system, the association of the bones and the strengthening of the muscles makes it possible for children to master their developmental tasks. However, their success in this regard depends largely upon the extent of the opportunity they are given to master and the help and guidance they receive.

Bjorklund (2004) argues that maturation and learning work together in the development of muscle control. As a result of maturation of muscles, bones and nerve structures and because of the change that takes place in the body proportions, children are able to use their bodies in a coordinated manner. They must, however, be given an opportunity to learn how to do so, until this state of readiness is present, teaching will be of little or no value.

Elkind (1976) suggests that when motor development is delayed, a child will be at great disadvantage when she/he begins to play with age mates. The more they lag behind the group motor control, the slower they are likely to be in acquiring the skills other children possess.

Cognitive Development

According to Piaget (1972), knowledge is a body of information or beliefs a child has acquired, either through instruction or through direct experience with the world. It is a fair representation of what the child has been taught or witnessed. The storehouse of knowledge is increased as items are added upon items from daily experiences. Flavell and Miller (1998) conceived knowledge as a process, to know something means to act that thing with action being either physical or mental or both. Cognitive development then is a constant effort on the part of the child to expand and refine knowledge.

‘All knowledge is continually in a course of development, passing from a state of lesser knowledge to one which is more complete and effective’ (*ibid*: 5). Cognitive development depends upon such factors as maturation, physical experience, social transmissions and equilibrium. These factors regulate the stages of cognitive growth through which all children normally develop.

Theorists like Piaget and Vygotsky have argued that cognitive development is achieved through stages, though they believe that children do not pass through the stages at the same speed or that all children eventually reach the highest level. Individual differences in the rate of progress are expected. Some children, such as children with severe disabilities, would fall short of the formal operation levels and may not even get past the sensory-motor or pre-operational levels.

This then, implies that in order to help children develop their cognition, there is need to select learning goals for the children to pursue, which should be based on the analysis of what the child needs to succeed in, in life. The sequencing of objectives and associated learning tasks, suggests a psychological sound order in which to confront the child with different tasks. Bishop and Nally (1993) point out that task analysis is very cardinal in the teaching of children with disabilities. A similar topic or problem can be used, but activities should be assigned according to various types of sequences. This can only be done if the child’s intellectual functioning is assessed.

Self Help Skills Development

Kirk *et. al.*, (2009) encourages the teaching of activities for Daily Living (ADL) to children with disabilities. These are activities that enable the child to take care of himself/herself, like eating, dressing, bathing, toileting and other household activities. These are Activities for Daily Living (ADL). The development of these skills helps the child to build self-esteem, which facilitates independence of the child from the family and community. Kirk *et. al.*, (2009) have revealed that severely and multiple disabled children usually have serious difficulties in self-care skills due to the impact of their disabilities.

Bender (2001) pointed out that children assert their independence by wanting to do things for themselves. This eagerness to be independent makes it the ideal time for them to learn self-help. It is therefore, important to provide opportunities for children to develop self-help skills. This can be achieved through modelling the self-help skills and providing feedback. Buysse and Snyder (2007) argue that everyone strives for independence. A special needs child is no different. Teaching self-help skills to a special education needs child will help build self-esteem as well as allow the child to gain independence in everyday tasks. This benefits children for a life time.

2.4 Summary of Related Literature

Literature reviewed above has shown that Home Based Education is a concept under Community Based Rehabilitation of children with disabilities. It has been found that there is a relationship between home based learning and the development of children with multiple and severe disabilities.

Literature clearly indicates that many studies have been undertaken on the development of children and it has been found that there are a number of factors that are considered in the normal development of children. These include, the influences on the course of development, whether development is a continuous process or follows a series of discontinuous processes, the influences of the nature or nurture on the development of the child, basic foundations of normal child development-which includes the significance of early foundations and the role of learning in child development.

Literature has also shown that children with severe and multiple disabilities are cognitively normal and are capable of mastering the regular curriculum when they receive the necessary support. This means that no matter how severe the disability, a child is capable of learning and can progress. In this vein, it has been revealed that the Home Based Programme concentrates on working on the developmental milestones of children as a basis for teaching these children. This is so because the learning of the children is based on functional age appropriate skills and with an ongoing systematic evaluation of the child's progress. The utilisation of home visitors, i.e. teachers and physiotherapists, parents or caregivers and any other community members in the Home School Education Programme has proved to have a lot of advantages as an intervention of rehabilitating children with severe disabilities through the use of available local resources.

With this review I can state that children with severe and multiple disabilities, like any other children, if provided with the right learning experiences, at the right time and with necessary supports will have their conditions improve and possibly enjoy 'normal' child development.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

This chapter presents the research methods which were employed in this study. It consists of the following: research design, target population, sample size, sampling procedure, research instruments, data collection and data analysis.

3.2 Research Design

Ghosh (2003) defines a research design as a plan of the proposed research work. A research design represents a compromise dictated by mainly practical considerations. He points out that ‘a research design is not a highly specific plan to be followed without deviation, but rather a series of guide posts to keep one headed in the right direction’.

A survey design was used in conducting this research. A survey usually involves collecting data by interviewing a sample population selected to accurately represent the population under study (Sidhu, 2006). Survey questions concern people’s behaviour, their attitudes, how and where they live and information about their background. The study opted to use this method taking into account the complexity of the research at hand i.e. the few numbers of severely disabled children, the inability to communicate on their own and the difficulty in ascertaining their attitudes and behaviours.

This study used mainly the qualitative method of data collection. The quantitative method of data collection was, however, also employed to yield empirical data to substantiate the qualitative data. According to Grinnell (1993), the most reliable way to know the objective world is through examination of data collected and assessed according to certain rules of logic, which in the end, produces a solid logical support. Quantitative researchers collect facts and study the relationships of one set of facts to another. They use techniques that are likely to produce quantifiable and if possible generalisable conclusions.

3.3 Target Population

The target population comprised eighty-six (86) basic school teachers, hundred seventy-six parents and their children and programme coordinators in the Home Based Education Programme under study in Lusaka district.

3.4 Sample Size

Twenty-five respondents made the sample. The characteristic distribution of the target population who were respondents in this study was as shown in the table below:

Characteristics of Respondents

Category	Gender		Total
	Male	Female	
HBE Teachers	-	10 (40.0%)	10 (40.0%)
Parents/Caregivers	-	10 (40.0%)	10 (40.0%)
CBIA Coordinators/ physiotherapists	1 (4.0%)	4 (16.0%)	5 (20.0%)
Total	1 (4.0%)	24 (96.0%)	25 (100.0%)

Age, Duration of Service on the HBEP and Professional Qualification of the Teachers

Age in years	Length of service (HBEP)	Professional qualification %								Total
		Primary Cert	Special Ed. Dip	Primary Dip	Secondary Dip	B.Ed (Sp)	BA	BEEd	MA	
20-25	Below 1 yr									
	Between 1 - 4									
26-30	Below 1 yr									
	Between 1 - 4					1				
31-35	Below 1 yr	1	1			2				40
	Between 1 - 4									
	Between 5 - 10									
36-40	Below 1 yr			1		1				20
	Between 1 - 4									
41 +	Below 1									
	Between 5 – 10									
	Between 11 – 15							2	1	30
Total		1	1	1		4		2	1	100

The table above describes the age groups, duration of service in the HBEP and professional qualifications of the teachers on the Home Based Education Programme who participated in the research. From the table, most respondents were aged between thirty-one to thirty-five years, followed by those above forty years. The table indicates that teachers on the programme have diverse qualifications; special education tops the categories with 80% of the respondents. The table also shows that 20% of the teachers do not have a prior qualification in special education.

3.5 Sampling Procedure

The convenient sampling technique was used to select participants in the study. The location of the study area dictated the choice of teachers in the locality as this made the work of the researcher much easier to accomplish.

The parents/caregivers were selected using purposive sampling technique. The researcher used her judgment as an experienced special education teacher in selecting the parents/caregivers who had children whose disabilities were typical.

Children, on the other hand were selected using convenient sampling method. The selection was based on the availability of such children, especially that they were few in number; hence there was no any other alternative. The Home Based Education administrators were also selected using convenient sampling procedure since they are only four in Lusaka urban district.

3.6 Research Instruments

In collecting data for this research, the following instruments were used: structured questionnaires, semi-structured interview schedules, document analysis, Focus Group Discussion guides and observation.

Semi-structured Interviews

These were used to collect data from the parents/caregivers and Community Based Intervention Administrators. It involved asking questions, listening and recording answers. This instrument was used to gather in-depth information to gain an insight of the Home Based Education issues through understanding the experiences of the individuals.

Questionnaire

A questionnaire was used to collect data from the Home Based Education teachers. It comprised open and closed-ended questions. Closed-ended questions were supplemented by open-ended questions, which allowed the respondents to express themselves freely. Sockets (1998) points out that open-ended question evoke a fuller and richer response and probably probe deeper. They frequently go beyond statistical data into the area of hidden motivations like attitudes, interests, preferences and decisions.

Document Analysis

This was used to supplement interviews and questionnaires. It included the Community Based Intervention Association annual reports, brochures, photos of children in the programme, videos, official statistics, home based education guides, prospective and teachers work diaries. Robson (1993) argues that data analysis relies on the use of available printed or written data and films. To this effect, this tool helped to obtain the background information on the operations of the organisation.

Focus Group Discussion

This was conducted with groups of parents and teachers separately who were already covered for in the interviews and questionnaires. It was basically used for triangulation purposes. Coleman and Briggs (2005) point out that members frequently correct each other on points of detail until a consensus is established on contrast of desired picture. In this way, respondents had the advantage of hearing each other's views and made additional suggestions beyond theirs. Patton (1990) alluded to the fact that focus group discussions have the potential of providing a certain quality control on data collection as the process tends to create a system of checks and balances, where the respondents usually present false or extreme views.

Observation

Observation is a powerful, flexible and real tool in research. It seeks explicative evidence through the eye of the observer/researcher directly (Cohen *et. al.*, 2000). It is concerned with observation of everyday events, description and construction of meaning, rather than reproductive events.

3.7 Pre-testing of Research Instruments

Before commencing the final data collection for the study, the researcher pre-tested the research instruments. This exercise was carried out in Chilenje zone schools namely; Arthur Wina, woodlands A, and Chilenje B. This exercise was essential as it helped the researcher to assess the validity of questions set and whether the respondents did understand the questions in the instruments, hence the purpose of the study and finally as to whether the instruments would yield the intended results. It also enabled the researcher to reconstruct or rephrase the questions so that they answered the objectives of the study.

3.8 Data Analysis

The Statistical Package for Social Sciences (SPSS) was used to analyse quantitative data from the questionnaires. Qualitative data obtained through semi-structured interviews, focus group discussions, observations and document analysis was analysed by coding and grouping the emerging themes. Computer generated tables of frequencies and percentages were used in describing distributions of the variables, which were presented in the form of tables or pie charts.

3.9 Limitations of the Study

The sample was rather small due to limited time and resources. The children in the study were quite few and, therefore, posed a challenge in finding a comprehensive number in a given locality. Scarcity of information on the topic, due to lack of documented materials on the local scène. Another limitation was the enormous variations between children with severe and multiple disabilities and likely bias in the selection of children for inclusion in the study. As a result, caution must be exercised in generalising the findings of the study.

3.10 Ethical Considerations

The researcher sought written permission from the District Education Board Secretary (DEBS)'s office to interview teachers in the Lusaka central zone schools' teachers. Permission was also sought from the Community Based Intervention Association coordinators at the University Teaching Hospital and parents to conduct interviews and discussions. Permission for the children was sought from parents since most children had no capacity to give consent due to age and

severity of their disabilities. Privacy, anonymity, confidentiality were maintained and participants were assured that the information was for academic purposes only.

CHAPTER FOUR

4.0 PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents results of the research carried out in Lusaka central zone of the Home Based Education Programme. There were three categories of respondents namely, home based teachers, parents/caregivers and the HBE coordinators, who are also physiotherapists.

4.2 Training of Teachers as Home Visitors

Respondents were asked to indicate whether there was any training required before embarking on the Home Based Education Programme. In response, all the respondents in the study indicated that training was necessary.

Table 1: Sufficiency of the Training Received by the HBE Teachers

Response	Frequency	Percentage
Yes	7	70.0
No	2	20.0
Don't know	1	1.0
Total	10	100.0

Teachers were asked whether the training they received was sufficient enough. Table 1 shows the responses. The table shows that majority of the teachers, seven (70.0%) were of the view that the training they received under the HBEP was adequate to enable them teach the children. However, two (20.0%) of the teachers said the training was not sufficient.

The two who did not agree that the training received was sufficient were of the view that there was need to receive more information on physiotherapy techniques. On the other hand, the one (10.0%) respondent who said 'don't know' had no special education training prior to joining the HBEP hence could not make any conclusive judgment on the training.

4.3 Type of Training Offered to Teachers in Terms of Skill and Knowledge in the HBEP

Table 2: Type of Skills and Knowledge Received by the HBE Teachers

Methods	Levels			Total
	Great extent	Some extent	Lesser extent	
Physiotherapy techniques	2 (20.0%)	5(50.0%)	3(30.0%)	10(100.0%)
Infant stimulation	6(60.0%)	4 (40.0%)	0(0.0%)	10 (100.0%)
Socialisation	8(80.0%)	2(20.0%)	0 (0.0%)	10 (100.0%)
Cognitive	8(80.0%)	1(10.0%)	1 (10.0%)	10 (100.0%)
Language	6(60.0%)	3(30.0%)	1(10.0%)	10(100.0%)

Table 2 above shows responses from HBE teachers on the type of skills and knowledge they received during training. The table shows that to a greater extent, physiotherapy was at two (20%), infant stimulation at six (60%), socialisation at eight (80%), cognitive at eight (80%), language at six (60%). To some extent physiotherapy was at five (50%), infant stimulation was at four (40%), socialisation at two (20%), cognitive at one (10%) and language at three (30%). To a lesser extent physiotherapy was at three (30%), infant stimulation at 0%, socialisation at 0%, cognitive at one (10%) and language at one (10%).

4.4 Impact of the Home Based Education on Children with Severe and Multiple Disabilities

Table 3: Age Range of Children Enrolled on the Programme

Age range in years	Frequency	Percentage
0 – 1	3	30.0
2 – 4	3	30.0
5 – 6	4	40.0
7 – 10	-	-
Total	10	100%

Table 3 shows that most of the children enrolled under the HBEP fell in the age range of between five and six years representing four (40.0%), followed by those in the age range of between two and four, three (30.0%) and between zero and one, three (30.0%).

4.5 Whether Children were assessed Before Enrollment

Teachers were asked to state whether they assessed the children before they could be enrolled into the programme. Their responses indicated that all the teachers ten (100.0%) assessed the children before enrolling them into the programme. See Appendix (iv) for the assessment checklist.

Table 4: Improvements Observed by Teachers in the Children

Duration on the HBEP	Responses			Total
	Great extent	Some extent	Lesser extent	
Less than 1 year	-	-	1(10%)	1(10.0%)
1 to 3 years	-	2(20.0%)	-	2(20.0%)
4 to 7 years	3(30%)	1(10%)	-	4(40.0%)
7 to 10 years	3(30%)	-	-	3(30.0%)
Total	6(60.0%)	3 (30.0%)	1(10.0%)	10 (100.0%)

Table 4 indicates that children on the programme who were less than one year about one (10%) improved to a lesser extent, one to three years shows two (20%) improvement to some extent, four to seven years shows one (10%) to some extent and three (30%) to a great extent, while seven to ten years stood at three (30%) to a great extent. The overall outcome shows that children who have been on the programme for a longer period improved more at six (60%).

Table 5: Teachers' Responses on the Benefits of HBEP

Response	Frequency	Percentage
Very beneficial	6	60.0
Beneficial	4	40.0
Less beneficial	-	-
Not beneficial	-	-
Total	10	100.0

Table 5 above shows the views of the teachers on whether the HBEP was beneficial to the development of children with disabilities. As can be seen from the table, six (60%) of the teachers said the programme was very beneficial, while four (40.0%) said it was beneficial. The overall indication of the responses implied that the programme was beneficial.

Type of Training Offered to the Teachers

When teachers were asked about the main areas covered, they indicated the following: Simple physiotherapy techniques; infant stimulation activities; child socialisation skills; language and speech development techniques; cognitive stimulation activities; counselling skills; different types of disabilities and their causes; and assessment procedures.

Activities Given to Parents by the Teachers for the Children

Teachers were asked to mention the type of activities they leave with the parents for the children. The study revealed that teachers left different types of activities depending on the child's deficit needs. The activities left were taken from the Home Based Education Guide and covered areas in infant stimulation, cognitive, motor, language and speech development, socialisation and self-help.

Section 1: Views of Parents on Beliefs and Opinions of the Home Education Programme

A focus group discussion (see Appendix ii) was conducted for parents of children in the study. It was conducted to elicit responses on beliefs and opinions of the parents as well as provide in-depth information on the subject. The following issues emerged from the discussion:

Parents were asked to indicate how they realised that their children had problems; their responses were that 'some children were not developing and that others could not do things like other children of the same age'.

When asked about what type of problems the children presented to them; parents' responses varied. However, most parents said the children lacked mobility; generalised body weakness; mental retardation/slowness in doing things; generalised muscle rigidity; inability to do age

appropriate tasks, such as sitting, crawling, standing, holding things and speaking; lack of language; and socially withdrawn - could not play with others, usually cried most times.

As regards the age at which the children are accepted to enroll into the programme; the parents indicated that the children were allowed to enroll from as young as 0 to 8 years old, as long as a problem had been identified.

As to whether the parents had seen any changes in their children from the time they were enrolled into the programme; their responses varied with those that had their child on the programme for at least one year saying 'yes', while those that had children on the programme for less than one year said they were not sure, implying that they had not seen any change in their children yet.

Another issue that was discussed was that of training. Parents were asked to say whether they had received any training on how to handle their children. To this effect, all the respondents indicated they had received training on how to handle or help the children at home. With regard to the roles parents played in the HBEP, they indicated that they helped the children with simple physiotherapy exercises everyday; carried out the work left by the teacher on any of the activities; and played with the children.

As regards the type of activities for the children that the teachers left with the parents, their responses varied. Nonetheless, the parents indicated that they were left to give stimulation exercises to their children. These included physiotherapy exercises, cognitive stimulation exercises, and play patterns, use of simple aids, language and speech exercises and exercises on daily living activities.

When asked about the benefits that children got from the HBEP, parents indicated that the Home Based Education Programme was very beneficial to them and the children. The benefits included:

1. Infant stimulation: the children were stimulated in the main developmental domains. The planned programmes left by the teachers helped parents to work on identified deficit skills of the child. At the end of the day, the child's brains were activated to perform. It was observed that some body parts if not stimulated could not function.
2. Cognitive exercises: the children were provided with activities that help them develop their intellect. The parents have observed that children were able to do things they were not able to do especially reading, writing, singing and many other activities.
3. Language development skills: helped parents to train children in speech and language skills. Children had responded favourably in terms of communication by showing capacity of using a language especially those who could not do it.
4. Motor skills: provision of physiotherapy skills was said to have been very beneficial, especially to children with cerebral palsy and other related conditions. Children with physical disabilities received physical stimulation exercises and parents testified to have seen these children use their limbs i.e. walk, grasp and use their muscles in a well coordinated manner after receiving this help.
5. Socialisation: parents revealed that these activities managed to change the attitudes of the children towards others and themselves. Some parents testified that their children had difficulties interacting with others especially strangers, but with the activities offered, the attitudes improved tremendously.

Section 2: Views of Home Based Education Coordinators on the HBE Programme

In-depth interviews (see Appendix iii) with the Home Based Education Coordinators, who are also physiotherapists by profession, revealed that the HBEP's aim was to provide early intervention to children with disabilities through education and physiotherapy.

As regards where children on the programme were to be found, the coordinators said children could be found from the University Teaching Hospital main referral centre, local clinics in the communities, in the community through outreach services by the HBE teachers. Parents take their children to any nearest HBEP once they get to know about it.

As regards who should be enrolled into the programme, the coordinators indicated that all children with disabilities as long as they were within 0 – 6 years and were not in school. The coordinators also explained that the aim of the programme was to intervene as early as possible to avoid or reduce the impact of the disability; to provide an avenue for early childhood care, development and education, which in most cases, children with disabilities do not access; to conduct physiotherapy exercises on children with physical disabilities; to train teachers and parents to conduct simple physiotherapy exercises and design and make simple aids.

According to the responses given by the HBEP coordinators, the training curriculum for the teachers covered basics of therapies essential for communication; Activities for Daily Living (ADL); physical disabilities along with the concepts and techniques related with motor and the rehabilitation processes; assessment skills; and counselling skills.

Parents with children on the programme were also given skills on how to handle the children in terms of play and communication; how to help children with work left by the teachers; and how to identify needy areas of the child.

As regards the type of skills offered to the children, the coordinators indicated that these depended on the child's needs after initial assessment. They are based on the main developmental domains i.e. cognitive, socialisation, language and motor skills. Self-help and infant stimulation activities are also offered according to the need area of the child.

When asked to indicate the teacher's role in the HBEP, the coordinators gave the following:

- (i) To plan exercises for the child together with the parents.
- (ii) To teach different therapeutic exercises and techniques to the parents.
- (iii) To give suggestions for the use of simple aids in case of need.
- (iv) To develop rapport with the children and parents so that interaction is facilitated.
- (iv) To check whether parents are doing the right exercises, which are complete and correct, give correction through demonstration when necessary.
- (v) To counsel the parents on the different aspects of the child's disability and the importance of maintaining general health of the child as necessary.

- (vi) To conduct home based assessment to facilitate the formulation of an individualised education and physiotherapy programme.
- (vii) To be a link between the parents and the CBIA coordinators.
- (viii) To maintain a record of the home visits under the following headings:
 - (a) General condition of the case (improving/no change/deteriorating).
 - (b) Quality of life of the child (getting better or not getting better).
 - (c) Problems found and things taught.

The main roles of parents in the HBEP as stated by the coordinators were to:

- (i) continue with the activities left for the child by the teacher;
- (ii) help the teacher plan the child's curriculum; and
- (iii) take the child for medical checks up where necessary.

Furthermore, the coordinators were asked to indicate the attitudes of parents towards the programme. They described the attitudes of parents as follows:

‘At the beginning, they are very eager but due to slowness of the progress of their children, they tend to develop negative attitudes. From the onset, male parents show negative attitude towards the programme’

When asked whether the programme received any form of help from Government, one coordinator said that:

‘Yes, basically from two ministries. Ministry of Education (MoE) has allowed the use of its teachers while the Ministry of Health (MoH) provides the physiotherapists and clinics for physiotherapy on given dates. The doctors from MoH also play vital roles of identification, assessment and referral to CBIA, which finally allocates an appropriate zone to the child’.

The data presented above has provided results, which have revealed salient issues on the HBEP, such as activities done in the HBE, the value of involving parents in the programme and the benefits of the HBEP activities. The next chapter attempts to synthesise and discuss these findings.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

5.1 Introduction

This chapter discusses the findings of the study that sought to investigate the role of Home Based Education in the development of children with severe and multiple disabilities in selected Home Based Education Programme centres in Lusaka district.

5.2 Training of Teachers as Home Visitors

As regards training of teachers, the findings of the study showed that HBEP had put more emphasis on training its staff. Table 3.4.2 shows the characteristics of respondents. It shows that all the teachers are professionally trained. It is clear that the teachers trained in special education are more likely to participate in HBE activities than those trained as regular class room teachers. This view is further supported by eight (80.0%) special education trained teachers, against two (20.0%) regular classroom teachers possessing certificates, diplomas and degrees who are in the HBE programme.

The 20.0% representing regular classroom teachers indicated that the HBE involved a wide range of teachers despite not having any specialised skill/training on how to handle children with Special Education Needs (SEN). Non special education teachers needed to be encouraged to participate in disabilities issues with the help of the special education teachers and CBIA coordinators in collaboration with communities.

UNESCO (1995) elaborates that teachers not only need to be properly trained and qualified; they also need to have a positive attitude to their work. Teacher's professional development needs to go beyond teaching only but also change of attitude to their work and learners. This is done when teachers are able to interact and learn from each other. Regular classroom teachers

should find ways to upgrade their knowledge and refine their pedagogical methods and open to new ideas in order to work effectively in the HBE. This is because they give instructions of change in the life of severely disabled children, therefore, need enough knowledge in order to disseminate the right information through HBE.

The study also sought to find out if CBIA provided any specialised training to teachers to enable them to participate effectively in the HBE programme. Responses to question 1 show that 100% of the teachers agreed that they received training before embarking on the HBE programme. The value of this training is echoed by ADD (1999) report, which shows that on leaving training colleges, the regular class teachers are not well equipped with skills to handle children with multiple or severe disabilities. These teachers are used as the most convenient population to help meet HBE objectives of providing early intervention strategies in education. With the rapid growth of knowledge and its applications, HBE teachers should have an opportunity to review their knowledge at regular intervals. Snelson (1990) argues that without properly trained teachers, the educational system including programmes like HBE would not succeed. Teachers should, thus be encouraged to attend and participate in these professional development activities.

As regards the type of training received by teachers during the HBEP initial training to enable them take part in the programme, all the teachers in the study revealed that the training borders on how to handle and teach children with disabilities and their parents.

In terms of skills that the teachers received, Table 3 has shown that at the end of the programme, the teachers will have acquired the following skills: Simple physiotherapy techniques; infant stimulation activities; child socialisation skills; language and speech development techniques; cognitive stimulation activities; counselling skills; type of disabilities and etiological facts; and assessment procedures.

The CBIA coordinators summarised these skills in three areas as seen in Appendix iii. The curriculum for HBE teachers consisted of basically the following aspects: i) basics of therapy essential for communication ii) activities for daily living and iii) physical disabilities along with the concepts and techniques related with motor and rehabilitation processes.

The curriculum for HBE teachers as reflected above consisted of aspects such as understanding fundamental issues of child development, i.e. influences on the course of child development, basic foundations of child development. As revealed in ADD report (1999) these teachers are not able to handle severe and multiple cases with rudiments of skill effectively, especially that the programme uses even teachers who have no special education qualifications as seen in Question 1, no wonder the HBEP has deliberately put training of teachers as a priority need, to prepare them for this noble task.

The instructional needs of children with severe and multiple disabilities are different from those of their non-disabled peers; this gives rise to differences in the core curriculum goals and content. This signifies emphasis on functional and communication skills, which will be used in real life situations. Stieler (1994) supports this argument by stating that activities for severely and multiple disabled children should not be based on hypothetical sequences of normal development but should be transmitted to functional skills, which include communication, mobility and activities for daily living.

5.3 Training for Parents/Substitutes in Terms of Knowledge, Skills, Roles and their Value

The study also looked at the activities parents with children on the programme are given by home visitors in order for them to continue helping the children at home. The study has revealed that there are a number of activities, which the teachers give parents. This is an illustration of the parental involvement in the programme. These activities reflect what teachers learn, which is interpreted expressively in the home based education teachers' guide. These skills offered to teachers, parents and finally to the children are very important in the development of children with severe disabilities. Just like any other children, children with severe disabilities are cognitively normal and capable of mastering the regular curriculum when they receive the necessary support.

Learning is a very important aspect in child development. Development cannot be possible without learning. This is the reason why children with severe and multiple disabilities should be given a chance to learn like any other children. Though the goals of education are the same for all children, some goals may not be realistic for children with severe disabilities, but from my

own observations and reports from parents and teachers the children, under the programme are learning. The provision of correct learning experiences and materials as propounded by Skinner has facilitated the learning process. The study has proved beyond reasonable doubt that children are learning and change has been observed.

In this regard, parents have been identified as providing critical support in the education of children with disabilities. The HBEP has provided training for parents and teachers because parents play a significant role in the provision of the desired skills. Responses from the focus group discussion revealed the roles played by the parents as; providing simple physiotherapy exercises, planning the child's education programme with the teacher and implementing the exercises/activities left by the teacher. In short, parents are the teachers of the child, without them the programme may not be able to provide the service at an appropriate time.

5.4 The Impact of the Programme on Children with Severe and Multiple Disabilities

In the review of fundamentals of child development, Vanden Daele (1974) notes that development is a complex process integrating many structures and functions. It is a progressive series of motivation and experience. Children with multiple and severe disabilities desire an integrated curriculum in order to cater for their multifaceted problems.

The study has shown that children present problems such as lack of mobility, generalised body weakness, mental retardation (slowness in doing or learning things), generalised muscle rigidity/spasticity, lack of speech and language and socially withdrawn/cannot play with others and are irritable. This revelation just confirms the magnitude of the problems the children have. Lahey (2009) reveals that child development has three main developmental domains, these form an integrated whole of child development. The HBEP has placed emphasis on the developmental mile stones as a way of meeting their intended goal of facilitating a holistic child development. A child who fails to reach a mile stone within the desired range requires intervention to stimulate the development of that skill.

Harris (1998) suggests that it is very important to provide opportunities for learning when the child is ready, using these developmental periods. The HBEP puts value on this aspect as seen in

Question 5 as regards assessment before the children are enrolled. The findings from the study showed that all the children were assessed before being enrolled on the HBEP. This assessment continues during the course of the programme. Three main ways of assessment are used as revealed in the CBIA coordinators' interview responses; a checklist (see Appendix iv), observation by parents and teachers and also teachers using progress charts. Assessment classifies skills in terms of current, emerging and deficit skills. This allows for the planning of the child's individualised education programme, including physiotherapy plan of action to those who need it. Placement of children with disabilities has to start with assessment. Assessment helps to find out the child's level of functioning.

As regards enrolment, the study has shown that children are enrolled into the programme between the ages of 0 and 4 years. Scholars like Elkind (1976), White (1976) and Bijou (1974) have argued that foundations laid during early years of the child are the most critical and they tend to persist. Children have a time table when they can learn certain things without much difficulty. In order to avoid these hazards, intervention needs to be started as early as possible and at the right time. Early education intervention programmes enhance development through provision of structured opportunities to practice skills appropriate to the child's developmental level.

In this study, there was evidence to show that early intervention provides a very good chance for the children to improve their conditions. Some actually have managed to avoid the severe impact of their disabilities. The children enrolled on the programme at as early as infancy have shown great improvement as compared to those who start later in their chronological age.

The study indicates that the teaching of these children takes place in their home environment as alluded to by all the respondents. Disabilities vary in their severity and functional capacities. Most of them on the programme are severely disabled and cannot be easily sustained in the school system. In Zambia, the home environment is critical due to the poor pupil to teacher ratio that allows for little or no time for individual attention, lack of institutions that provide services for severely disabled children especially in the peri and rural settings. Literature has revealed that very few children with severe disabilities are placed in regular pre-schools and kindergartens.

The home environment then becomes critical in the development of children with severe disabilities. The parents, siblings and other members of the family take up the role of the teacher in the home. This helps to intervene or provide the services needed for the child, who should have accessed this in a school environment, but due to their multifaceted problems, they could not. The home becomes a critical starting point in the life of a disabled child; it provides the primary early environment for the child.

In terms of whether the programme was beneficial to the intended group of children, Table 6 has shown that 60% of teachers agreed that the home based education activities were very beneficial to the development of children with severe and multiple disabilities, while 40% indicated it was beneficial. The discrepancy in the responses perhaps was quite subjective. Children with disabilities usually show changes at a very slow rate; in order for the teacher to see the effects of the programme, they should have handled the child for a long time, possibly not less than one year. This difference in responses has also been associated with the attitude of parents. The CBIA coordinators reported that at the beginning, the parents are very eager, but due to slowness of the child's progress, they start developing negative attitudes. In the discussion with parents, it was also revealed that children enrolled on the programme show great and quick improvement in all the developmental domains. This confirms that depending on how long the child has been exposed to the HBEP, the progress may be seen or not.

CHAPTER SIX

6.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter covers the summary of the study, conclusions that are drawn from the study and recommendations.

6.2 Summary

This study has demonstrated that Home Based Education is vital in the placement of children with multiple and severe disabilities at an early age. The study has shown that detailed training in the basics of child development provided to the teachers helps them plan and develop appropriate learning experiences for the children with severe and multiple disabilities.

The home environment provides a natural place for the development of children with multiple and severe disabilities. The skills, values and knowledge provided to parents to teach children with multiple and severe disabilities at home, combined with visitations by teachers, provides a better early intervention as children are observed and taught at home in a quiet and natural environment. The study has shown that early detection and intervention measures can prevent or reduce the impact of childhood disability. Children without early interventions face a diminished future and grow up with severe permanent physical and intellectual disabilities.

The study has revealed that the impact of home based education approach is significant in the provision of education to children with multiple and severe disabilities because in most cases, these children have failed to secure early access to special and/or inclusive schools due to the severity of their disabilities. The home based education is, therefore, seen to have helped improve the quality of life for the children and their parents.

The study has also shown that home based education is one effective strategy and approach for rehabilitation of children with severe and multiple disabilities in the country.

6.3 Conclusion

The study has shown that home based education plays a very significant role in the development of children with severe and multiple disabilities.

6.4 Recommendations

Based on the findings of the study, the following recommendations emerged:

- (i) Due to the positive impact of the HBEP, NGOs like the Zambian Community Based Intervention Association (CBIA) with keen interest in the provision of education to children with severe and multiple disabilities should be encouraged and supported by the Government through the ministries involved i.e. Education, Health and Community Development.
- (ii) There is need to train more Home Based Education teachers by MoE to cater for the ever increasing number of children who have severe and multiple disabilities.
- (iii) MoE should introduce and intensify training for parents who have children with severe and multiple disabilities.
- (iv) The Home Based Education should be recognised as an effective strategy or approach for rehabilitation of children with disabilities, since it has proved that it is fairly easy to use and monitor.

6.5 Implication for Future Research

In order to help children with severe and/or multiple disabilities, there is need to carry out studies in the following areas:

- Early childhood educational provisions for children with severe and/or multiple disabilities.
- Community based rehabilitation strategies that would provide lifelong self-reliant capacities for children with severe and multiple disabilities.

REFERENCES

- Abadzi, H. (2004) 'Efficient Teaching for All: Hidden Insights from learning Research.' *Draft Report*. Washington, D.C: World Bank.
- Albright, Z., Brown, I., Vandeventer, P. and Jorgensen, S. (1998) *Characteristics of Educational Programmes for students with Severe Intellectual Disabilities*. Chicago: National Society for the Study of Education.
- Batshaw, M. and Perret, Y. (2002) *Children with Handicaps: A Medical Primer (6th ed.)*. Baltimore: Brookes.
- Berk, L.E. (2007) *Child Development (7th ed)* New Delhi: Dorling Kindersley Pvt. Ltd.
- Bijou, S.W. (1975) *Development in the Preschool Years: A Functional Analysis*. Oxford: Pergamon.
- Billingsley, F.F and Kelley, B. (1994) 'An Examination of the Acceptability of Instructional Practices for Students with Severe Disabilities', *Journal of the Association for Persons with Severe Disabilities Issue (19)*, 75-83.
- Bishop, E. and Nally, G. (1993) 'An In-Home Crisis Intervention Programme for Children and their Families.' *Hospital and Community Psychiatry*, 44, 182-184 at <http://www.institutefamily.org/>
- Bjorklund, D. F. (2004) *Children's Thinking (4th ed)*. Belmont, CA: Wadsworth.
- Bluma, S.M., Shearer, M.S., Frohman, A.M. and Hillard, I.M. (1976) *Portage Guide to Early Education: Checklist Curriculum and Cared File*. Portage Wisconsin. U.S.A.
- Briggs, A.R.J. and Coleman, M. (2005) *Research Methods in Educational Leadership and Management*. New Delhi: SAGE Publication.
- Briggs, C. (1986) *Learning How to Ask: A Sociolinguistic Appraisal of the Role of the Interview in Social Science Research*. Cambridge: Cambridge University Press.
- Bronfenbrenner, U. (1974) Cited in Frohman *et. al.*, (1983) *The Portage Home Teaching Handbook*. Portage Wisconsin: Cooperative Educational Service Agency.
- Buchanan, M. and Cooney, M. (2000) 'Play at Home, Play in the Classroom, Parent Professional Partnership in Supporting Child Play': *Young Exceptional Children*. Vol. 3. Issue No. 4.

- Cohen, I., and Manion, (1994) *Research Methods in Education* (5th ed). Routledge: London.
- Cohen, L., Manion, L. and Morrison, K. (2000) *Research Methods in Educational Management*. New Delhi; SAGE Publication.
- Coleman, M. and Briggs, A.R.J. (2005) *Research Methods in Educational Leadership and Management*. London: Sage Publishers.
- Coleridge, P. (1996) *Disability, Liberation and Development*. Oxford: Oxfam.
- Community Based Intervention Association (2008) '*Zambia Home Based Education Programme Manual*'.
- Ellis, J.M. and Logan, S. (2001) 'Home Based Parent Mediated Early Education Intervention for Children with or Biologically at Risk of Developmental Disability'. www.kportage.org.UK.
- ElKind, D. (1976) *Child Development and Education*. New York: Oxford University.
- Falvey, M.A. (1989) *Community-Based Curriculum: Instructional Strategies for Students with Severe Disabilities*. Baltimore. Brookes.
- Finnie, R.W. (1974) *Handling the Young Cerebral Palsied Child at Home*. London: Oxford.
- Gagne, R.M. (1973) *Development Readiness*. In Charles, D.C. and Loft, W.R. (eds.). *Readings in Psychological Development through Life*. New York: Holt.
- Giddens, A. (2006) *Sociology*. India: Polity press.
- Ghosh, B.N. (2003) *Scientific Methods and Social Research*. 4-50 Okhla Industry: Sterling Publishers.
- Gottlieb, G. (2003) 'On Making Behavioural Genetics Truly Developmental'. *Human Development*, 46,337-355.
- Grinnel, R. M. (1993) *Social Work Research and Evaluation*. Peacock: Ilions.
- Guralnick, M.J. (2006) *The Developmental Systems Approach to Early Intervention*. Baltimore: Brookes.

- Harris, G. (1998) *The Nurture Assumption: Why Children turn out the way they do*. New York: Free Press.
- Havighurst, R.J. (1972) *Developmental Tasks and Education* (3rd ed). New York: McKay.
- Helander, E. (1993) 'Prejudice and Dignity: An Introduction to Community Based Rehabilitation'. Geneva: UNDP.
- Hurlock, E.B. (1980) *Developmental Psychology: Lifespan Approach* (5th ed). New York: McGraw – Hill.
- Jackson, H. (1988) 'Approaches to Rehabilitation of People with Disabilities': *Journal of Social Development in Africa*, 3(1). Pp. 39-53.
- Kasonde Ng'andu, S. (1989) 'Early Childhood Environments of Children with Severe Mental Handicaps in Rural Areas of Zambia: Challenge for Outreach Services'.
- Kasonde, Ng'andu, S. and Moberg, S. (2001) 'Moving Towards Inclusive Education. A Baseline Study on the special Educational Needs in the North Western and Western Provinces of Zambia Education support programme.' Ministry of Education in Zambia/Ministry for Foreign Affairs of Finland.
- Katwishi, S.C.M. (1995) 'Viability of Developing Early Identification and Intervention Services for young children with Impairments in Zambia'. *Unpublished PhD. Thesis. University of Birmingham, United Kingdom*.
- Kirk, S., Gallagher, J.J., Coleman, M.R. Anastasiow, N. (2009) *Educating Exceptional Children* (20th ed). New York: Houghton Mifflin Harcourt Publishing Company.
- Lacey, P. (1991) *Managing the Classroom Environment* in Tinstone, C. (ed) *Teaching pupils with severe Disabilities*. London: Fulton.
- Lahey, B.B. (2009) *Psychology: An Introduction*. New York: McGraw Hill.
- Lovitt, T.C. (eds.) *Integrating General and Special Education*. New York. Merrill.
- Ministry of Education (1996) *Educating Our Future: National Policy on Education*. Lusaka: MoE.
- Moerk, E.I. (1975) *Verbal Interaction between Children and their Mothers during the Pre-school Years. Developmental Psychology*. New York: Wiley.

- Nabuzoka, D. (1991) 'Community Based Rehabilitation for Disabled Children in Zambia: Experiences of the Kasama District Project'. *International Journal of special Education*, 6(3), 321-340.
- Ncube, J. M. (1999) 'Community based/intervention Programmes'; *Evaluation Report*. Lusaka
- Needleman, R., and Spock, B. (2004) *Dr. Spock's Baby and Childcare* (8th ed). New York: Pocket.
- O'Toole, B.J. (1991) 'Guide to Community Based Rehabilitation Services': *Guides for Special Education No.8*. Paris: UNESCO.
- O'Toole, B., McConkey, R. and Maison, H.G. (1992) *Community Action on Disability*. George Town: Guyana.
- Patton, M.Q. (1990) *Qualitative Evaluation and Research Methods*. (2nd ed.), Newbury Park: Sage
- Piaget, J. (1972) *Psychology and Epistemology*. London: Penguin.
- Piaget, J. (1973) *The Child and Reality*. New York: Viking press.
- Pugach, M.C. and Warger, C.L. (1993) *Curriculum Considerations*. New York: McGrawHill.
- Ramey, S.L. and Ramey, C.T. (1999) *Early Experiences and Early Intervention for Children at risk for Developmental Delay and Mental Retardation and Developmental disabilities* Baltimore, M.D: Brookes.
- Robson, C. (1993) *Real World Research*. Oxford; Blackwell.
- Rogoff, B. (2003) *The Cultural Nature of Human Development*. New York: Oxford University Press.
- Sailor, W. (1989) The Education Social and Vocational Integration of Students with the most Severe Disabilities in Lipsky, D.K. and Garther, A. (eds.), *Beyond Separate Education; Quality Education for All*. Baltimore, M.D: Brookes.
- Sampon, M. A. and Wolenburg, K. (1998) *Portage Project/CESA 5 Portage*. Wisconsin. Web address <http://www.portageproject.org/model.htm>
- Serpell, R. (1993) 'Specialised Centres and Local Home Community: Children with Disabilities need them both'. *International Journal of Special Education*, 1(2).107-127.
- Sidhu, S.S. (2006) *Methodology of Research in Education*. New Delhi: Sterling publishers' private limited.

- Simeonsson, R.J. (1991) 'Early Prevention of Childhood, Disability in Developing Countries'. *International Journal of Rehabilitation Research*. Vol. 14, no.1, pages 1-12 School of Education, University of North Carolina: Chapman and Hall Ltd.
- Skinner, B. F. (1974) *About Behaviourism*. New York: KNOFF.
- Snelson, P. (1990) *Education Development in Northern Rhodesia 1888-1945*. Lusaka; Kenneth Kaunda Foundation.
- Socket, H. (1998) *Practical Professionalism*. New York: Falmer Press.
- Stieler, S. (1994) Children with Physical Disabilities. In Ashman, A.F. and Elkins, J. (eds.). *Educating children with Special Needs* (2nd ed). Sydney: prentice –Hall.
- Tautermannova, M. (1973) *Smiling in Infants: Child Development*. New York: Norton.
- Thomas, M. and Thomas, M.J. (2002) 'A Discussion on Some Controversies in Community Based Rehabilitation'. *Asia Pacific 'Disability Rehabilitation Journal*, **1391**.
- Thomas, R.M. (1997) *An Integrated Theory of Moral Development*. West Port: Greenwood.
- Thomas, R.M. (2000) *Comparing Theories of Child Development* (5th ed). Belmont, CA: Wadsworth.
- Thorburn, M.J., Brown, J.B. and Bell, C. (1979) 'Early Stimulation for Handicapped Children using Community Workers'. A paper presented at the 5th International Congress of the International Association for the scientific study of Mental Deficiency, Israel.
- Vander, Z. and Wilfred, J. (1987) *Human Development* (3rd ed.). New York: Randon House, Inc.
- Ware, J. (1990) The National Curriculum for Pupils with Learning Difficulties. In Daniels, H. and Ware, J. (ed.), *Special Education Needs and the National Curriculum*. London: Kogan Page-University of London.
- White, B.L. (1976) 'First Two Years of Life Found to be Critical'. APA Monitor pp 4-7.
- Wolffers, L. and Finkelflugel, H. (1993) Primary Health Care and Community Based Rehabilitation: Concepts for Empowerment in Finkelflugel, H. (ed.). *The Handicapped Community. The Relationship between Primary Health care and Community Based Rehabilitation* (7th ed). Amsterdam: University Press.
- Vanden den Daele, L.D. (1974) 'Prenatal Influences and Twin Differences'. *Journal of Genetic Psychology*. Pp 41-60, 124.

Vygotsky, L.S. (1987) Thinking and Speech, in R.W. Rieber, Carton, A.S (eds.). The Collected Works of Vygotsky, L.S: **Vol.1.Problems of General Psychology**. New York: Plenum.

Young, J.F. (2003) 'Predicting Intra-individual Self-Concept Trajectories during Adolescence'. *Journal of Adolescence*, 26,589-603.

ZAFOD (2003) 'National Plan of Action (NPA) on Disability in Zambia' (August 2003-July 2008). Zambia Federation of the Disabled. Lusaka: Zambia.

Zanjoc, R.B. (1975) Birth Order and Intelligence: Dumber by the Dozen. *Psychology Today*.

Zambia Federation of the Disabled (June 2000) **Disability Herald**, Issue No.006. Bi-annual Publication.

APPENDICES

Appendix: I

UNIVERSITY OF ZAMBIA

DIRECTORATE OF RESEARCH AND POST GRADUATE STUDIES

TEACHERS' QUESTIONNAIRE

Dear respondent

This questionnaire is aimed at investigating Home Based Education teacher's views on the role of Home Based Education programme (HBEP) in the development of the severely disabled children in the community. You are therefore requested to be very objective when filling in the questionnaire.

All information you give is confidential and will be used for academic purposes only. There is no right or wrong response.

1. Name of zone

Sex: Female Male

2. Age: 20 – 25 years 26 – 30years 31 – 35years 36 – 40years
Above 40years

3. Academic Qualification

Form 3 Form 4 Grade 12 G.C.E

4. Professional Qualification

Primary Teacher's Certificate

Certificate Special Education

Secondary Diploma

Special Education Diploma

Bachelor Degree Special in Education

Master's Degree Special Education

Master's Degree in Education

5. Length of service as a home based teacher

1-4 years 5 – 10years 11 – 15years 16 – 20years

6. What is the age range of your child enrolled on the programme?

0 -1 year 2 – 4 years 5 – 6 years 7 – 10 years

7. Is there any training that you receive before you embark on the HBEP? Yes No

8. If yes, in No. 9 describe the type of training offered

.....
.....

9. Do you think the training offered is sufficient enough?

Yes No don't know

10. To what extent are the mentioned skills offered Greater extent Some extent
Lesser extent

11. Is there any improvement observed in the children on the HBEP

Yes No

12. What type of activities do you leave with the parents/caregivers for the child?

.....
.....

13. Are children on the HBEP assessed before being enrolled? Yes No

14. Do you think the HBEP is beneficial to the development of the severely disabled child

Very beneficial

Beneficial

Less beneficial

Not beneficial

Appendix II

INTERVIEW GUIDE

COMMUNITY BASED INTERVENTION ASSOCIATION (CBIA)

ADMINISTRATORS

1. How long have you served the CBIA?
2. What are the aims and objectives of the HBEP?
3. How do you find children to enrol on the programme?
4. What type of children do you enrol on the programme and at what age?
5. Is there any specific reason as to why you specifically enrol at the above mentioned age?
6. How are the physiotherapists used in the Home Based Education programme?
7. Do you offer any type of training for home based teachers and parents?
8. If you do, what type of knowledge/skills do you impart to the teachers and parents?
9. What type of skills are the children imparted with?
10. How do you assess the progress of the children on the programme?
11. How are the parents involved in the programme?
12. How would you describe the attitude of parents/teachers towards the programme?
13. How has this programme benefited the severely disabled children and their parents?
14. Do you receive any support from liaison government ministries e.g. education and health?

Thank you for your time and attention.

Appendix III

FOCUS GROUP DISCUSSION GUIDE

PARENTS WITH CHILDREN UNDER THE HOME BASED EDUCATION PROGRAMME

1. How did you realise that your child had a problem/disability?
2. What type of problems does your child present with?
3. At what age did the child enrol on the programme?
4. Have you seen any progress in the child from the time you enrolled the child?
5. Is there any training that you have under gone before starting to help the child?
6. If yes, what type of skills do you receive from the training?
7. What role do you play in the education of your child?
8. What type of work/exercises does the teacher leave with you for the child?
9. Describe the challenges you face in the process of helping the child?
10. How is the programme benefiting you and the child?
11. Is there anything that needs to be done to easy the challenges in No. 9?

The discussion has come to an end thank you for your time and attention.