

**THE IMPACT OF EPILEPSY ON ACADEMIC PERFORMANCE
OF EPILEPTIC LEARNERS IN WESTLANDS DIVISION
NAIROBI KENYA**

**BY:
EUNICE KOINI
BED/10811/61/DF**



**RESEARCH REPORT SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE AWARD OF DEGREE IN
SPECIAL NEEDS EDUCATION OF KAMPALA
INTERNATIONAL UNIVERSITY.**

AUGUST 2008

DECLARATION

I Eunice Koini admission number BED/DL/10811/61/DF hereby declare that, this special study paper is my own original work. It is not a duplication of similarity published work of any scholar for academic purpose nor has it been submitted to any other institution of higher learning for the award of a certificate, diploma or degree in special needs education. I also declare that all materials cited in this paper which are not my own, have been duly acknowledged.

Signature.....

Date:13/8/08.....

DEDICATION

Most sincere thanks to my beloved husband Ben for his financial and moral support to me, for my little boys for the understanding during my absence at home, for my colleagues at Highridge Primary School for the kindness and support towards achieving this noble cause.

They all continue to inspire me.

APPROVAL

This is to certify that this research paper has been submitted for examinations with my approval as a research supervisor.

Signature Laaki 13-08-08

MR.LAAKI SAMSON

Supervisor

ACKNOWLEDGEMENT

I wish to thank KIU lectures especially the special needs lectures, for their handwork and suggestions, encouragement and patience offered throughout the compilation of the report.

I am grateful for my classmate and colleagues for the encouragement. Special thanks to my colleagues and dear friend Mrs. Mwololo for her moral and physical support.

I am grateful for Highridge Teachers College Community for allowing me to the relevant details, material and the use of their library for the compilation of this report.

I also wish to thank the Head teacher, Highridge College Community for allowing me to the relevant details, material and the use of their library for the complication of this report.

I also wish to thank the head teacher, Highridge Primary School for allowing me to carry my study in that school. All other support not mentioned above is also highly appreciated.

Above all I that the most highest God for his unconditional provision and for making everything possible.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
APPROVAL	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES.....	ix
LIST OF FIGURES.....	x
LIST OF FIGURES.....	x
ABSTRACT.....	xi
 CHAPTER ONE	 1
INTRODUCTION	1
1.0 BACKGROUND INFORMATION	1
1.1 STATEMENT OF THE PROBLEM.....	1
1.2 PURPOSE OF THE STUDY.....	2
1.3 OBJECTIVES OF THE STUDY.....	2
1.4 SIGNIFICANCE OF THE STUDY	2
1. 4.1 The epileptic child	3
1.4.2 To the parent	3
1.4.3 To the teacher	4
1.4.4 To the community	4
1.5 SCOPE OF THE STUDY	4
1.6 OPERATIONAL DEFINATION	5
 CHAPTER TWO	 6
REVIEW OF RELATED LITERATURE.....	6
2.1 HISTORY OF SPECIAL EDUCATION IN KENYA	6
2.2 DEFINATION OF EPILEPSY.....	7
2.2.1 What is Epilepsy?	7

2.3 TRADITIONAL BELIEFS ABOUT EPILEPSY IN KENYA	8
2.4 CAUSES OF EPILEPSY	9
2.5 CONTRIBUTORY FACTORS	10
2.5.1 Genetic factors	10
2.5.2 Effects of Brain Maturation	10
2.5.3 Other precipitating factors	10
2.6 CONDITIONS CO-EXISTING WITH EPILEPSY	11
2.6.1 Cerebral Palsy	11
2.6.2 Mental retardation	12
2.6.3 Psychiatric problems	12
2.6.4 Behavior disorders	12
2.7 ACADEMIC IMPLICATION	13
2.8 PREVENTION	14
2.9 RESEARCH QUESTIONS	14
 CHAPTER THREE	 16
METHODS OF INVESTIGATION	16
3.0 INTRODUCTION	16
3.1 RESEARCH DESIGN AND METHODOLOGY	16
3.2 DESIGN OF THE STUDY	16
3.3 TARGET POPULATION	16
3.4 SAMPLING DESIGN PROCEDURE	17
3.5 METHODS USED TO COLLECT DATA	17
3.6 LIMITATION OF THE STUDY	17
3.6.1 Lack of co-operation	17
3.6.2 Resources	18
3.6.3 Time factor	18
3.6.4 Misconception of genuinity of the study	18
3.7 DELIMITATION	18

CHAPTER FOUR	19
INTRODUCTION	19
4.0 PRESENTATIONS AND ANALYSIS OF DATA.....	19
4.1 PRESENTATION OF DATA	19
 CHAPTER FIVE	 32
SUMMARY, DISCUSSION AND RECOMMENDATION	32
5.0 INTRODUCTION	32
5.1 KNOWLEDGE AND UNDERSTANDING OF EPILEPSY.....	32
5.2 ATTITUDES TOWARDS LEARNERS WITH EPILEPSY	33
5.3 THE IMPLICATION OF EPILEPSY IN LEARNING.....	33
5.4TREATMENT AND MEDICATION OF EPILEPSY	34
5.5 TEACHERS EXPECTATIONS TOWARDS EPILEPTIC CHILDREN	34
5.6RECOMMENDATION.....	34
5.7SUMMARY/CONCLUSION.....	35
 APPENDICES	 37

LIST OF TABLES

Table 1: Institutions where data was gathered.....	19
--	----

LIST OF FIGURES

Figure 1: Gender – Female and Male	20
Figure 2: Background information about the teachers; Respondent's personal information	20
Figure 3: Highest qualification	21
Figure 4: Special education	21
Figure 5: Class teaching.....	22
Figure 6: Awareness	22
Figure 7: Contact with an epileptic person	23
Figure 8: Causes of Epilepsy	24
Figure 9: Teachers attitude towards teaching epileptic learners.....	24
Figure 10: Demands of teaching an epileptic child	25
Figure 11: Demands of teaching epileptic children.....	25
Figure 12: Representation of epileptic children in class.....	26
Figure 13: Performance of epileptic children	27
Figure 14: Response to seizures in epileptic children	28
Figure 15: Attitude of other children in class	28
Figure 16: Treatment of epilepsy	29
Figure 17: Prevention of epilepsy	30
Figure 18: Peoples attitude towards epilepsy medication.....	30
Figure 19: Support personnel.....	31

ABSTRACT

The researcher was investigating the impact of Epilepsy on academic performance epileptic learners. The design used was descriptive which was suitable because of its addressed major objectives and major objectives and research questions proposed in the study. The researcher used teachers from six schools in Westlands which were: Highridge primary, North Highridge, Oshwal Jahy special school, Westlands Primary school, hospital Hill and Aga Khan special unit. The data collection instruments used were questionnaires. Based on the entire findings of the study, the researcher recommended that seminars and short courses for regular teachers should be organized. Public awareness and campaign in the region through chief's barazas, workshops, church services by the special educators. The curriculum should be adjusted and adapted to meet the learner's individual needs.

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND INFORMATION

The word “epilepsy” is a Greek word meaning “to take hold of” or “to seize”. This word was used because the ancient Greeks believed that evil spirits seized people and made them fall to the ground. Long ago as 400BC, the people who knew about medicine argued that epilepsy was a disorder of the brain and nothing to do with possession by devils. But because there was no cure and people were superstitious, families with epilepsy persons were forced to keep the condition a secret. This attitude is beginning to change, as the causes of epilepsy are better understood and treatment improved.

A great deal of medical research has been carried out on epilepsy and continues to be done. It is clear that the condition, which usually starts in childhood, should be controlled as quickly as possible in order to prevent later problems from developing.

Modern research on child development, psychology and education has made it clear that parents, families, schools and the immediate society all have a very important role to play in helping the child with epilepsy to lead a normal life as possible. The emphasis is put on what an individual with epilepsy can do rather than on what he/she cannot do.

1.1 STATEMENT OF THE PROBLEM

The first problem that faces a person when they are told that they have Epilepsy is an emotional one. The word Epilepsy, whether in Europe, Asia or Africa, brings us ideas, which are confused by ignorance and ancient superstitions and because of this ignorance, and ancient in our thoughts, we find it frightening to think about Epilepsy.

In nearly all societies Epilepsy is still taken to be something bad and to be feared. It is often not understood and it is therefore rarely discussed.

Epilepsy produces such complex and frightening emotion that is very important that these feelings are discussed and acknowledged. If a person with Epilepsy is to be helped to lead a normal life, everyone in the family must take a realistic attitude towards the problem.

Very often Epilepsy is not taken about at all, even within the family group because it is not accepted.

1.2 PURPOSE OF THE STUDY

The study is to investigate the impact of epilepsy on academic performance of epileptic learners in regular schools. This is carried out with the following objectives: -

1. To be able to investigate the problems which epilepsy can bring.
2. To be able to investigate the social implication which are often more difficult to handle.

1.3 OBJECTIVES OF THE STUDY

The main objectives are carrying out a research for children with epilepsy and to be able to: -

1. Find out teachers knowledge about epilepsy.
2. Find out teachers attitude towards learners with epilepsy.
3. Find out the implication of epilepsy in academics.
4. Find out possible treatment and medication of epilepsy.
5. Find out teachers expectations towards epileptic children.

1.4 SIGNIFICANCE OF THE STUDY

The study on support given to children with Epilepsy is very important especially in carrying out various roles that will assist the child with Epilepsy, parents, the teachers

and the community as well, who play a big role in ensuring safety, comfort and daily routine activities.

1. 4.1 The epileptic child

The child should be taught ways of coping with Epilepsy and since it's a medical condition, which causes a sudden malfunction in the brain, it is very important for the child to visit a doctor to be explained about the medicine. The child should also keep count of appointments and more so if the parents are illiterate and ignorant.

The study will enable the child to interact with others in their learning and social environment without discrimination.

1.4.2 To the parent

The study will help increase knowledge on how to handle and cope with the health problems. They will know that if it is important to comfort and talk to the child if he/she is worried or confused after the seizures or convulsions.

The parent will be able to know that some children with epilepsy do grow out of the condition and can still lead a normal life like any other ordinary human being whether intellectual or social life.

They should know the probability and risk of having other children since the disease can also be inherited or degenerative central nervous system.

The parent should be aware that discipline and family life must continue as normal, if the child goes to school then talk to the head teacher and teachers and make sure they know what to do if the child has seizures.

Protect the child against the danger of a sudden seizure, which includes open fires, swimming or bathing alone, riding a bicycle or climbing trees and ladders.

1.4.3 To the teacher

Teachers working with children with Epilepsy can assist them by referring them to hospital for prescriptions of drugs, talking to other learners, teachers and the community to understand that epilepsy is not contagious. Train all learners to team up to remove any objects that could cause injuries to the sick one. Training the learners to understand the signs of onset of the seizures so as be assisted to avoid injuries. Counseling other teachers and classmates not to make fun of Epileptic learners or putting too much attention on them.

The teacher should also understand the medical history of the learner and reminding him/her of medical appointments and when to take drugs during schools hours. Monitoring the learners behavior and identifying and developing specific learning difficulties, provide guidance and counseling to the learners.

1.4.4 To the community

Every society has its own ideas about a person with Epilepsy, for centuries people with Epilepsy have been burdened with false beliefs and labels. It is therefore important to start by removing these false ideas, let the community know that a person with Epilepsy is not mentally ill, is not a criminal, is not possessed by the devils and cannot give Epilepsy to anyone else.

1.5 SCOPE OF THE STUDY

To investigate the impact of epilepsy on academic performance in Westland division is one of the eight divisions in Nairobi district in Kenya. It is situated in the western part of the city, 2 kilometers from the city centre.

Most schools in westlands were started by the Europeans and Asians community in the 1950's. They were meant for the Europeans and Asians children who lived within the locality. However the schools are now under the city council with a few still in partnership with the Asian organization.

Westlands division has 25 schools. The schools are clustered into two zones that is parklands zone and Kilimani zone. The target population is from parklands zone which has twelve schools. Out of the twelve schools the researcher has narrowed to six neighbouring schools, two schools which are for special learners while four are integrated

1.6 OPERATIONAL DEFINATION

1. EPILEPSY

This is a condition that occurs in a person due to brain disorders.

2. INTERACTION

A manual attention towards each other, or same objects or a third person.

3. INVESTIGATE

To find out.

4. SNE

Special Needs Education

5. EARS

Educational Assessment and Research Services.

6. CONVULSION

A seizure during which a person's body shakes.

7. SEIZURE

Fit, attack or convulsion, a period of abnormal physical reaction or behavior.

8. SIDE-EFFECTS

The undesired effects of a drug, which come in addition to the undesired or main effect.

9. GRANDMAL

A seizure starting with stiffening of the body and followed by rhythmic contractions.

10. DEGENERATIVE CENTRAL NERVOUS SYSTEM DISORDER.

A disease where the tissue of the central nervous system deteriorates.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 INTRODUCTION

2.1 HISTORY OF SPECIAL EDUCATION IN KENYA

Special needs education in Kenya started during the Second World War to rehabilitate army officers who returned from Second World War in 1945 with injuries. Services were developed to rehabilitate those with physical, visual impairments and brain damage. This later included people with other handicaps. Churches like Salvation Army and Lutheran church were managing education. These churches were involved right from the start with activities of praying, counseling and rehabilitating war victims.

Voluntary and non-governmental organizations such as Rotary Club, Kenya Red Cross and other individuals also played a leading role at the start of special need education. As churches played their roles, they provided medical care, food, recreation and other facilities within the rehabilitation homes. People who came from the war with serious injuries could not fit into the society so they lived in set up homes. It was out of these homes that earliest special schools grew to cater for the following broad category of learners: -

1. Visually impaired
2. Physically handicapped
3. Mentally handicapped
4. Hearing impaired

As the churches and other non-governmental organizations continued to support education for children with special needs, societies and association for and of persons with disabilities were formed to supplement government efforts in the provision of devices in the area of: -

1. Education
2. Social welfare

3. Health care

Education included – Administration e.g. the Ministry of Education, Science and Technology, which was established in 1975. The Kenya Institute of Education (KIE), Educational Assessment and Resources services (EARS) which was started in 1984, Kenya Institute of Special Education (KISE) which was started in 1986.

Social welfare included, societies such as: -

1. Kenya Society for Deaf Children (KSDC) started 1958.
2. Kenya Society for the Blind (KSB) started 1956.
3. Kenya Society for the Mentally Handicapped (KSMH) started 1960.
4. Association for the Physically Disabled Kenya (APDK) started 1958.
5. The Kenya Association for the Welfare of Epileptic (KAWE) started 1987.

2.2 DEFINATION OF EPILEPSY

2.2.1 What is Epilepsy?

Epilepsy is a brain disorder that causes people to have recurring seizures. The seizures happen when clusters of nerve cells or neurons in the brain send out the wrong signals. People may have strange sensations and emotions or behave strangely. They may have violent muscles spasms or lose consciousness. One seizure does not necessarily mean that a person suffers from Epilepsy. For instance, a child who has continuous vomiting and diarrhoea may lose so much water and salt that seizure or convulsion develops. The treatment is to give water and salt, not anti-convulsions drugs as in the case of Epileptic.

Epilepsy has many possible causes including illness, brain injury and abnormal brain development. In many cases the cause is unknown. Doctors use brain scans and other tests to diagnose epilepsy. It is important to start treatment right away. There is no cure for epilepsy but medicines can control seizures for most people. When medicines are not working well, surgery or implanted devices such as vagus nerve stimulations may help. Special diets can help some children with epilepsy.

Epilepsy is a condition of the nervous system that affects 2.5 million Americans. More than 180,000 people are diagnosed with epilepsy every year.

It can be scary watching someone have an epileptic seizure. The person may lose consciousness or seem unaware of what's going on making involuntary motions (movements the person has no control over, such as jerking or thrashing one or more parts of the body) or experience unusual feelings or sensations such as unexplained fear. After a seizure he or she may feel tired, weak or confused.

There are different types of seizures for example: -

1. Petit mal or Black Spells – “absence”. A child suddenly stops what he is doing and passes a brief moment with an empty stare.
2. Psychomotor seizure- consists of an empty stare, strange sounds, and strange movements of face, tongue or mouth or complex movements such as picking at clothes.
3. Grand mal or Generalization or “big” seizure – loss of consciousness, often after a vague warning feeling or cry. Uncontrolled twisting or violent movement. Eyes roll back may be tongue biting or loss of urine and bowel control. Followed by confusion and sleep.

2.3 TRADITIONAL BELIEFS ABOUT EPILEPSY IN KENYA.

In Swahili Epilepsy is called “kifafa”. In the vernacular language seizures are given more specific names. A grandmal seizure, when the whole body convulses will have a different name to the seizures where only half the body moves. Some vernacular terms translates as “the little death”, “devil’s disease”, or “head disease”.

A person with Epilepsy was considered to have been cursed, perhaps because of a quarrel amongst the grandparents or as punishment for some ancestral error or possibly a bewitching because of a grudge against the family or a punishment from the gods.

Epilepsy was greatly feared because it was always viewed as a supernatural happening and naturally everyone reacted strongly against the epileptic sufferer and his family. The deep-rooted fear based on old believed and superstition probably still exists today in many areas of Kenya.

Many different attitudes developed concerning Epileptic seizures because of the different beliefs. It was also considered that Epilepsy was contagious, when a person having a seizure and that, touching the urine or faeces that was excreted at such a time could also give a person Epilepsy, wind passed during a seizure “spoilt the air” and could pass on the condition, and sharing the same utensils at meal time was also thought to be contagious. It was also believed that Epilepsy was inherited.

In view of these beliefs it was easy to see why a person with Epilepsy was not very welcomed. His family was also considered unfortunate and unlucky and social life was restricted for them too.

2.4 CAUSES OF EPILEPSY

There are many different causes of Epilepsy: -

1. Lack of oxygen due to a lead and difficult birth can lead to brain damage, which can result in epilepsy.
2. A head injury.
3. Diseases such as cerebral malaria, meningitis and encephalitis lead to epilepsy.
4. Diseases during pregnancy can lead to brain damage, which can result in epilepsy.
5. A brain tumor.
6. Inherited or degenerative central nervous system disorders.
7. Strokes.
8. Idiopathic epilepsy.

2.5 CONTRIBUTORY FACTORS

2.5.1 Genetic factors

In many, if not all Epilepsies there is a genetic factor, which might determine the threshold for seizures. Even in Symptomatic Epilepsy this factor plays a role, e.g. many people have had a head injury but only some develop Epileptic seizures afterwards.

If one of the parents had idiopathic, the risk of the having a child with Epilepsy is 4% - 6%, while in the general population the risk is 0.3% – 0.5% (Europe), if both parents have idiopathic Epilepsy, the risk raises to 12% - 20%.

In parents with Symptomatic Epilepsy there is still a slight increase in the risk up to 20% in Europe.

2.5.2 Effects of Brain Maturation

The resistance of seizures also depends on the maturation of the brain; the resistance in the first year of life (except during the newborn period) is very high, and therefore only a severe injury such as severe damage since birth, meningitis or tuberoses sclerosis will produce seizures.

Between the age of one and four the resistance to seizures is very low, a simple febrile disease may precipitate seizures. After the age of four the resistance is again high and seizures are mainly seen in already- brain –damaged children. This resistance diminishes again from about the seventh year when the Idiopathic Epilepsies tend to appear. The resistance is at its lowest around the time of the resistance is at its lowest around the time of the prepubertal growth (Brown, 1982).

2.5.3 Other precipitating factors

Apart from the condition and maturation of the brain and the genetic threshold, other factors may trigger a seizure; these factors may be different for each individual patient.



Some patients learn which factors are important for them, and so they can modify their behavior or activities to try to avoid seizures.

The most common factors are: -

1. Flashing lights (resulting in Reflex Epilepsy).
2. Hyperventilation
3. Lower alertness; sleep itself and lack of enough sleep.
4. Emotion.
5. Physical stress.
6. Special smell, sound or sensation of touch.
7. Alcohol.
8. Hormonal change.
9. Acute illness (viral malaria)
10. Over hydration.

2.6 CONDITIONS CO-EXISTING WITH EPILEPSY

Sometimes the insult to the brain is so severe (e.g. in birth trauma) that in addition to the Epilepsy there may be other impairments e.g. Cerebral Palsy and mental retardation, children with such multiple handicaps make up 10% of the patients with Epilepsy.

2.6.1 Cerebral Palsy

In Europe the incidence of cerebral palsy is two per 1000 live births. The condition is classified into the following syndromes: -

1. Spastic (hemiplegic, tetraplegic and diplegic).
2. Ataxic (diplegic and congenital).
3. Dyskinetic (choreo-athetotic and dystonic).

Epilepsy is most common in the spastic and rare in the ataxic and dyskinetic syndromes.

2.6.2 Mental retardation

Epilepsy is common in mentally retarded children, the proportion rising as the degree or retardation increases from 6% - 30% (Corbett, 1985).

The occurrence of Epilepsy varies in the different syndromes associated with mental retardation. It is very common in children with tuberose sclerosis, common in those with spastic tetra – and hemiplegia, and not so common in children with Down syndrome.

In the kibwezi Survey (AMREF 1990) 1,674 children between 0 and 15 years were screened for any form of disability. Mental retardation was found in 48 children (2.8%) and Epilepsy in 17 children (1.02%), 10 children had both mental retardation and Epilepsy. In this survey, 13.7% of the moderately retarded and 44% of the severely retarded had Epilepsy of the 17 children with Epilepsy 10 (58.8%) were mentally retarded.

2.6.3 Psychiatric problems

Epilepsy is not a mental disease; although a small number of patients will develop psychiatric problems.

This is more likely when there is organic brain damage, an early age of onset a chronic form of Epilepsy, special location (e.g. temporal lobe Epilepsy) or difficult adjustment to social surroundings.

2.6.4 Behavior disorders

Brain lesion) from minimal brain damage to more severe damage) can also result in behavior problems such as hyperactivity irritability, lack of concentration and aggression. Behavior problem can also be a side effect of the medication.

Children with seizures disorder have emotional and behavioral problems more often than most children (Freeman, Jacob, Vining and Robin, 1884, Hoare, 1984).

One must not however conclude that seizure disorder causes emotional and behavioral problems directly. The stress of having to deal with seizures, medications, stigma as well as adverse environmental conditions is more likely to cause these problems.

2.7 ACADEMIC IMPLICATION

About half of all children with seizure disorders have average or higher intelligence. Among those without mental retardation however, one may expect to find a higher than usual incidence of learning disabilities (Batshaw and Perret, 1986). Although many children who have seizure disorder have other disabilities some do not. Consequently, both general and special education teachers may be expected to encounter children who have seizures. Besides obtaining medical advice regarding management of the child's particular seizure disorder, teachers should know first aid for Epileptic seizure (West Brook, Silver, Coupey and Shinnar, 1991).

Some children who do not have mental retardation but have seizures exhibit learning and behavior problems (Huberty, Austin, Risinger and Menelis, 1992).

Learning and behavior problems may result from damage to the brain that causes other disabilities as well. The problems may also be the side effects of anticonvulsant medication or the result of mismanagement by parents or teachers. Teachers must interfere with the child's attention or the continuity of education. Brief seizures may require the teacher to repeat instructions or allow the child extra time to respond. Frequent major convulsions may prevent even a bright child from achieving a usual rate.

Although these children may have normal intelligence, they are often unable to attend normal classes in a normal school because of their restlessness and lack of concentration. Some causes of these learning disabilities could be: -

1. Presence of actual seizures.
2. Presence of sub clinical epileptic activity.
3. Structural brain abnormality.

4. Unfavorable environmental factors at school and at home causing emotional problems which might be the most important factors causing academic and social under-achievement.

2.8 PREVENTION

In a number of patients symptomatic Epilepsy could have been prevented. From our knowledge of the main causes of Epilepsy in Kenya was known that the following preventive measures should be considered.

1. Provision of waiting areas for pregnant women, near hospitals for timely intervention. (Caesarian section, vacuum delivery etc) at the time of delivery to save the mother and prevent life long disabilities from birth, asphyxia or trauma in the new born child.
2. Early diagnosis and early adequate treatment of bacterial meningitis.
3. Adequate malaria treatment in areas where chloroquine resistance had developed. Primary health workers should be informed about the changing resistance pattern.
4. Prevention of malaria attacks (mosquito nets etc).
5. Measles vaccination.
6. Prevention of road traffic and other trauma.
7. Improvement in treatment and management of other conditions such as metabolic disturbance electrolyte imbalance following diarrhoea and vomiting.
8. Effective and early treatment of seizures and status epileptics so that further brain damage is prevented.
9. Improvement in treatment and management of prolonged febrile convulsions.
10. Genetic counseling where a hereditary disease is diagnosed.

2.9 RESEARCH QUESTIONS

The study answered some questions, giving comfort and hope to children with Epilepsy and those who surround and care for them.

1. Did teachers have any knowledge about Epilepsy?
2. What was the attitude of teachers towards children with Epilepsy?
3. What were the implications of Epilepsy in academics?

4. Is there treatment and medication offered to Epileptic children?

What are teachers' expectations towards Epileptic children?

CHAPTER THREE

METHODS OF INVESTIGATION

3.0 INTRODUCTION

3.1 RESEARCH DESIGN AND METHODOLOGY

3.2 DESIGN OF THE STUDY

This will entail methodology used in gathering data for investigating the impact of epilepsy on academic performance of epileptic learners in Westlands division Nairobi, Kenya. The design to be used is descriptive which is suitable because of its addressed major objectives and research questions proposed in the study.

3.3 TARGET POPULATION

The researcher used teachers from:

- i. Highridge primary school.
- ii. North Highridge primary school.
- iii. Oshwal Jayh special school
- iv. Westlands primary school
- v. Hospital Hill primary school
- vi. Aga Khan special unit

Questionnaires were meant to deal with two specific areas, these are, questionnaires for teachers. The questionnaires for teachers covered specifically the following areas:

- i. Academic achievement of the Epileptic children in regular schools.
- ii. Facilities available for the Epileptic children.
- iii. Attitude of the community/society towards the Epileptic children.
- iv. Teachers teaching experience.
- v. Teachers' opinion and recommendation.
- vi. Availability of medical service.
- vii. Availability of trained personnel for the Epileptic in the province.

3.4 SAMPLING DESIGN PROCEDURE.

Sampling is a procedure by which some elements of the population are selected/representatives in the total population. The main aim of a sample designation is to make samples design observations and make conclusions regarding the entire population. Due to financial and social constraints the study results to obtain information about part of the population.

The researcher got a sample of 16 people in the field. They are teachers from regular schools. This is done through random sampling, taking into consideration various types of statutes of the population.

3.5 METHODS USED TO COLLECT DATA.

The type of data collected is mainly primary data. The data collection instruments were: -

Questionnaires

This is a set of questions that is drawn up to meet the objectives of the study. The key facts in the construction of questionnaire in relevance of the questions to the goals of the study and individual respondent its important that care should be taken, to decide on how answers should be analyzed before including an item in the questionnaires. The researcher has used questionnaires method because of the time factor as in the case of interview.

3.6 LIMITATION OF THE STUDY

3.6.1 Lack of co-operation

The respondents are not willing to co-operate, especially on when to hand over the questionnaires while others thought that I amwasting their time.

3.6.2 Resources

Lack of materials needed in the research due to finance to travel here and there.

3.6.3 Time factor

Responsibilities in the family and at my working station hindered me from beating the deadlines. There is a lot of work to be done in schools due to free education and transfers of teachers that makes teachers left to re-scheme Distance learning Assignment was another factor.

3.6.4 Misconception of genuinity of the study

Lack of correct information got from the respondent who for instance answer questions for the please sake of it.

3.7 DELIMITATION

The study is done at Highridge and North Highridge primary schools. It is an advantage being a teacher at Highridge; there is an opportunity to follow up the study and to get information.

CHAPTER FOUR

INTRODUCTION

4.0 PRESENTATIONS AND ANALYSIS OF DATA

The major purpose of this is to investigate the impact of epilepsy on academic performance of epileptic learners in westlands division. The study carried the following themes.

1. Knowledge and understanding of Epilepsy.
2. Attitude towards learners with Epilepsy.
3. The impact of Epilepsy in learning.
4. Treatment and medication of Epilepsy.

4.1 PRESENTATION OF DATA

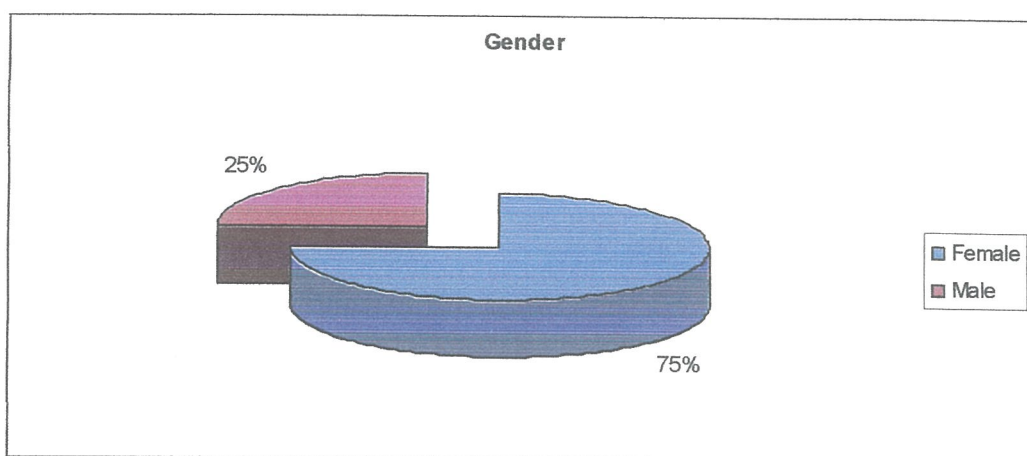
In this chapter the researcher analyzed the data questions with similarities taken, combined and tabulated with a brief explanation on each table.

Table 1: Institutions where data was gathered.

Name of institution	Given questionnaires	Returned questionnaires	Percentage
Highridge primary school	8	8	50%
North highridge primary school	8	8	50%
TOTAL	16	16	100%

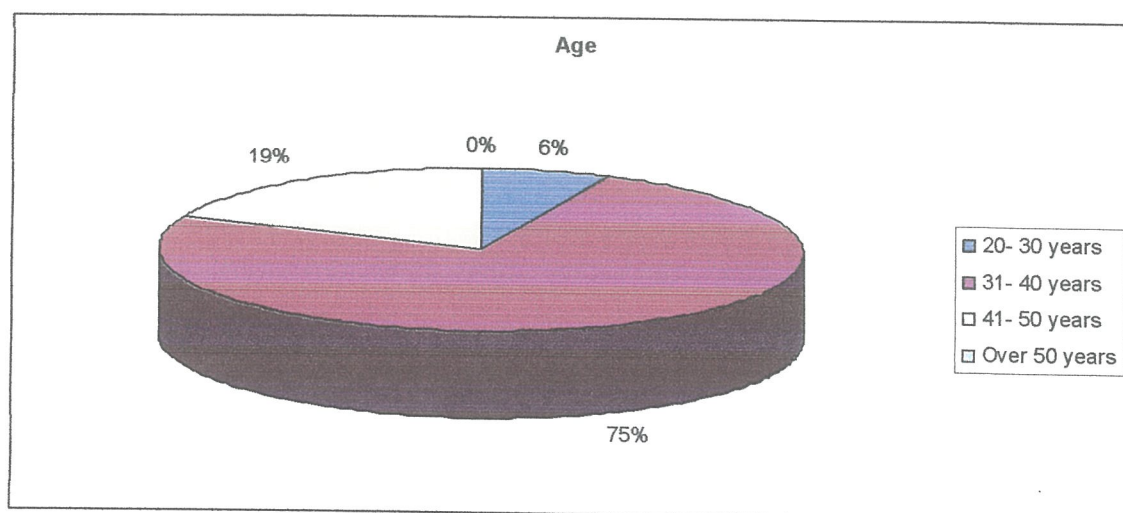
From Highridge School 50% respondents managed to return the questionnaires and so is North Highridge, which showed that 50% of the questionnaires were returned.

Figure 1: Gender – Female and Male



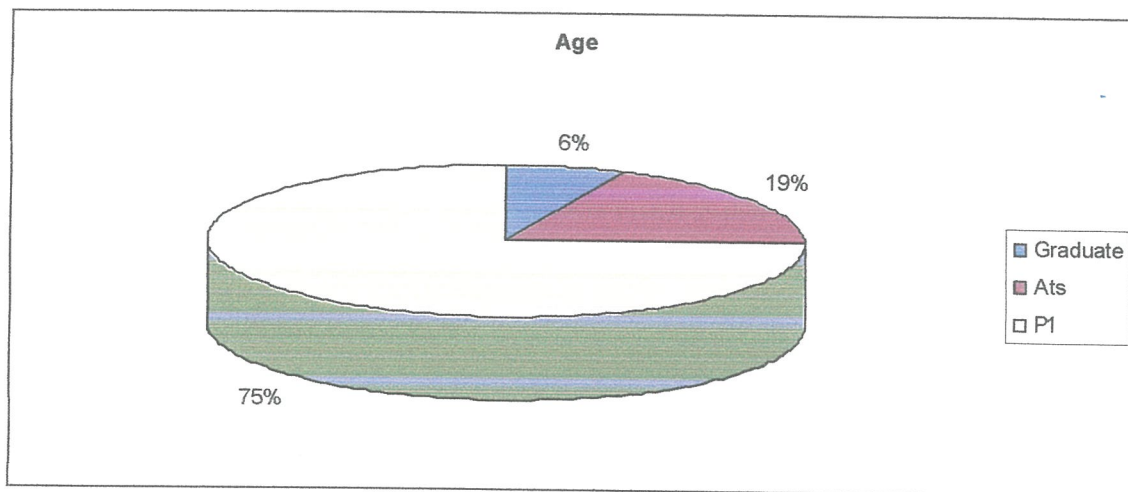
The figure shows that 75% of the respondents are females, this could be that majority of them have come to join their husbands in town, whereas the male teachers are either seniors or deputies.

Figure 2: Background information about the teachers; Respondent's personal information



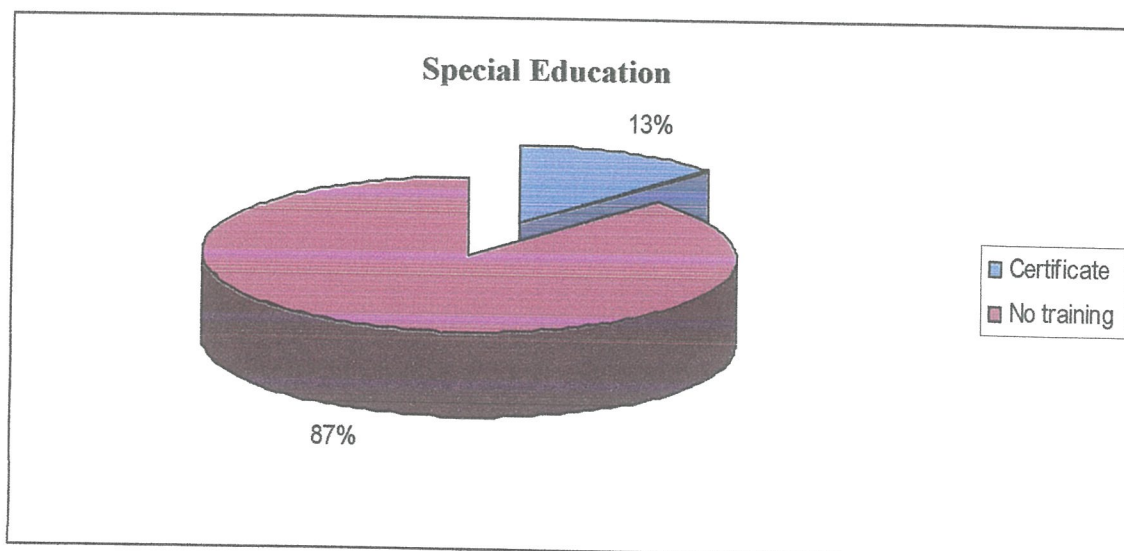
75% of the respondents are between the ages 31 – 40, followed by 19% between 41 – 50 years, the lowest percentage was the age between 20 – 30years with 6%.

Figure 3: Highest qualification



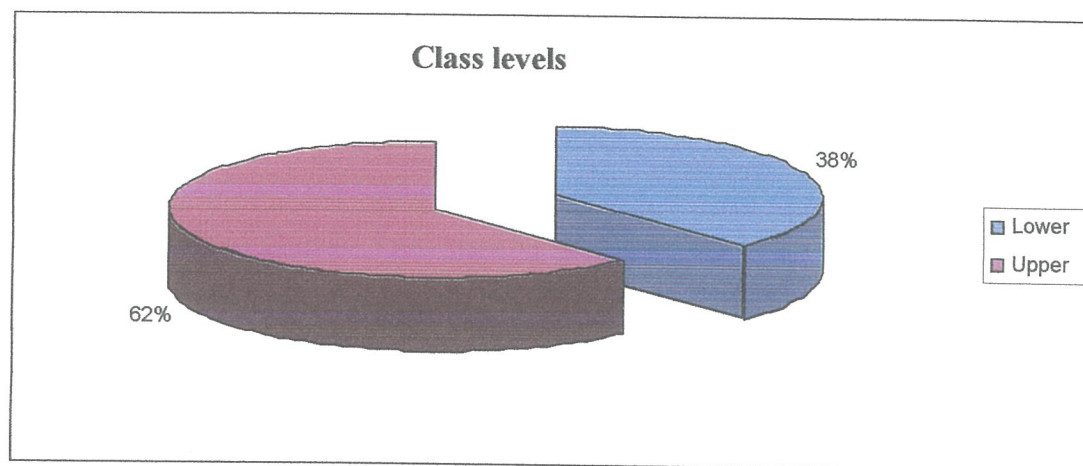
The above figure shows that 75% of the teachers are P1's while 19% are Ats and the least been graduate with 6%.

Figure 4: Special education



From the above figure it appears that 87% of the teachers have absolutely no training in special education while 13% of the respondents (teachers) have certificates in special education.

Figure 5: Class teaching

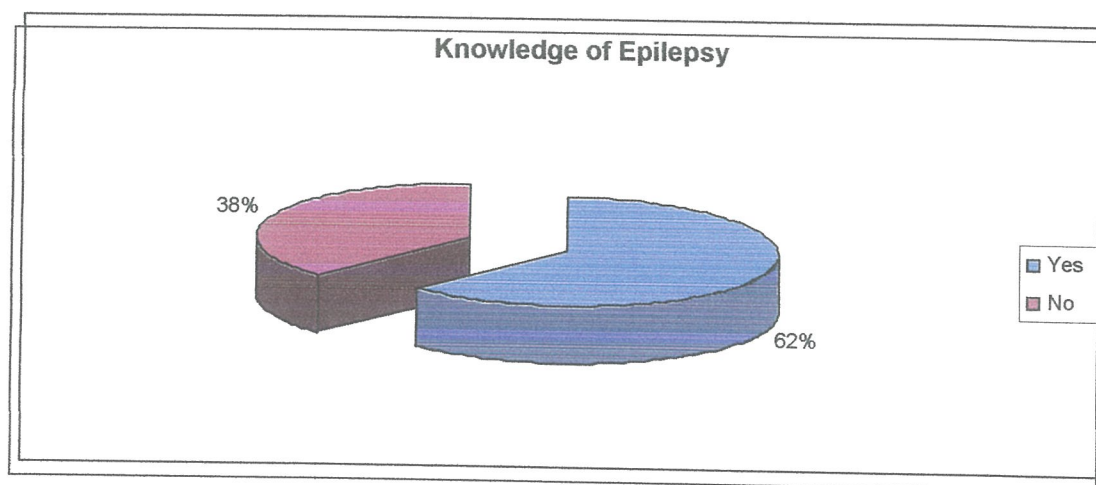


A majority (62%) of the respondents are teacher teaching in lower primary

1. TEACHERS KNOWLEDGE AND UNDERSTANDING EPILEPSY

Figure 6: Awareness

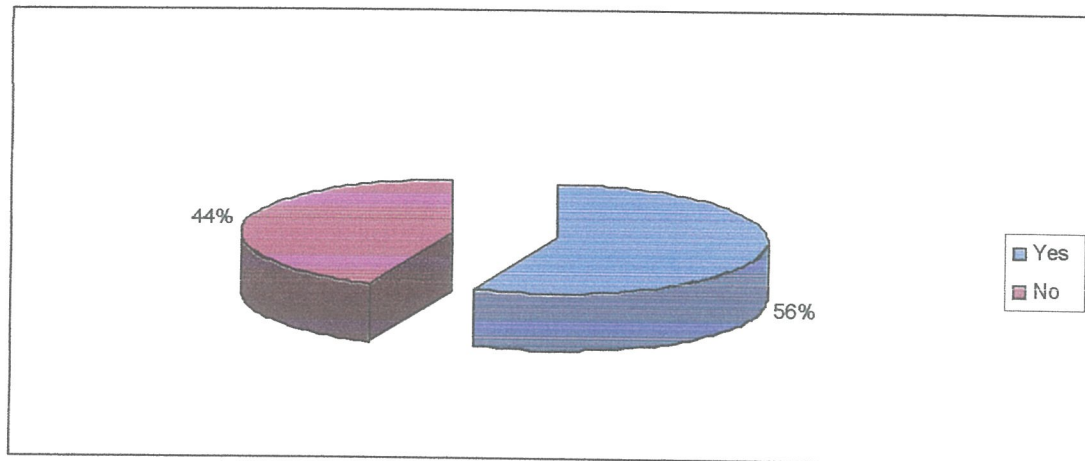
Do you know what Epilepsy is?



62% of the teachers know what Epilepsy is, while 38% of teachers had no idea about the disease.

Figure 7: Contact with an epileptic person

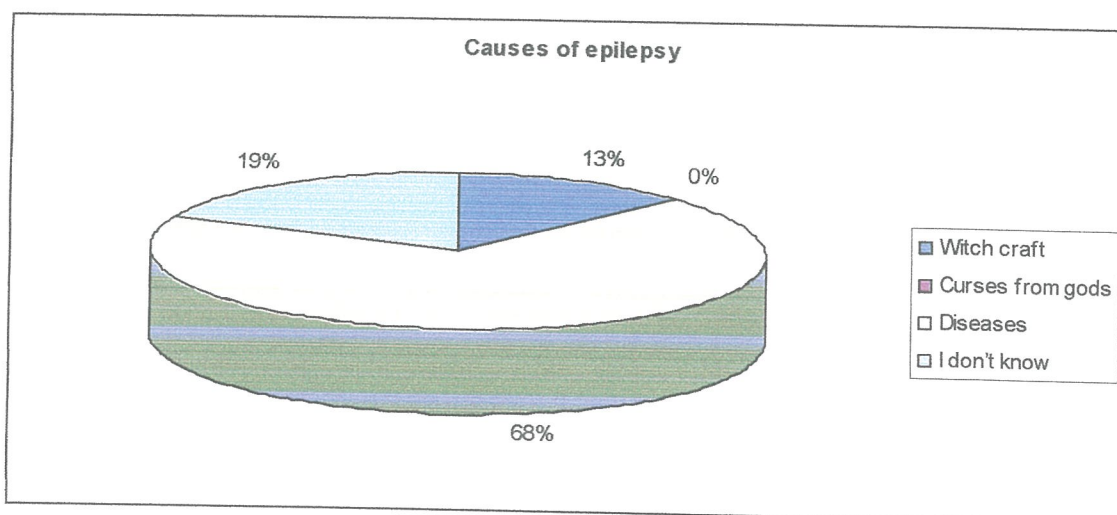
Have you ever come across a person suffering from Epilepsy?



From the figure above, only 56% of the respondents have come across a person suffering from Epilepsy, whereas 44% of the teachers had not. As a matter of fact Epilepsy is not a strange disease to many teachers even those who said No probably fear being in contact or being associated with the disease.

Figure 8: Causes of Epilepsy

In your opinion what are the causes of epilepsy?



According to the above chart 68% of the teachers have some knowledge of the cause of the disease, 18% of the teachers did not have any idea about the cause of the disease, 13% thought it was a result of witch craft.

2. TEACHERS' ATTITUDES TOWARDS LEARNERS WITH EPILEPSY.

Figure 9: Teachers attitude towards teaching epileptic learners

- Are you ready to teach children who are Epileptic in your school?

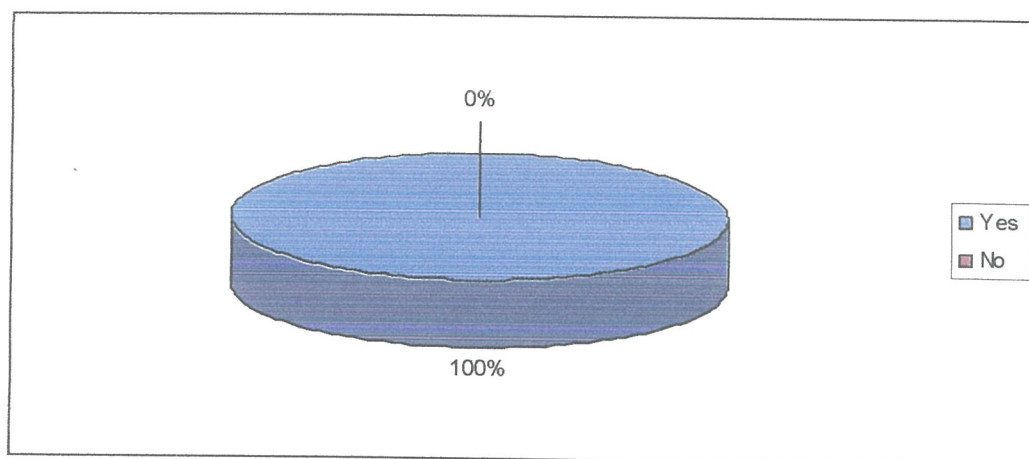
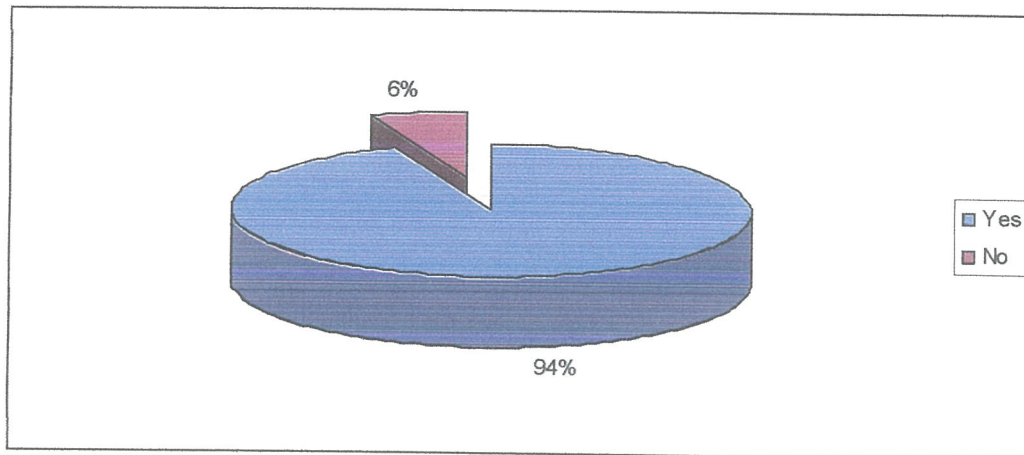


Figure 9 shows that all the teachers have responded positively and that they are willing to assist children who are Epileptic

Figure 10: Demands of teaching an epileptic child

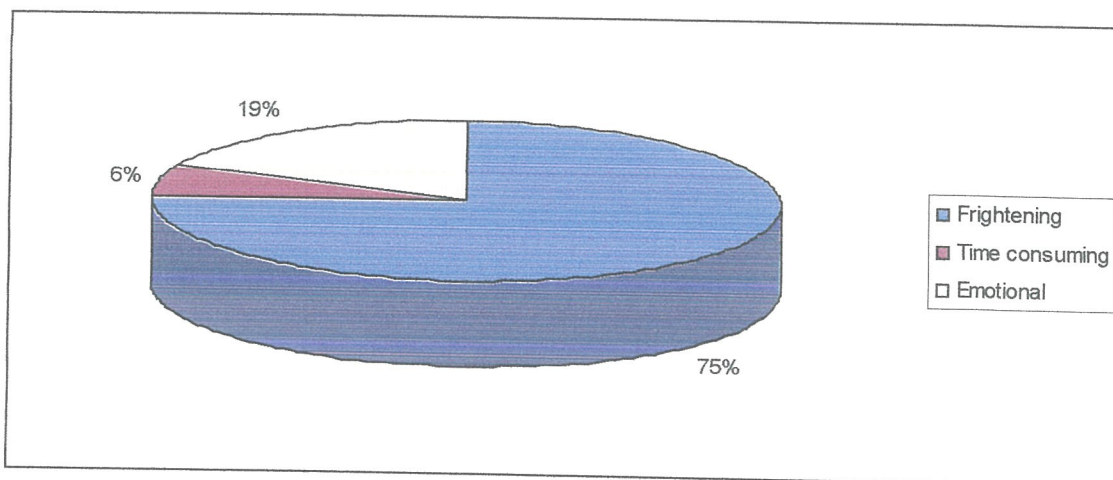
b. Do you think it is more demanding to teach Epileptic children than non-epileptic?



According to the figure 10 the 94% of teachers think it is more demanding to teach epileptic children than non-Epileptic while 6% of the teachers felt that it was not demanding to teach epileptic children.

Figure 11: Demands of teaching epileptic children

If you find that teaching of Epileptic children is more demanding in what way is it demanding?



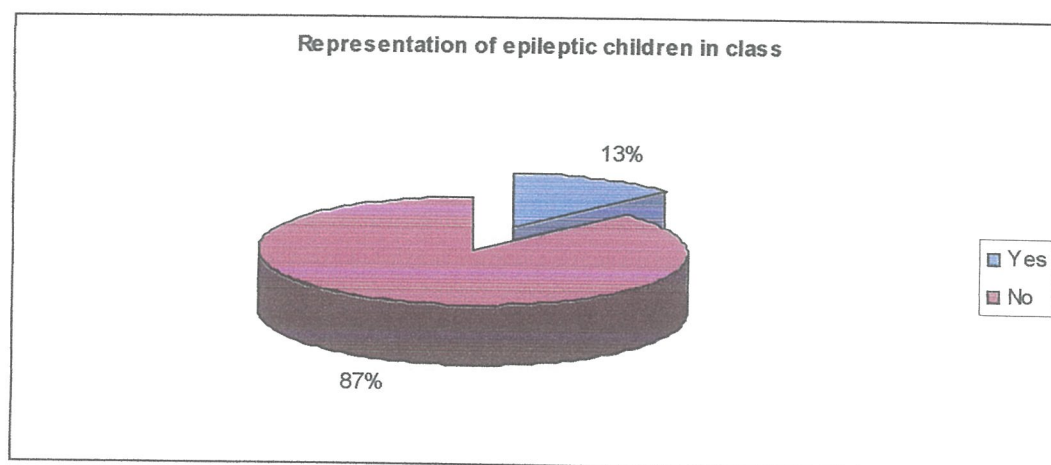
From figure 75% of teachers have fear of the disease possibly because of the action or activities accompanied by it. 19% of the teachers said that the diseases causes

emotional trauma and hence they prefer not to handle the child during convulsion. 6% think its time consuming; this is because it can take time fir a child to recover from a fit especially if there was a lesson in progress.

3. THE IMPLICATION OF EPILEPSY IN LEARNING

Figure 12: Representation of epileptic children in class

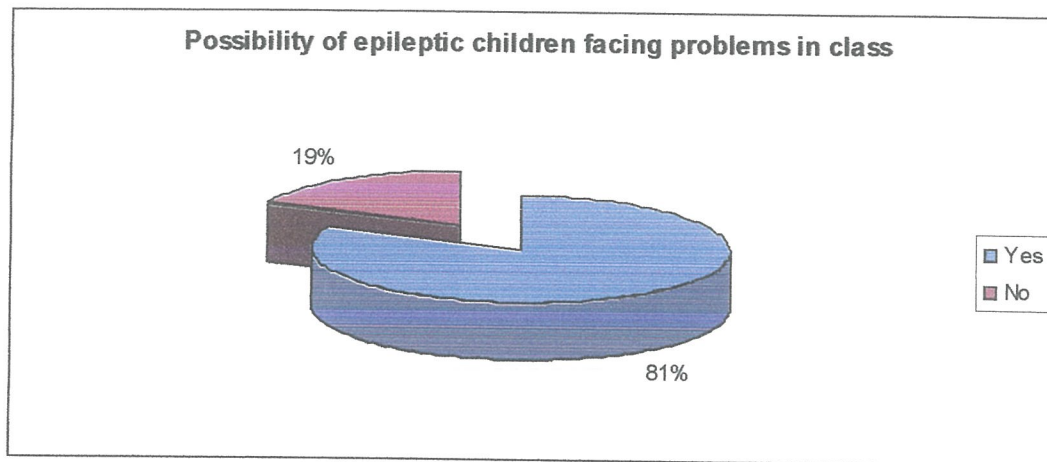
Do you have Epileptic children in your class?



The chart shows that 87% of the respondents have no children suffering from epilepsy in their class while 13% say they have children in their class.

Figure 13: Possibility of an epileptic child facing problems in class

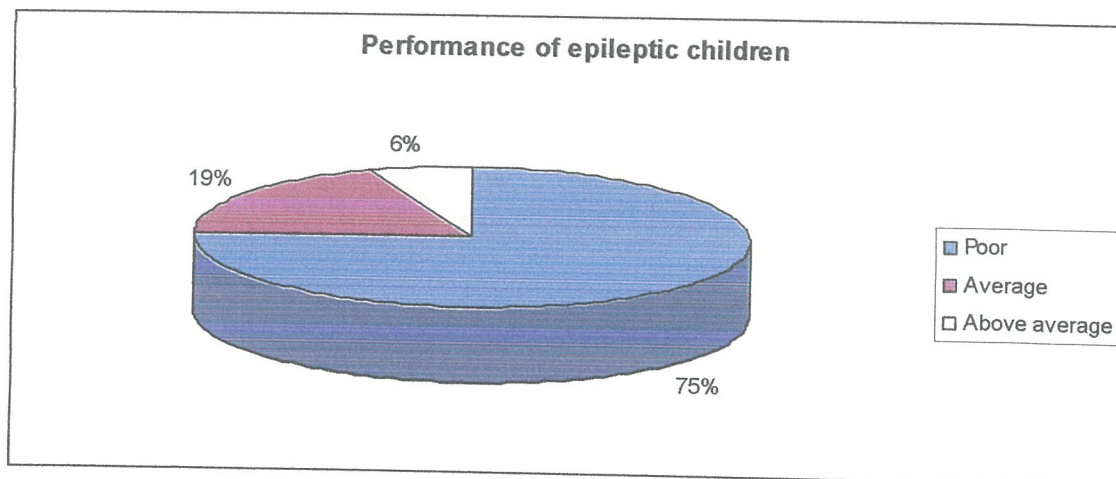
Would there be any possibility that an Epileptic child faces problems in a classroom setting?



The results from chart shows that teachers think an epileptic child faces problems in a classroom setting, this is evident from 81 % of teachers who think so while 19% think there is no any problems faced by other children suffering from malaria and colds.

Figure 13: Performance of epileptic children

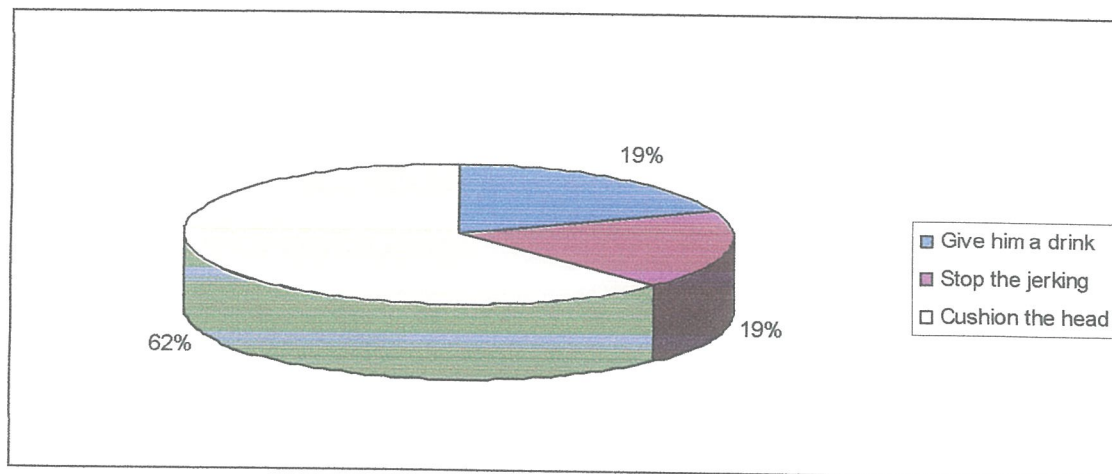
How do Epileptic children perform in your classes?



According to Figure 14, 75% of the teachers think that children with epilepsy perform poorly and 19% think they are average while 6% think they are above average.

Figure 14: Response to seizures in epileptic children

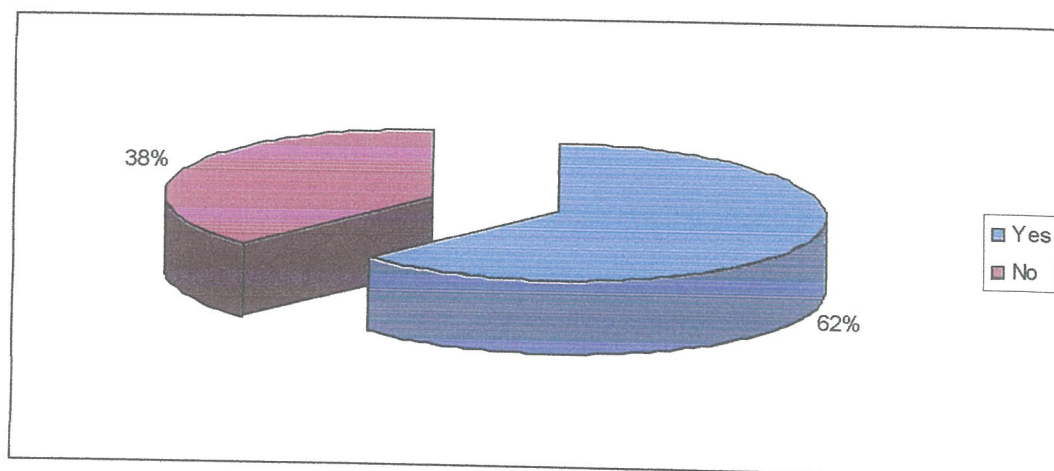
How will you assist a child with Epilepsy in your class during a lesson in case of a seizure attack?



Results from the above chart shows that a good number of teachers have an idea on how to assist a child with epilepsy during an attack this is as a result of 62% teachers saying the child's' head should be cushioned to avoid damage. The rest probably have never handled or seen a person with a seizure attack being assisted.

Figure 15: Attitude of other children in class

Do other children in your class assist children with Epilepsy to perform duties that can cause seizures?

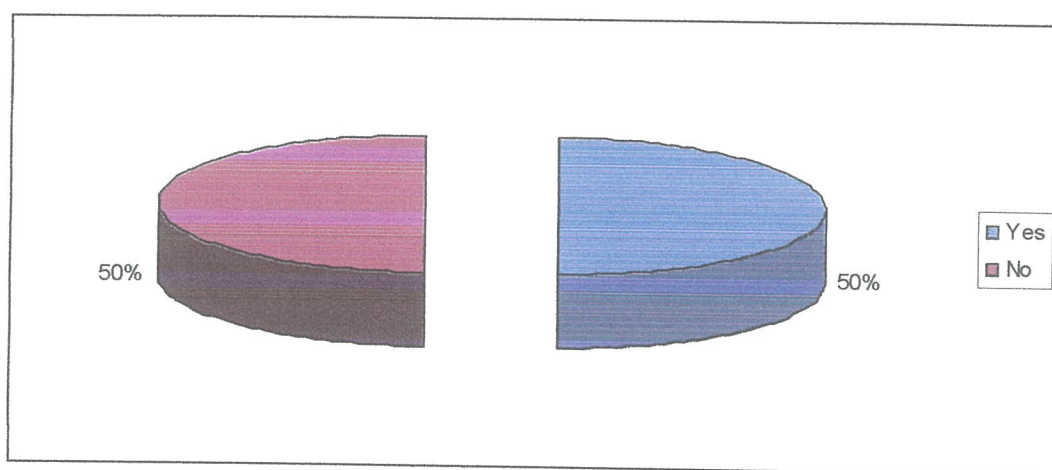


The above results show that 62% of learners get assistance from the other children while 38% are left to perform duties, this may be because the other children have no awareness on how to treat their classmates who have health problems.

4. TREATMENT AND MEDICATION OF EPILEPSY

Figure 16: Treatment of epilepsy

- a. If a child has Epilepsy, is there a possibility that he/she might get out of it?

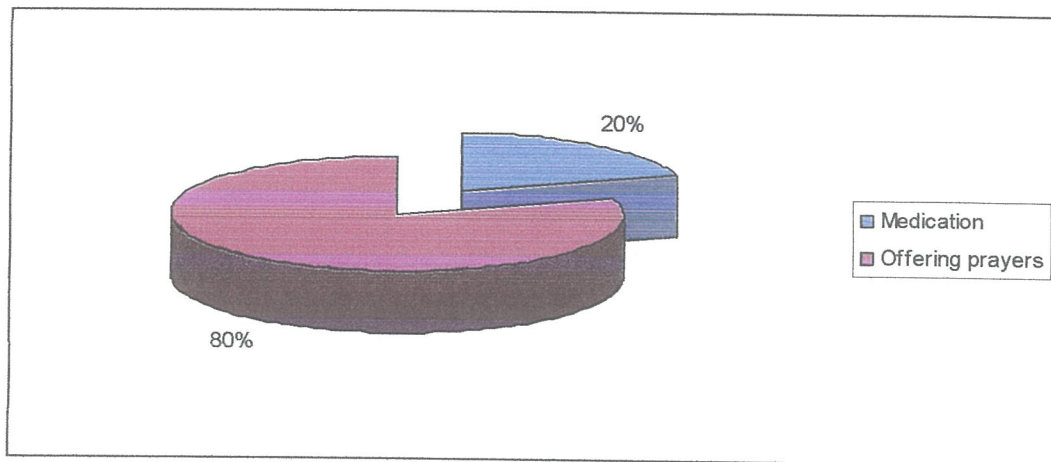


From the table the results showed 50% of the respondents think that a child suffering from Epilepsy can get out of it while 50% think it is not possible.



Figure 17: Prevention of epilepsy

b. What are the possible preventions of Epilepsy?



From the above figure 20% of the teachers said that proper medication and following of doctors advice can prevent Epilepsy. 80% of the teachers still think this disease is strange and demonic hence prayers to the family will prevent the occurrence.

Figure 18: Peoples attitude towards epilepsy medication

c. Does the medication given to epileptic children cause any undesired effects that affect learning in your class?

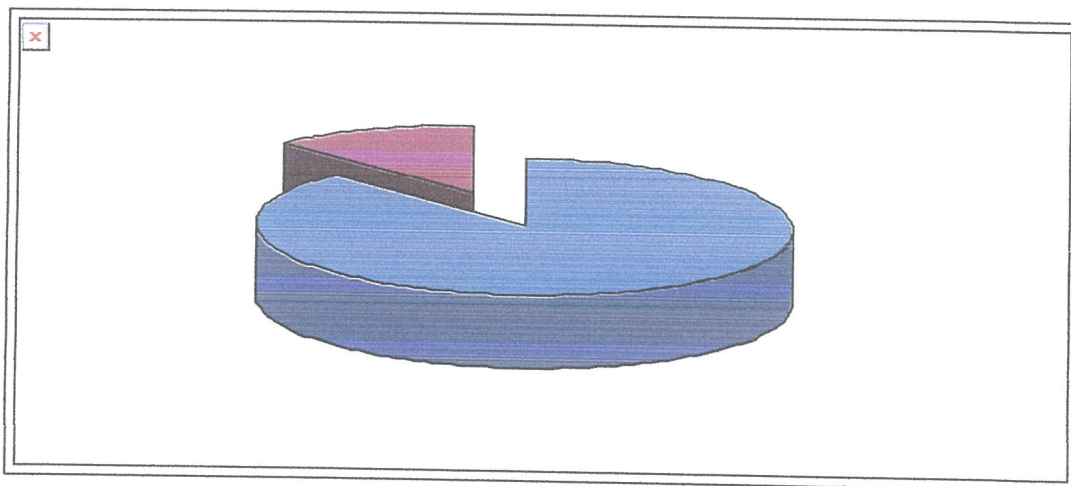


Figure 20 shows that a majority of teachers say the medication administered to children suffering from Epilepsy causes undesirable effects that affect learning in class. This is evident from 87% who said yes, while 13% said the medication does not affect learning.

Figure 19: Support personnel

d. Do you have any support personnel in your school?

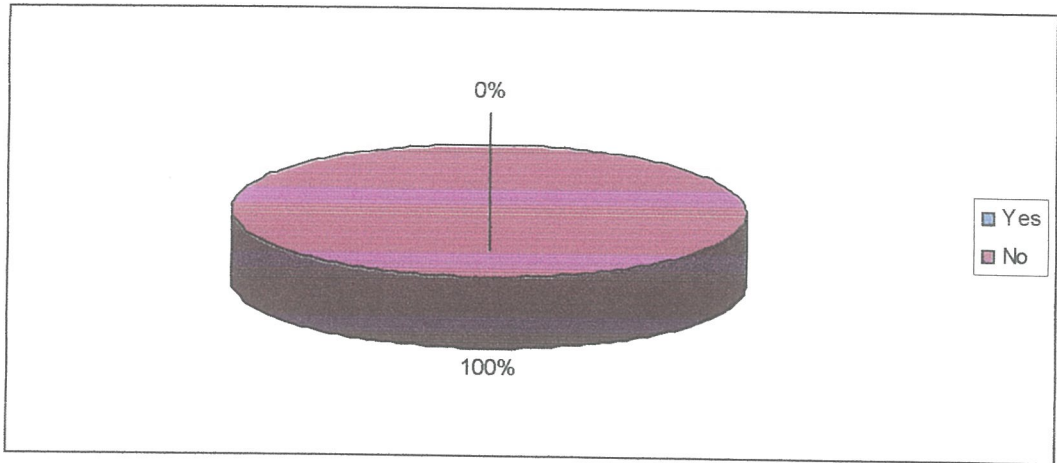


Table 21, shows that teachers from the two schools where the research was carried out said that they have no support personnel in their schools. The response was 100% for No.

CHAPTER FIVE

SUMMARY, DISCUSSION AND RECOMMENDATION

5.0 INTRODUCTION

The purpose of this study was to investigate the support given to children with Epilepsy in regular schools in Parklands Zone (Nairobi). The study was guided by the main research question, what is the support given to children with Epilepsy in regular schools in Parklands Zone?

In order to be able to investigate the support given to these children, the study focused on the following themes, these themes were based on the research questionnaires described on the previous chapter.

- Knowledge and understanding of Epilepsy.
- Attitude towards learners with Epilepsy.
- The implication of Epilepsy in learning.
- Treatment and medication of Epilepsy.
- Teachers' expectation towards Epileptic children.

5.1 KNOWLEDGE AND UNDERSTANDING OF EPILEPSY.

From the finding majority of the teachers know what Epilepsy is. This is shown by respondents with 62.5% from both schools that they have the knowledge of the disease. 37.5% of the targeted population said they have no idea about the existence of the disease.

Further findings in the study revealed that most of the teachers had gotten come contacts in one way or another with persons with Epilepsy. As a matter of fact Epilepsy is not a strange or new disease to many teachers even those who said that they have never come across probably fear being in contact or being associated with the disease.

Regarding the causes of Epilepsy the result showed that 69% of the teachers have some knowledge of the causes of the Epilepsy because a majority contributed it to diseases while a few thought it could be because of witch craft which is common with most Africans homes.

5.2 ATTITUDES TOWARDS LEARNERS WITH EPILEPSY

From the finding regarding attitudes of teachers towards learners with Epilepsy, their was an overwhelming response because teachers from both schools where the research was carried out said they are willing to teach children with Epilepsy, the response was 100%.

Although the majority of teachers stated that they are willing to teach the learners with Epilepsy, they thought it is or will be more demanding. Many responded like that because most teachers have a few children or no children suffering from Epileptic so as to be able to assess the real situation.

The reason why the teachers that is demanding to teach these children is attributed to fear of the disease 75% of teachers said its frightening to assist the learners, probably when they get a seizure.

5.3 THE IMPLICATION OF EPILEPSY IN LEARNING

From the result 88% of teacher have no children suffering from Epilepsy in their class and this then tells why a majority of teachers say that there is possibility that these children face problems in school and they would rather remain at home where their problems can be handled by people who understand them most; and that is why there are very few children in regular schools suffering from Epilepsy.

The result regarding these children performance show that the few who are in regular school do not do well in class, these could be because of the interruptions caused by the disease of the medication administered. Children suffering from Epilepsy get support from other children in regular schools. The results of this study showed that there is need to provide teachers with in-service training and equipping them with skills and knowledge on how to handle children with Epilepsy: that is evident from 88% of teachers.

Apart from training teachers so as to be able to handle these children, the respondents feel that it will be proper to adjust the Education system to suit special needs of children, they urged that there are some schools which can not admit normal children who are below average leaves alone children with special needs.

The other reason why children with special needs are not accepted in regular schools is because of the academic standard. 81.2% of teachers think that if these children are included they will affect the academic standard of the school.

5.4 TREATMENT AND MEDICATION OF EPILEPSY

Epilepsy is a disease that can be handle and if a child is suffering from it, the chances of him/her get out of it 50%. The respondents might have thought that will proper treatment and medication a child can get out of it.

Through proper medication it is possible to prevent Epilepsy in families especially if there is control, patience and understanding. Medication given to Epileptic children cause undesirable effects, which are evident from 88% response. The anti-convulsions drugs cause effects such as drowsiness, tiredness, dizziness and poor balance. These effects can affect learning.

5.5 TEACHERS EXPECTATIONS TOWARDS EPILEPTIC CHILDREN

From results gathered, it shows that its not only medication that can make these children comfortable both at home and in schools. 62% of teachers said that love and understanding plays a big role in giving comfort to children with Epilepsy. If a child gets a seizure he/she should be comforted when he/she recovers but not ridicule or laughed

5.6 RECOMMENDATION

Based on the findings of the entire study, the researcher makes the following recommendations.

- Organization of seminars and short courses for regular teachers and public awareness, campaign in the region through chief's barazas, workshops, church services by the few special educators.

- The curriculum should be adjusted and adapted to meet the learner's individual needs.
- Teamwork among teachers, parents and other professionals should be strengthened.
- Teachers should be promoted and up-graded as away of motivating them, especially those who have trained to handle the need children so as to create interest in the whole field.
- The teacher's services commission should employ more trained teachers, so as to reduce the workload of teachers in the primary regular schools. This will enable teachers to handle few pupils hence give a humble time to learners with special needs.

5.7SUMMARY/CONCLUSION

The researcher found out from the study that teachers in Highridge and North Highridge primary school in Parklands Zone of Westlands Division have some basic knowledge on Epilepsy. From the finding teachers responded well when asked whether they are willing to assist children with Epilepsy. This shows that they have positive attitudes towards children with special needs such as Epileptic children.

The research study showed that teachers have no skills on how to handle learners with Epilepsy especially when they get convulsions. Lack of support personnel to handle these children so as the teacher can continue with the lesson when a child gets a seizure is another problem. The teachers are overloaded with a lot of work due to congestion of the curriculum. Teachers have never had any in service seminars or workshops on the needs of special education, to make aware of the needs of these children and the help to give until recently when Kenya Institute of Special Education came up with the idea of training regular teachers on special needs, very few teachers knew what special needs was all about with the policy of free education in primary school, the teachers are overloaded with a lot of work, under overcrowded conditions. This shows that there is no time to pay attention to learners with special needs. Teachers' pay is also another issue, they are lowly paid despite the tedious work they do.

The researcher study shows that majority of the teachers are willing to assist children with special needs if only they are equipped with the skills.

BIBLIOGRAPHY

AMREF 1990, Survey of Children Disabilities in Kibwezi Division, Kenya-Nairobi.
African Medical and Research Foundation (AMREF).

Richmond R.C and Smith (1990) Support for Special Needs: The Class Teacher's Perspective. Oxford review of Education

Brown J.K, (1982) Fits in Children. Longman Group Limited, New York.

Spren, O (1994), Developmental Neuropsychology, Oxford university press, Newyork.

Caroline A.P. (1987), How to help with Epilepsy.

Corbett J, (1985), Epilepsy as part of a handicapping condition. Nairobi, Kenya

P.A Dekker,(1990) Epilepsy a manual for medical and clinical officers in Kenya. Nairobi, Kenya

<http://en.wikipedia.org/wiki/Epilepsy>

www.kidshealth.org/teen/diseases_conditions/brain_nervous/epilepsy.html

http://www.medicinenet.com/epilepsy_treatment/page4.htm

http://www.ehealthmd.com/library/epilepsy/EPI_kinds.html

APPENDICES

APPENDIX 1: QUESTIONNAIRES FOR TEACHERS INSTRUCTIONS

QUESTIONS WITH ALTERNATIVE RESPONSES

TICK YOUR ANSWER

PERSONAL INFORMATION

1. GENDER: MALE ☐ FEMALE ☐
2. HIGHEST QUALIFICATION
- Graduated ☐
- A.T.S. ☐
- P1 ☐
- P2 ☐
- P3 ☐
- P4 ☐
3. EXPERIENCE: 1-5 Years ☐ 6-10 years ☐
- 11- 15 years ☐ Above 15 years ☐
4. AGE: 20-30 Years ☐ 31- 40 Years ☐
- 41-50 Years ☐ Above 50 ☐
5. SPECIAL EDUCATION: MA ☐ Under graduate ☐
- DIP ☐ Certificate ☐
6. CLASS TEACHING: lower primary ☐ Upper primary ☐

1. TEACHING KNOWLEDGE AND UNDERSTANDING OF EPILEPSY.

- a. Do you know what Epilepsy is?

Yes ☐ No ☐

b. Have you ever come across a person suffering from Epilepsy?

Yes ☐ No ☐

c. In your opinion what are the causes of Epilepsy?

Witchcraft ☐ Curses from god ☐

Disease ☐ I don't know ☐

2. TEACHERS' ATTITUDE TOWARDS LEARNERS WITH EPILEPSY

a. Are you ready to teach children who are Epileptic in your school?

Yes ☐ No ☐

b. Do you think it is more demanding to teach Epileptic children than non-Epileptic children?

Yes ☐ No ☐

c. If you find that teaching of Epileptic children is more demanding, in what ways is it demanding?

Explain.....
.....
.....

3. THE IMPLICATION OF EPILEPSY IN LEARNING

a. Do you have Epileptic children in your class?

Yes ☐ No ☐

b. Would there be any possibility that an Epileptic child faces in a classroom settling?

Yes ☐ No ☐

c. How will you assist a child with Epilepsy in your class during a lesson in case of a Seizure attack?

-
-
-
- d. Do other children in your class assist children with Epilepsy to perform duties that can cause seizure?

Yes

☐

No

☐

4. TREATMENT AND MEDICATION OF EPILEPSY

- a. If a child has Epilepsy, is there a possibility that he/she might get out of it?

Yes

☐

No

☐

- b. What is the possible prevention of Epilepsy?
-
-
-

- c. Does the Medication given to Epileptic children cause any undesired effects that affect learning in your class?

Yes

☐

No

☐

- d. Do you have any support personnel in your school?

Yes

☐

No

☐

5. TEACHERS' EXPECTATION TOWARDS EPILEPTIC CHILDREN

- a. What factors contribute mostly to the comfort of the children with Epilepsy?
-
-
-

- b. How would you react when a child gets a seizure or convulsion in your class?

.....
.....
.....

c. Do you training so as to handle E epileptic children?

Yes ☐ No ☐

d. Do you agree that the Education system needs adjustment to suit special needs children?

Yes ☐ No ☐

e. Do you think the academic standard will be affected when these children who are Epileptic are included in regular schools?

Yes ☐ No ☐

f. If your answer is yes, do you think it is better to set a different national exam for them?

Yes ☐ No ☐

APPENDIX 2: MONETARY BUDGET

(In Ksh.)

A. Presearch activities

Proposal writing	500
Transportation	1,500
Stationery	1,000
Computer time	800
Printing	<u>300</u>
Total	4,100

B. Data collection activities

Field	500
Transportation	<u>1,500</u>
Total	2,000

C. Data Analysis

	800
--	-----

D. Report Writing

Computer time	800
Printing	<u>500</u>
Total	1,300

E. Miscellaneous

	1,000
--	-------

TOTAL	9,200
--------------	--------------

APPENDIX 3: TIME BUDGET

Activities	Time
Proposal Writing	April 2008
Prepare Instruments	May 2008
Pre-Testing of Instruments	June 2008
Collecting Data	July 2008
Analysis Data	August 2008
Writing Research Report	September 2008
Submit Final Report	October 2008

