

**Addis Ababa University**  
**College of University and Behavioral Studies**  
**Department of Special Needs Education**

**Challenges of Late Visually Impaired Persons Life:**  
**The case of Addis Hiwot Center for the blind in Addis Ababa**

**ZELALEM BELACHEW**

**June, 2013**  
**Addis Ababa**

**Addis Ababa University**  
**College of University and Behavioral Studies**  
**Department of Special Needs Education**

**Challenges of Late Visually Impaired Persons Life:**  
**The case of Addis Hiwot Center for the blind in Addis Ababa**

**ZELALEM BELACHEW**

**This thesis is Submitted to the department of special needs Education in  
partial fulfillment of the requirement for MA Degree in Special Needs  
Education**

**June, 2013**  
**Addis Ababa**

**Addis Ababa University**  
**College of University and Behavioral Studies**  
**Department of Special Needs Education**

**Challenges of Late Visually Impaired Persons Life:**  
**The case of Addis Hiwot Center for the blind in Addis Ababa**

**ZELALEM BELACHEW**

**Approval of the Board Examiners**

**1. Advisor**

Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

**2. Eternal Examiner**

Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

**3.**

**4. External Examiner**

Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

**June, 2013**  
**Addis Ababa**

## **Acknowledgements**

I am very grateful to my advisor, Alemayehu T/Mariam (PHD) for his constructive support, guidance and encouragement. Without his constant support and patience, my accomplishment of this research would not have been realized.

I would like to thank for the cooperation of lots of individuals in particular, I owe an immense debt of graduate to MA graduate classmates, and my friends who assisted me giving their time and read the progress of my research, encouraging and provide me any valuable ideas and suggestions in offering support in the journey of doing my research endeavor.

I very thank participants for offering me relevant information otherwise the finalizing of the study was hardly possible and also their eagerness and collaboration made carrying out this investigation a pleasure.

I would also like to acknowledge and thank my brother's Michael Belachew for his invaluable financial, material and emotional support throughout the completion of this thesis and my MA graduate study

## ABSTRACT

*The main objective of this study was to examine the current challenges of four persons with late visual impairments and to understand the situation of their current life appearance in Addis Ababa with particular reference to Addis Hiwot Center for persons with visual impairment. The result of the study was believed to be helpful for the four persons acquired late blind, after 18 years in the study area.*

*In order to achieve the objectives of this study, the researcher followed qualitative research approach with descriptive case study design the research participants consists of 4 late visually impaired persons ( 2 males and 2 females) in the Addis Hiwot Center, were purposefully selected to obtain the relevant data for the research questions. In-depth interview was carried out with the participants at the center. Besides focus group discussion was held among 6 people and their information was recorded. Personal documents of the late visual impaired persons were cross-checked. The data collected through the above instruments were organized based on the thematic of the research questions of the study and finally analyzed case by case and cross case study.*

*The result of the study revealed that there is various similarities of challenges between the life of the four late visually impaired persons in areas of social, emotional, economic and technological aspects following they had acquired the incident. They were also experienced different life challenges in which they also differ in their cases. Gradually the case participants revealed that currently they lead a better life after they have had joined the center at Addis Hiwot where they have received proper intervention. They have currently good social interaction at their work place and felt positive reaction to them themselves and co-staffs. They adapted to the technology of computers and they function properly through the series of training they have received in the center.*

*Finally, based on the findings, relevant conclusions and recommendations have been made.*

## Table of Contents

Content	pages
Acknowledgements.....	i
Abstract .....	ii
CHAPTER ONE	
Introduction.....	1
1.1 Background of the study .....	1
1.2 Statement of the Problem.....	2
1.3 Research Questions.....	4
1.4 Objective of the Study.....	4
1.5 Significance of the Study.....	5
1.6 Limitations of the Study.....	6
1.7 Definition of key Terms and Abbreviations.....	6
CHAPTER TWO	
Review of related Literature.....	7
2.1. Definition .....	7
2.2. Problems people with Visual Impairment .....	7
2.3. Barriers to people with Visual Impairment .....	8
2.3.1. Physical Barrier .....	8
2.3.2. Emotional stress .....	8
2.3.3. Learning Challenges .....	9
2.3.4. Social Barriers .....	9
2.3.5. Prejudice and Stereotypes .....	9
2.3.6. Work Attitude .....	11
2.3.7. Personality .....	12
2.3.8. Diversity .....	12
2.4. Organizational Environment .....	13
2.5. Removal of Barriers .....	14
2.6. Technological and Others Aids .....	14
2.7. Adaptive Technology .....	15

2.8. Causes of Late Blindness .....	16
<b>CHAPTER THREE</b>	
3.1. The Research Method .....	18
3.2. Sample Techniques .....	18
3.3. Sources of Data .....	19
3.4. Instruments .....	19
3.4.1. In-depth interview .....	19
3.4.2. Focus Group Discussion .....	20
3.5. Procedure of Data Collection .....	21
3.5.1. Interview Schedule .....	21
3.5.2. Administering .....	21
<b>CHAPTER FOUR</b>	
4. RESULTS .....	23
4.1. Introduction .....	23
4.1.1. Identification of Issues in the lives of participants with late visual impairments .....	23
4.2. Case studies .....	23
4.2.1 Case Study 1(C1) .....	24
4.2.2. Case Study 1(C2) .....	28
4.2.3. Case Study 1(C3) .....	31
4.2.4. Case Study 1(C4) .....	35
4.3. Comparison of Cases .....	39
4.6.1. Introduction .....	39
4.6.1.1. Similarities between Case Studies .....	39
4.6.1.2. Emotional Adaptation .....	39
4.6.1.3. Reaction of Others .....	41
4.6.1.4. Technological, Other Aids and the Environment.....	42
4.6.1.5. Legislation .....	42

4.6.1.6. Training and Support .....	43
4.6.1.7. Adaptation .....	43
4.6.1.8. Differences between the Cases .....	43

CHAPTER FIVE

Discussion .....	45
------------------	----

CHAPTER SIX

Conclusions and Recommendations .....	48
---------------------------------------	----

References

Appendixes

## CHAPTER 1: INTRODUCTION

### 1.1 Background of the Study

According to the World Health Organization (WHO), over 40 million people in the world are blind and over 120 million people have significant low vision conditions that cannot be corrected, cured or treated by conventional refraction, medicine or surgery. This number is expected to double by the year 2020 (World Health Organization, 2010). Figures for the developing world, where approximately 90% of world blindness exists, and the developed world are expected to increase significantly during the next decades as the world's population ages. This tells us that the burden of visual impairment is not distributed uniformly throughout the world: the least developed regions carry the largest share. Visual impairment is also unequally distributed across age groups, being largely confined to adults 50 years of age and older. A distribution imbalance is also found with regard to gender throughout the world: females have a significantly higher risk of having visual impairment than males (Ibid).

As to the figure of the case of visually impaired people, continents like Africa and Asia and corresponding countries in the continents are believed to constitute the bigger share. In this regard, a document from the World Health Organization report (2010) states that Ethiopia has one of the highest blindness prevalence rates in the world, with more than 1.2 million blind people and an estimated more 5 million people are suffering from visual impairment. Although over 80% of blindness and visual impairment in the country is preventable, tens of thousands of people continue to lose their sight simply because they do not have access to the basic eye care that is so readily available in the developed world. From this, it can be understood that sight loss

is an incident which people encounter not only at their birth but also in their later life (Culp, 1998).

### **1.2 Statement of the Problem**

From the above ideas, it can be understood that that vision loss may happen at any age starting from the age of birth to the dusk of one's life. However; here in the current study, I will focus on the challenges of vision loss among people who lost their sight in the middle of their life, especially those who lost their sight after the age of 18 years old. This is because I have a firm belief that if one loses his/her sight after this age, they would be in a more trouble of coping with life as a whole as they have encountered something terrible which they haven't experienced it before. Individuals who have recently become visually impaired will often have somewhat different emotional needs from those who have been visually impaired since early childhood (Hanye, 1998).

In fact, a visually impaired adult or child can be trained, with the help of Vision Enhancement, Vision Rehabilitation and Assistive Technology and low vision aids to perform most daily tasks more confidently at home, in school, in the playground, in the kitchen and at the work place, in a safe and independent manner, if only they were aware and could easily access and afford such services (Lachenauer, 1999). However, this may not be the case for every country where economic and development status is low. Again, the situation is more tempting for those who lost their sight after they have the full grasp of the world through their necked eyes which constructs the majority of learning and coping with the environment (Pearson, 1997).

We may know that many people around us whose vision was lost during their early childhood are competent enough to cope with their environment. However, I have a big doubt if people whose vision is lost after 18 years old can withstand and cope with challenges they face in a relatively short period of time with the right confidence as opposed to those people who lose their sight in their childhood period. To this end, I feel that there are many things we have not yet known about blind adults in our nation.

These may include issues like: what kind of challenges they are facing? What programs and services are they using, and are their needs being met? What are their daily lives like? Despite this fact, blind men and women are believed to have made important contributions to their society in every part of the world as teachers, lawyers, artists, and the like. In this regard, I have also a big conviction that the case happens to be true here in Ethiopia too. Nevertheless, I feel very surprising how little research has been done to learn more about the lives of people who have lost their vision during the middle of their life in contemporary Ethiopian society. In fact, to my information, I have come across little or no nationally representative study which had ever been conducted until very recently. Even this study itself will only focus in Addis Ababa-Addis Hiwot Centre, the centre which triggered me to conduct this research.

Moreover, my experience as a low vision individual at Addis Ababa makes it evident that the problem mentioned above about the challenges of late visual impairment in the specific context is felt to be reflected among other individuals who have a total vision impairment in the wider contexts where this study will be conducted. Therefore, with all the above insights from the various scholars and the researcher's own experience about the challenges faced by people who lost their sight after the mentioned age, the researcher found it extremely appealing to

examine the situation in Addis Ababa City with specific reference to Addis Hiwot Centre.

### **1.3 Research Questions**

Based on the above insights, the current study tries to answer the following basic research questions:

1. What are the challenges faced by those people who lost their sight after 18 years old?
2. Are these people aware of the issue of late visual impairment?
3. What kinds of services and/or support (if any) are given more emphasis to assist people who encountered late visual impairment?
4. What does their self-concept in their current situation look like?
5. Do these people have access to legislative information and materials in proper Medias concerning the rights of disabled people?
6. What is the attitude of people around towards the late visually impaired people?

### **1.4 Objectives of the Study**

It has been noted above that the incidence of sight losing is an indiscriminate instance that may occur at any age level. However, the aftermath may tend to be more threatening if the case happens when the individuals have gained full knowledge of their environment in their full sight. With this insight, this study mainly tries to examine the different challenges faced by individuals who have lost their sights after 18 years of age. In the meantime, the study will have the following objectives:

1. Examining the challenges faced by those people who lost their sight after 18 years old.

2. Identifying these people's awareness on the issue of late visual impairment.
3. Exploring what kinds of services and/or support (if any) are given more emphasis to assist people who encountered late visual impairment.
4. Examining their self-concept in their current situation.
5. Checking out if these people have access to legislative information and materials in proper Medias concerning the rights of disabled people.
6. Examining the attitude of people around towards the late visually impaired people.

### **1.5 Significance of the Study**

The result of this study regarding the challenges faced by people with late sight lose is hoped to have the following significance.

1. Planning better ways of assisting people with late visual impairment through providing them with the required services and/or support including training.
2. Providing these people with appropriate information about the case in point.
3. Informing people about some causes of late visual impairment.
4. It may help visually impaired people to develop positive self-concept.
5. It may help policy makers to look into the condition of late visual impairment.
6. Together with these, the study may give an insight for other interested researchers in the area and hence, serves as a spring board for other similar studies.

2. Identifying these people's awareness on the issue of late visual impairment.
3. Exploring what kinds of services and/or support (if any) are given more emphasis to assist people who encountered late visual impairment.
4. Examining their self-concept in their current situation.
5. Checking out if these people have access to legislative information and materials in proper Medias concerning the rights of disabled people.
6. Examining the attitude of people around towards the late visually impaired people.

### **1.5 Significance of the Study**

The result of this study regarding the challenges faced by people with late sight lose is hoped to have the following significance.

1. Planning better ways of assisting people with late visual impairment through providing them with the required services and/or support including training.
2. Providing these people with appropriate information about the case in point.
3. Informing people about some causes of late visual impairment.
4. It may help visually impaired people to develop positive self-concept.
5. It may help policy makers to look into the condition of late visual impairment.
6. Together with these, the study may give an insight for other interested researchers in the area and hence, serves as a spring board for other similar studies.

### 1.6. Limitations of the study sample

The sample members have been limited by the following criteria: They have to be of working age, and either have a job now, or have had a job after they became Visual impaired. There must have been an attempt at adjustment to the environment and the use of aids (technological or otherwise). The sample members need to have been fully blind after 18 years or so *and have attempted adjustment to the work environment for at least one year*, before being, interviewed.

### 1.7. Definition of Key Terms and Abbreviations

**Late sight loss** is any instance of losing eye sight by individuals during and/or after the age of 18 years old. Loss of sight and visual impairment was used in equal sense throughout the study and both were used to refer people who have lost their sight after 18 years old. Moreover, for the sake of convenience both loss of sight and visual impairment refer to late sight loss or late visual impairment.

**Legal blindness** is a level of vision loss that has been defined by law to determine eligibility for benefits. Accordingly, the term in this study was also used in the same sense and the case is taken as applied by in the center where this study will be conducted.

**People with Disabilities (PWDs):** For the purpose of this study, PWDs is defined as students having visual impairments alternatively PWVDs.

**WHO=** World Health Organization

**PWVDs** =People with Visual Disabilities

Here for the sake of convenience, **late impairment, late sight loss, and late blindness**were used in similar sense throughout this study.

**VI**=Visual Impairment

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### 2.1 Definition

The term vision loss refers to individuals who are visually impaired and, thus, have trouble seeing, even when wearing glasses or contact lenses. These visually impaired individuals have a visual acuity better than 20/200, and a visual field of better than 20 degrees. The term vision loss also refers to individuals who are legally blind or unable to see at all. Legal blindness is a level of vision loss that has been defined by law to determine eligibility for benefits. It refers to central visual acuity of 20/200 or less in the better eye with the best possible correction, or a visual field of 20 degrees or less (Bressler, 2004).

#### 2.2 Problems People Faced by Visually Impaired

All people go through different developmental stages that have their own opportunities and obstacles, but people who have faced recent visually impairment encounters additional challenges while they progress through their different lives. They may face coordination difficulties, emotional stress, difficulty learning in a traditional setting and organizational challenges--all coupled with additional attention and curiosity from their peers/colleagues.

The disability and inertia that one often sees in the VI originates in the physical and social barriers they experience in society and specifically in the workplace. It is, however not primarily the physical condition, but the impact of society's attitudes on the individual, that create the greatest obstacle of all. It does not take long before these attitudes have impact, as the VI person lives in

this world of preconceived bias and prejudice, struggling to survive against it emotionally and financially every day.

## **2.3. BARRIERS TO THE VISUALLY IMPAIRED PEOPLE**

### **2.3.1. PHYSICAL BARRIERS**

There are various physical barriers or problems in the workplace for the VI. Many of the problems are relatively easy to deal with, both in the effort required and the money needed to rectify the problem. It would however appear that employers often just do not think of making the necessary adjustments.

Coordination problem is one of the sound difficulties visually impaired people are tempted. According to (Barton, 1989), physical balance and coordination can be a challenge for visually impaired individuals, as they can't always see the objects around them--they rely instead on sound and familiarity with their environment.

### **2.3.2 Emotional Stress**

Visually impaired people face a serious emotional stress. Especially those people who lose their sight some noticeable years later are more susceptible to emotional stress. Barton (1989) notes that even in cases where the impairment comes on gradually or they've had a visual impairment since birth, visually impaired individuals will feel stress in new or unfamiliar situations, particularly when they feel isolated from peers. Starting at a new experience can be particularly stressful. Visually impaired individuals also may occasionally feel sad or frustrated. This is why the researchers wanted to focus on the challenges of late visual impairment.

### **2.3.3 Learning Challenges**

According to the (Browell,1988), there are a few learning problems that visually impaired individuals may experience in any learning setting, and particularly in new learning environments. If educators use a board to draw out graphs, charts, or other examples, visually impaired people can't always see it or benefit from it. The same concept applies to physical exercises and group activities, which are very visual. Educators can help teach visually impaired individuals by including specific verbal explanations and tangible objects that these people can touch and feel. In fact the problem is more serious for those people who lose their sight some years after they have enjoyed the benefit of their full sight (Dobbs, 1988; Dodds, 1999:295).

### **2.3.4. SOCIAL BARRIERS**

Social barriers are generally speaking even bigger problems to the VI than physical barriers. Other people react negatively towards VI people due to stereotypes of them and their abilities, prejudice and negative reactions to what they perceive to be their mood and capability.

Disabled people may feel negative and depressed about their situation. Social factors, such as other people's misguided attitudes, lack of knowledge about blindness and inappropriate responses may be the cause of much of their anxiety. VI people are actually able-bodied people, capable of performing a multitude of tasks, and functioning very well within the workplace environment. And yet they are regarded as unmotivated and poorly adjusted, due to the passivity and hopelessness that they often display. Ironically these types of behavior are usually a result of how others react to the visually impaired.

### 2.3.5. Prejudice & Stereotypes

According to Pierce, there are many prejudices and obstacles that make it difficult for VI people to demonstrate their qualifications and skills (Dobbs, 1999: 96). She furthermore lists pity, ignorance and misinformation as the reasons for joblessness among the VI. The definition of Visual Impairment generally accepted by society is also a barrier to employment. People are seen as helpless and handicapped if their vision is impaired. Most legally blind people are not functionally blind though, and partially sighted people – although often encouraged to accept a functionally blind life-style – have enough residual vision to read, write & move independently (Genensky et al, 1979: 1). It is thus unfortunate that the VI is labeled in a way that causes others to stereotype them. Many people with impaired vision lack confidence in their abilities. This is worsened by prejudice as the way people act towards a VI individual has an impact on how they see themselves. If the VI is told they are incapable often enough, eventually they believe what they are told, and eventually they cannot do the tasks necessary to survive in the work environment (RNIB, 1992: 1).

Ignorance of both the needs and abilities of VI people lead to a lack of understanding by sighted people. And this lack of understanding only leads to a deepening of the belief in their inability to be successful, for both the VI individual and the man in the street.

Few VI people do not have a memory of some event where they were treated as helpless and pitied by some uninformed stranger. According to Rowland (1985: 4) there is a narrow perspective of VI people, as they are seen behaving uniformly and have their requirements satisfied in very specific ways. People draw a number of conclusions from this: a VI person leads a life without variety; the aids they make use of are 'special' in nature; their lives are drawn out in a struggle to achieve modest goals.

The question is whether these impressions are true, or just an expression of those placed in authority over the VI. It should be noted that these ideas do not take into account new developments such as training courses, new occupations and the electronic revolution, which has enhanced VI people's skills. Stereotypes have two main characteristics, namely persistence (i.e. their continuation across generations) and rigidity (i.e. a lack of flexibility in the application of an idea). The danger of stereotypes lies in the assumptions, which are so easily made about a group based on their membership. The VI are, for example, seen in a negative light, and the cumulative effect of building a negative image about the VI, shapes the attitudes of those who work with the VI, as they are continually being subjected to this kind of information Swain (1993: 34).

The VI person is frequently seen as a sighted person who has merely been deprived of sight, and a direct comparison is thus made between sighted and non-sighted people. Science then readily characterizes VI people as inferior, as science fails to distinguish between blindness, between the lack of sight and the lack of opportunity (Rowland, 1985: 9). It is a short step then to seeing VI people as being unable to work or as only capable of performing certain kinds of tasks. The onus, according to Swain (1993: 45) is placed on the disabled or VI to cope in a non-disabled society and to cope with their limitations in a way not expected of the able-bodied.

#### **2.3.6 Work Attitudes**

What do people's actions and attitudes in the workplace depend on? The biggest hurdle the VI face in the able-bodied world is other people's attitudes. Wolffe (1998: 11-12) says that how others act depends on whether the VI person has the following skills:

- **Work experience**

Experience validates ability for the VI. Either paid or volunteer work is an important step to promote the VI person's career, as references can be obtained from people who have seen them in action. Prospective employers will then be able to discover the potential VI employee's worth.

- **Achievements**

A VI person has credibility when he/she has evidence of having accomplished tasks in the past.

- **Dependability**

A person is seen as dependable when they are willing to work until a task is complete. Employers expect all workers to be at work at all times (during working hours), to be on time, not to miss too much work for personal reasons and to be willing to stay after regular working hours now and again if necessary. Workers with VI should understand that employers see them in the light of their dependability.

- **Flexibility**

Today's job environment is constantly changing. Workers must be able and willing to adjust and try new things. VI people should acquire as many skills as possible, as versatile employees are more attractive to employers.

### **2.3.7. PERSONALITY**

Cutsforth (Zahl, 1950: 175) believes a VI person has both a personality and a social problem. The social environment, a world unaccustomed to Visual Impairment, affects the person's personality as he/she attempts to live in this world. VI at a later age may cause a rearranging of attitude towards oneself and of one's social reaction patterns. This leads to a change in personality, which in turn often leads to an added social barrier, as the VI struggles with the attitudes of others, and those that are self-inflicted. Both attitude problems separate him/her from society, and often result

in a feeling of social inadequacy.

### **2.3.8. DIVERSITY**

Society needs to recognize that separate facilities are inherently unequal, and that even an open door to an institution full of both attitudes related and culture related barriers does not guarantee equal opportunity (Crewe & Zola, 1983: 358). Furthermore equal treatment does not necessarily mean equal opportunity. This is because VI people may need special adjustments to their environment and people's attitudes. People with disabilities are as diverse as the human race, and are united merely by a functioning impairment and common social disenfranchisement. (Crewe et al, 1983: 360). It would be ludicrous to treat all VI people in the same manner as they come from different backgrounds and cultures, have different interests and abilities. Freedom, according to Macleish (Crewe et al , 1983: 357) is the right to choose and create choices for oneself. The VI should have same right to pursue careers that interest them as the rest of the workforce, who are also so different from each other in other ways.

When one asks why disabled people are not given the opportunity to choose, the answer may be that the values of society in general are threatened. Society is accustomed to discriminating and still thinks it is justifiable to judge a person based on what he or she can do.

People should however experience equality in treatment, regardless of their capabilities or limitations. An individual should have a choice as far as his /her career and workplace is concerned, and a willingness to accept the responsibilities connected to the consequences of their choice. Crewe et al (1983: 361) remind one that that which "we do to the disabled today, we will have done to ourselves tomorrow."

## **2.4 ORGANISATIONAL ENVIRONMENT**

When one examines workplace approaches to differences, one needs to ask if a business case can be made for employing VI people. In other words is it a financially viable thing for a business to do? One also has to ask if a reason can be found to retain and value the skills and contributions VI people make to an organization. If VI workers are valued, perhaps an environment can be created which enables VI people to fulfill their potential. The environment can play an enabling or an obstructive role. Individuals can experience a different severity of disablement in different environments. It all depends on the barriers people knowingly or unknowingly put between the VI individual and his/her ultimate success.

## **2.5 REMOVAL OF BARRIERS**

If all disabled workers are to realize their potential, their environment should be welcoming and accessible to all individuals with visual impairments. According to Woodhams (2000: 413) organizations advocating a total barrier removal approach to disability would have to examine their communications, premises, location, and job and work station design. Barrier removal for VI people would require a great deal of organizational disruption, specialist advice, training and money. The consequences may not be useful for all, as that which enables one disabled person may dis -enable another. Thus barriers, specific to VI people would have to be addressed, and these may not benefit those with other impairments.

## **2.6. TECHNOLOGICAL AND OTHER AIDS**

Technology has drastically changed the workplace, and has made it easier for the VI to obtain employment and perform more effectively at work. The significance of new technologies for VI people is increasingly gaining recognition. About 90% of the VI uses computers at work. And it can be said that computers are more important for VI people than for anyone else (Dobbs, 1999:

96). With proper training and adaptive technologies, such as voice synthesizers, Braille embossers, or pocket-sized Braille notepads, VI people can work in many different environments.

Despite this, some view technological Aids as a *mixed blessing*, because it leads people to think that the disabled person no longer needs assistance. Changes in technology can also be particularly difficult for blind people. When companies upgrade their technology, VI workers must also find compatible upgrades for their adaptive equipment. This means they regularly need to learn twice as much when new computer programs are introduced. So, although VI *challenges*, people constantly face new they also have a constant set of new opportunities arising from technological change.

Interestingly enough, according to Lachenauer (1999: 34), when professionals have an application for an innovation (for example a computer program that takes and reads back dictation) it has an added payoff for VI workers. The VI employee becomes a more accepted part of the workforce, as they are not considered different, when they profit from the same advancements as able-bodied people.

Computers, and the assistive technology that comes with them, are vital for the VI. Although technological and ergonomic aids are not the only answer to solving VI workers problems, they make a tremendous difference to their access to information, and their ability to function normally in the workplace. Each individual's specific needs must be taken into account when choosing the appropriate technologies, software and environmental setting. The VI person's input should be used at all stages of the process of design, both of computer related technology and of ergonomic environment. When adequate thought is put into the work setting, and appropriate adaptive technology is made available to the VI worker, he/she will have access to the

information and tools to be successful in the workplace.

Other positive aspects which technology offers are more employment options; a wider range of tasks the VI employee can perform; the possibility of flexible working arrangements and enhanced quality of working life (Swain, 1993: 241-242). Training also boosts confidence and creates a ripple effect, in that when employers see a VI worker prove his/her abilities – they are more willing to give another VI applicant a chance (Dodds, 1999: 100-101).

## **2.7. ADAPTIVE TECHNOLOGY (AT)**

AT is a device that allows individuals with disabilities to perform independently. Advances in adaptive computer technology give VI people an opportunity to access information and to participate at the workplace (Lazzaro, 1994: 1066). Personal computers (PC's) represent freedom and independence to the VI person, as they can be adapted for a wide range of visual problems. The PC is now the foundation on which most adaptive technology is built, as AT can easily interface with a standard PC. The thrust of these technologies is to change the keyboard or monitor, so that the user can read or input information in the format they need.

Most adaptive technologies work with the MS -Dos, Macintosh, and Windows operating environments. One to four megabytes of RAM, with a few expansion slots and a number of serial and parallel ports are needed (Lazarro, 1993: 59). There are countless examples of technologies that help visually impaired users, including: There are also a number of aids that make it easier to work at home. The workspace, which should be situated in the main living space, should be designed and adjusted to meet the workers specific needs. For example the home office is most accessible when it is located in the main living space. The desk needs to be the right height. Arm reach should be considered, and the placing of the telephone and other necessary items should be carefully considered (Syarto, 1998: 48- 9). Assistive Technology is

vital in this environment and must be chosen to meet the users' specific needs.

## **2.8 Some Causes of Late Blindness**

There are many possible defects or diseases of the visual system, but, fortunately, many of them appear after the first few years of life. There are still many malformations, defects, diseases, infections, and disorders that can affect the visual system among teenagers. The following selected terms include only a few of the many visual disorders found in young people (Culp, 1998).

According to Nobile (1997) and Pearson (1997) visual impairment can be either congenital or acquired. Many of the types of vision loss occur primarily in the elderly, so 4-H leaders and extension educators may not have exposure to these types. Types of vision loss that one most likely will not be exposed to in the 4-H setting are diabetic retinopathy, glaucoma, cataracts, and macular degeneration.

Patricia (2005:pp.1-2) notes that the following are some types of visual impairments that leaders and educators may encounter:

- 1. Rubella**—Vision impairment along with other disabilities can be acquired if a mother contracts rubella during her first trimester of pregnancy. However, rubella is not common in the United States because of widespread vaccination.
- 2. Accidents**—Accidents are a major cause of visual impairments in children. These can result from punctures, ruptures, or burns.
- 3. Detached Retina**—this condition is present when a retina detaches, and a hole is torn in the outer wall. This decreases blood flow to the eye and creates blind spots. It is most often associated with some sort of trauma such as a car accident.
- 4. Retinopathy of Prematurity**—this occurs in premature newborns when they are exposed to

100 percent oxygen for long periods of time.

**5. Trachoma**—this is a major cause of blindness worldwide. It is caused by flies that spread microorganisms that, when they enter the eyes, cause infection and subsequent scarring on a cornea or eyelid. Due to improvements in sanitation, trachoma is not prevalent in the United States.

**6. Retinitis Pigmentosa**—this is an inherited disease that can lead to blindness in adolescence or early adulthood. It can create night blindness, tunnel vision, and loss of central vision.

## CHAPTER THREE

### THE RESEARCH METHODOLOGY AND DESIGN

#### 3.2. The Research Design

Since the primary objective of the study was exploring the challenges late visually impaired people face, a descriptive research approach was used. Hence, the type of the research design employed was qualitative approach. Descriptive study that applies qualitative interviews and discussions for data triangulation and augmentation was carried out. One purpose is to explore and describe a specific population. The information obtained must provide more insight into the behavior or attitudes of the population. Such a survey is hoped to produce estimates of all kinds of population characteristics (Miller and Brewer, 2003). This is because the study tried to investigate the experience of those late Visually Impaired individuals and their adaptation techniques to their workplaces from within their own environments.

#### 3.3 The Subjects of the Study

The subjects of the study were four persons with visual impairment who lost their sight after the age of 18. These people are taking trainings at Addis Hiwot Centre in Addis Ababa.

#### 3.4 Sampling Techniques

Since the study took place at Addis Ababa City at a specific center, Addis Hiwot Centre which trains people with late visual impairment. Four persons with late visual impairment were purposely chosen were included in the study using purposive sampling technique. This is because the researcher believes that these people could provide the real information just based on their practical life and experience.

### **3.5 Sources of Data**

In the process of this study, both primary and secondary data were employed. Primary data was obtained from late blind individuals at Addis Hiwot center. An analysis of secondary data such as relevant documents prepared by the center and related documents from similar sources was undertaken. Furthermore, documents, reports, publications, of different studies, etc. was taken into consideration. It was hoped that through the analysis of such documents, gaps and challenges will be highlighted to provide an evidence base for improved and strengthened policy-making including programming in the areas of assuring quality.

### **3.6 Instruments**

In order to gather the required data, the following data collection instruments were independently employed:

The instruments used in this study were in-depth interview, focus group discussion and document analysis. An in depth interview was carried out with the late visually impaired individuals in the center.

#### **3.6.1 In-depth Interview**

As one of the major data gathering tool, in-depth interview was employed by this study. This tool is believed to be used among selected group of people who are seen as likely to provide needed information, ideas and insights on a certain topics due to the expertise they hold in that topic (Miller and Brewer, 2003). Hence, this research made use of in-depth interviews to gather information from individuals who have experience of late vision loss. The interviews were unstructured ones and will not follow a standardized interview guide which is hoped to give the interviewees scope to expand their responses. A total of four interviewees were selected to be interviewed. Three research assistants participated in the process of interviewing these

informants. The interviews were presented in the form of case studies, where an interpretive narrative derived from the data to be obtained in the interviews, were given. The case studies were then analyzed to determine the above mentioned similarities in the experiences of VI people adapting to the work environment.

Furthermore, in-depth interview research method has advantages which are seen suitable for this study. Interviews provide an excellent way of gaining factual information such as details on different issues (Miller and Brewer, 2003). This proved useful for this study as most of the information was obtained from representative samples. In-depth interview also allows the interviewee to speak freely and extensively about the knowledge they have on a certain topic (Miller and Brewer, 2003). All interviews were conducted in the local language and will be audio-taped. Then, the interviews were transcribed word for word and transcripts were then translated from the local language into English.

### **3.6.2 Focus Group Discussion**

As another tool of gathering the required data, focus group discussions were held with the selected individuals. It was held with selected persons with visual impairment from the center was carefully recorded with audio tape recorder and short notes were taken during the focus group discussion. Here the researcher's assistant was oriented to be keen in carefully recording the issue raised by the discussants. Furthermore, to keep the discussion engaging, themes were raised as points of discussion. Two focus groups were made for the focus group discussion. Each focus group discussion comprised 6 participants. A researcher can gather six to twelve people in a room for discussion (Neuman, 1994). This tool was believed to be effectively used with other tools as it gives flexibility to the researchers. Focus groups can be used both as a self-contained method and a technique which may be used in conjunction with others. Flexibility therefore is

one of the greatest benefits of this approach (Miller and Brewer, 2003).

Here, one group of discussants, each with 6 participants was formed for the group discussions. The recommended number of people per group is usually six to ten although it can work with a few more or less either way (Miller and Brewer, 2003). It is common to have only one focus group meeting with a particular group of people. The researcher, however, may on occasion deem it necessary to have more than one meeting with a particular group and therefore delve that much deeper into the subject with that group (Miller and Brewer, 2003). As the participants are all with vision impairment, they are believed to deliver the required information during the group discussion. While focus group participants do not have to be considered experts' on the subject matter, it is necessary that they have a specific experience or opinion about the issue under discussion. Here to avoid any sort of confusion about the purpose of the discussion and the time the discussion could take was explained to the participants. In the process of the discussion, some form of icebreaker was presented to the participants to make them feel at ease.

### **3.7 Procedure of Data Collection**

Data were collected through interviews to discover if the interviewees have faced challenges due to Visual Impairment. The focus was also to investigate what kinds of challenges they face. An interview plan/schedule was drawn up, to help keep the interviews consistent and similar, and to ensure all major issues are covered during the interviews. Data was qualitatively analyzed for trends, described and compared.

#### **3.7.1 Interview Schedule**

In order to ensure that the four interviewees were undertaken in the same manner, focusing on the same issues, an interview schedule was used. The interview schedule was developed by the researcher, based on the aims of the research and the information obtained from the literature.

### **3.7.2. Administering of Interview Schedule**

The four participants were interviewed by using the interview schedule as a guide. The researcher made notes of the participants' answers and comments. When the participants' comments strayed far from aims of the study, the researcher used the schedule to return to the topics that had been decided before setting up the interview schedule. Each interview took about 30 minutes to complete. The interviews were recorded using tape recorder to capture the details, and notes were made.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSIONS**

#### **4.1. INTRODUCTION**

This chapter presents the data gathered through interview, observation and focus group discussion. These tools were used because it was hoped that the result obtained would be valid. The findings of the data collected using the above instruments are organized into four major sections. The first section presents the results for the case study of the first individual; the second section for the second; the third for the third and the last one for the fourth participant. In all cases the discussion is supplemented by the review of related literature. Furthermore, each case study results have been backed up by the results from other data collection instruments such as the focus group discussions and others employed by the study. All the results obtained by the aforementioned tools were analyzed qualitatively.

##### **4.1.1. Identification of issues in the lives of participants with late visual impairment**

Those issues, with which almost all participants agree with on, are identified as possible issues in the majority of late visually impaired people's lives. Other issues that came to light during the interviews, from the answers of persons with late visually impairment were also identified as possible topics of interest to the persons with late visually impairment.

##### **4.1.2. CASE STUDIES**

The interviews are presented in the form of case studies, where an interpretive narrative derived from the data obtained in the interviews, is given. The case studies were then be analyzed to determine the above mentioned similarities in the experiences of persons with late visual impairment adapting to the work environment.

Before the analysis of the data obtained from the subjects, the following assumptions were made:

- ❖ Recent visual impairment is more challenging
- ❖ The persons with visual impairment adapt to the work environment.
- ❖ The persons with visual impairment must make certain adaptations to cope up at work under their new circumstances.
- ❖ Adaptive technology and equipment, training and support are necessary and helpful to the persons with visual impairment in the workplace.
- ❖ Some participants with visual impairment are doing jobs they want to do, and others are not.
- ❖ Some persons with visual impairment feel normal and have always feel normal; others need physical and social barriers removed, to feel normal; and yet others would feel normal if they could have those things they took for granted before, back .
- ❖ The positive reaction of colleagues, clients and managers depends on two things: their knowledge of the persons with visual impairment and the persons with late visually impairment attitude to life and his/her impairment.
- ❖ Most people with visual Impairment need and can find some form of meaningful activity in their lives.

#### **4.2. CASE STUDY 1(C1)**

He is a 26-year -old man who became visually impaired due to a disease that burst in his head. As a result of high blood pressure, five years ago. In his own words he said, "...for the last four years, my vision has rapidly been declining...".He has been working for three years in his present position. He has started to struggle considerably more, during the past three years, as a result of his deteriorating eyesight.

He experienced a great deal of frustration during this period, and found the newly emerged loss of sight difficult to live with. He has become more aggressive. He often feels hopelessness and isolated. Simple tasks like, buying groceries have become difficult and he ends up feeling like he has lost control of his life. He said that he often has to pretend what he is doing is all right even when it is not, and uses humor as a defense to hide behind.

The problems and emotions he experienced have only been getting worse over the last two to three years. He cannot play with his friends with sighted anymore. His lifestyle has been affected.

He feels more relaxed when he is with persons with visual impairment, but feels uneasy with sighted people, as he feels self-conscious when he is with them.

Technology has helped at work and assists in making him feel more worthwhile, as it gives him independence. He has however, lost some independence, as he cannot walk around with ease anymore, but did not use a cane, as his pride does not allow him to. He lost a good deal of motivation regarding his work because he has achieved no increment at work.

All of these restrictions and difficulties perceived and real, have led to his suffering from depression. Even his religion is now in doubt. He feels like he is losing control of his life, and for over the last four years, has not felt like he has gained any control over any aspect of his life.

The only meaningful activity he feels he has in his life includes the opportunity to play some mobile games, and participate in some private activities. He uses the JAWS software, with a speech synthesizer that tells him the numbers he is looking for in his mobile and computer.

Others no longer think he needs help, and this makes him feel good. It is the most significant that he has increased independence. He feels he has more control over his work environment, as he now knows where the phone calls come from. He feels more professional and has more self-

respect.

He says that Technology (i.e. computers) increases his performance in job and study opportunities. In his company he has however, come up to a good position within the organization, due to management's view of his incapability to do a job he truly believes he can do.

He is not segregated from others at work, but he feels he cannot move around the building. When he wants to go out far from the center for his personal cases, he finds it difficult to move outside.

He moved his desk into a corner, because he wanted to be away from others, due to anger at the situation he finds himself at work. His co-workers ask others for help, not him. They side step him so they don't have to talk to him. He thinks they see him as incapable. He hides behind humor so that he can be seen as a person.

He feels that the people are ignorant, and therefore won't give him a chance to prove himself.

They don't realize he has useful ideas, because his impairment makes them think he can't think.

He says management in the center does not acknowledge the problem. He feels he has to work harder than others to prove him. Others respond to him inappropriately in that they talk to him as if he is incapable. This, he says, is due to ignorance of his abilities.

His co-workers see him as unmotivated, since he no longer tries as hard as he used to. They do however think he has adjusted well to his job, since he can do it well and without any difficulty.

He feels like he is expected to cope up with sighted people's rules. He has to get to their level. His company does not integrate his non- work related problems with his work related problems. He, for example, must organize his own transport, which can be a difficult issue at times.

Previously he was not very aware of the laws regarding people with special needs. He was scared of losing job and will therefore not fight about any issues either. This was because the management lacked knowledge and understanding, and his lack of skills due to lack of training on the rights of

people with special needs.

Currently, he feels the management and co-workers have supported him adequately, and he has been trained sufficiently to overcome some challenges he faced due to his impairment. The JAWS program helps him to do his job properly. In this regard, he appreciates the service he obtained from the center.

The most serious problem he encounters is a lack of communication with management as he feels they don't have time to speak to him. They furthermore don't inform him of change. The authority to speak with/negotiate with department managers could rectify this, but he feels he does not have this authority.

He does not think his vision is important in the kind of job he does. When his co-workers write messages, he types on his computer. Furthermore the software on his computer enables him to know exactly what is going on. He says he used to experience job satisfaction, but now he does not as he feels so de-motivated.

He says work was not so hard to adapt to, but he is not motivated to adapt anymore. Emotionally, he said he had to get used to the idea that others were looking at him all the time. He felt like he was being discriminated against.

He is not doing the work/job he would like to do. When he was younger he had an ambition to be medical professional. However he is successful as training coordinator / facilitator.

He also says he feels normal, he feels like a human being. But sometimes he feels frustrated, as he can't always do all the things others can do.

He says he would also feel a lot better about life, if the organization he works for would give him more a chance. He thinks his employer should make more of an effort to accommodate his promotion with the organization.

He thinks the persons with visual impairment can adapt in the workplace once they settle in and get comfortable. He says he would feel more normal and happier like he used to if the barriers at the work place are removed.

#### **4.3. CASE STUDY 2(C2)**

The second participant is a 32-year -old man who was born in Oromia region Hararge zone. Currently he is living in Addis. He lost his sight at 27 due to a Brain Tumor. The Brain Tumor was not diagnosed in time, and grew exponentially against the optic nerve, until he loses his sight. At first he lost sight for 10 seconds at a time. Soon he was not able to see anymore. The Brain Tumor caused him to start becoming psychotic as well. It was a very traumatic experience. He had an operation to remove the tumor in 2005. When he woke up, although he had completely and permanently lost his sight, he felt peaceful.

Since then, he has had no time to feel sorry for him as he set about building his new life immediately. He underwent rehabilitation and counseling through the center for the blind at Addis Ababa.

The most difficult time was the 5 days after the operation when he was inactive. He says he started to listen to tapes – from Tape Aids for the Blind – to try to understand what he was going through. He asked a Psychologist to help him with coping up life skills. He says he is not angry about what has happened to him. He is optimist for life and emotionally stronger and more motivated than he used to be.

He had been working not only as a welding professional at a building construction site, but also as a professional carpenter. Currently, he is usually busy with his current jobs. He took an assertive stance and an independent course for the blind at his own self initiation.

According to C2, he felt stronger and more confident. He positively says great things have happened to him. His effort has given him a large degree of independence, as he is active social participation. Computer training he has gained from Addis Hiwot center has also been of enormous assistance to him.

He says he accommodated himself to his new restrictions speedily, and has never felt anything but normal. In fact he has not felt like he has lost control of his life any more.

He believes his life is full of meaningful activities. However, he had to start from scratch to learn to walk, eat and listen, and this took time. His focus was to lead 'the most normal' life he could. But he could not achieve easily.

He uses various kinds of specialized equipment. He has a cane to walk, digital recorder, and talking watch. Computers are also of great use. He has access to e-mail and the Internet. He uses JAWS software, which reads what is on the screen to him. He can also scan documents on computer, and JAWS reads them to him. He had some of these technological aids from friends around and from the center, which were a great help as they are relatively expensive and inaccessible.

He says that although he does not like people to help him unless he asks them to, people do meddle, thinking they can help. He however feels that he would rather ask for help when he needs it. He is not ashamed to ask but he just wants to see if he cannot do it himself first.

C2 says he has experienced technology to be an exceedingly positive thing in his life. It has increased his ability to communicate, to read and write, to study and to record words. It has given him independence and dignity. Technology has increased his employment options. He can perform a wider range of tasks. He agrees that technology has improved the quality of his life, at home and at work and anywhere else.

The negative things he has found about technology are that it can be cumbersome, expensive, not always accessible, and not advertised sufficiently, so that persons with visual impairment and their employers often don't know the technology is available. He only has access to a computer at work, but is fortunately not segregated from the other employees.

He felt unnecessary to adjust his working environment in any way. His employers have been good to him, but have made no adjustments on his behalf, as he did not want to be treated differently to his colleagues.

He says at first his colleagues wanted to help him, but soon saw it wasn't necessary. His co-workers have a positive attitude towards his impairment and do not express pity or embarrassment, although they do display a lack of knowledge about the problems involved. His co-workers see him as well adjusted and he does not feel he has to work harder to prove himself than others do.

Some people do act inappropriately towards him. Some people shout as if he can't hear. He says that, as soon as one explains the situation to people, they get over it. He says, how one acts, depends on how one feels about oneself. His own attitude is the key to how others act towards him.

He does not think sighted people should accommodate him and believes it is his responsibility to adjust his impairment and his environment. His employer tries to offer him assistance, but he maintains that he does not need more help than others.

He is aware of the country's legislation regarding persons with disability. He does not think there are equal opportunities for people with disability. Persons with visual impairment are at a disadvantage in the workplace because there are many things they cannot do and they therefore

have certain limitations and do not think employers should do more to accommodate employees with visual impairment as this would make them a burden, and they need not be a burden. He says he does not want to be a burden.

He feels that his co-workers and management support him adequately. He has also been trained sufficiently to help him overcome his challenge at work. He says the only adjustment made for him at work was an accommodating attitude. The biggest problem he had to cope with at work was sighted people's resistance to the idea that his abilities were intact.

As to C2, he has emotionally accepted his impairment and does not see it to be pessimist for life. He says one will always need new skills, and cannot ever adapt completely. He is doing the job he wants to. He got the job because of his proven track record from his previous sighted life. Old acquaintances had faith in him and gave him a chance, and he believes he is good at his job. He believes Persons with visual impairment can do anything they set in their mind. He had to adapt to the fact that people think he is useless because he is visually impaired. He thinks Persons with visual impairment are not seen as equal. He had to adapt to new technology, learning how to find things and places, and how to move in the available space.

He thinks it is generally difficult for Persons with visual impairment to adapt in the workplace. For him it was easy as he could carry on in his career. But he believes Persons with visual impairment can redevelop in new directions if the barriers they encounter at work are removed.

#### **4.4. CASE STUDY 3(C3)**

C3 is a 38-year- old woman, who has diabetics, which has caused her sight to deteriorate considerably over the last ten years. She is one of the few individuals who established Addis Hiwot Center for the blind. She had been working in water resource development organization for more than ten years and has been moved from the organization due change in regime. Bitterness was the

have certain limitations and do not think employers should do more to accommodate employees with visual impairment as this would make them a burden, and they need not be a burden. He says he does not want to be a burden.

He feels that his co-workers and management support him adequately. He has also been trained sufficiently to help him overcome his challenge at work. He says the only adjustment made for him at work was an accommodating attitude. The biggest problem he had to cope with at work was sighted people's resistance to the idea that his abilities were intact.

As to C2, he has emotionally accepted his impairment and does not see it to be pessimist for life. He says one will always need new skills, and cannot ever adapt completely. He is doing the job he wants to. He got the job because of his proven track record from his previous sighted life. Old acquaintances had faith in him and gave him a chance, and he believes he is good at his job. He believes Persons with visual impairment can do anything they set in their mind. He had to adapt to the fact that people think he is useless because he is visually impaired. He thinks Persons with visual impairment are not seen as equal. He had to adapt to new technology, learning how to find things and places, and how to move in the available space.

He thinks it is generally difficult for Persons with visual impairment to adapt in the workplace. For him it was easy as he could carry on in his career. But he believes Persons with visual impairment can redevelop in new directions if the barriers they encounter at work are removed.

#### **4.4. CASE STUDY 3(C3)**

C3 is a 38-year- old woman, who has diabetics, which has caused her sight to deteriorate considerably over the last ten years. She is one of the few individuals who established Addis Hiwot Center for the blind. She had been working in water resource development organization for more than ten years and has been moved from the organization due change in regime. Bitterness was the

predominant feeling that she experienced, as she could not do the things other people take for granted. The loss of independence and not being able to control her own transport bothered her most.

Depression led to passiveness and that led to withdrawal. The last ten years were the worst, and things have been getting even worse all the time. She can no longer walk without a cane. Even going down stairs is difficult for her.

Nevertheless she says she has been growing more confident. She says she has been going through this process for some time and is still adapting. Recognizing people becomes more and more difficult. She feels uneasy for not greeting acquaintances and friends. When it becomes obvious that she cannot see them, and they realize she has a problem, it gets better though.

C3 believes there is always a way to deal with problems and restrictions. She does not feel inadequate; she does not even feel impaired, it is not holding her back. If she compares being Persons with visual impairment to other diseases, it seems like a small problem to her. She says she is accustomed to her impairment and copes well at work. Her husband drives her around, so she has access for transportation.

Being able to walk alone with her cane gives her a lot of independence. She admits she avoids strange situations or she takes someone with her. Even at the darkest times, she never felt she had lost control of her life. However, she is still suffering from depression. She also says she has a full life, full of meaningful activities, including playing some games and spending time with her family.

C3 uses various types of technology or equipment aid at work. The tape recorder is the most important and cheapest aid at her disposal. It plays the biggest role in overcoming her problems. Books are also available on tape for her. Her assistant reads her a good deal of documents and correspondence to tape for her. She also has other people who read her if she needs them to, for

example her husband.

The newest technology that she uses is Braille and Speak, which writes Braille for her. Type and Speak, which she recently acquired has an ordinary keyboard and is portable. She can type, accurately although not fast. She can type whilst on the telephone. Later she can retrieve those notes and information, by having the computer speak them back to her.

JAWS is another computer programme C3 uses to assist her at work. It works on a normal PC, and uses windows, reading all the text on the screen to the user. The programme helps to make her more independent. Finally, she has a little note taker, which looks like a calculator, and takes messages.

According to C3, the fact that people are inclined to think she cannot do things, has a positive and negative side. On the one hand they are always willing to help, and yet on the other hand many people are unwilling to give her work

Technology has however given her independence that she recognizes as enriching her own level of satisfaction. Technology has probably increased her employment options, but she would prefer to remain working for herself. She also thinks jobs are hard to find.

Although she says she is still learning, she thinks technology will allow her to complete a wider variety of tasks successfully. Technology will also eventually increase the quality of her working life, like when she can do things for herself and knows she has done them right. Computers can also be a negative influence as, according to her, a person can become "stuck on" them, and end up being tired by them.

She has no problems with her colleagues at work place. Her colleagues are not told beforehand about her visual impairment. She only tells them when they actually arrive at her office, as she does understand much about the situation of visual impaired people. She then usually asks them to read the documents to her themselves to show that she has confidence over them.



On the whole she mentions that she usually receives positive reactions from her colleagues who can see. Initially they seem to think less of her, but as she takes control of the situation, their confidence grows. She says a display of knowledge about the law helps her colleagues believe in her.

She says it is difficult to see if they pity her, but if they patronize her, or condescend to her, she amends them quickly. She tries not to be over sensitive, but does not hesitate to request colleagues not to talk to her in an inappropriate manner. She says that if their reaction is stronger than she is able to cope with, she must accept it and let them go as if nothing happens.

She admits there is a lot of ignorance about the visual impairment. People are inclined to think they are helpless. At the same time although people don't understand the problems she faces, they don't acknowledge them. She does not really think she has to work harder to prove herself. She says it is, however, vital that she be persistent and keeps trying until she succeeds. She believes people do expect her to follow sighted people's rules. That's why she created a niche for herself where she can follow her own rules.

C3 is aware of the country's legislation regarding people with impairment. She thinks, as jobs are scarce; it is difficult to get an equal employment opportunity. Proper equipment and technology help, but the lack of these things put the Persons with visual impairment at a substantial disadvantage in the workplace. She also thinks that people won't assist their visually impaired colleagues enough, as they are not used to helping others.

As far as training goes, she has trained herself to use the necessary technological aids. In this regard, C3 gives her witness the contribution of Addis Hiwot center for the blind to be of tremendous. She says this can be difficult as it takes time and can be expensive if such centers are not locally available. According to C3, adapting to her impairment is a lifelong task, which is

ongoing. The last year was bad, and she expects it will take her a few more years to adapt enough. She still needs to learn to walk more regularly with her cane. Until now she has been trying to walk without the cane, to do it her "own way". She acknowledges that she will eventually have to do it the "blind way". She says she is doing a challenging job that she likes and studied to do. She might have liked to try something different, but now she must stay with this career.

Finally, she says, as a person with an impairment it might even be better for her to have a job with less stress, and therefore less challenge. This indicates that works are not limited with impairment they have, instead the performance they show in the area.

#### **4.5. CASE STUDY 4: (C4)**

C4 was born and grown up in Gojjam, Motta town .She is a 28- years -old woman who started losing her sight at age of 23. She suffered from Brain Tumor and a rare eye disease, which caused her retina in her right eye to detach. She has reduced sight in her left eye, and apart from only being able to see from a very short distance, she runs the risk of her left eye's retina becoming detached due to her disease too.

Currently she is a second year student at Rift Valley College. She used to work as a secretary at a private organization in Addis Ababa, but after losing her sight she left at her own personal will due to her illness. But now she got returned to her previous organization. She spent 7 months at home in bed having to lie on her stomach due to the operations she had to undergo on her eyes. This was the hardest time for her, as she could do little, and worried about losing her job. She felt isolated, depressed and scared. She then tried to go back to nursing but within 2 days she knew she could no longer functioning effectively as a secretary.

According to C4, as soon as she started to take action, she started to feel better and in control of her life. Training, run by the Addis Hiwot Center for the Blind, gave her a kick-start of helping her to

prepare herself for the challenges she had to face.

As time went on, she found out it was not so bad to be visually impaired. There were people and technological aids to help her.

She accommodated herself to new restrictions, although she felt the hardest part to bear was not being able to be visual anymore. She also misses the simple things one takes for granted, like sunsets and being able to see the products on the shelves when she goes shopping. She says those small things in life now have more value for her now. Due to this loss, she does not always feel comfortable.

C4 says she has a lot of independence, as she is able to catch the bus to school and use technology to help her with her daily tasks. She also has enough meaningful activity in her life. She is studying a secretary science in the diploma programme at the Rift Valley Private College. She uses various technological aids, such as laptop computer, the JAWS, and the Braille for her daily routine, or she asks for help without any shame if any for what the products are on the shelf in a supermarket. On her computers, at home and at work, she uses Word and Excel and the Internet, and uses the JAWS for her readings. She says she has found computers to be friendly with Persons with visual impairment, helping her a great deal with her studies

She agrees with the idea that people tend to think one no longer needs help once one has technological aids. Fortunately, her families and friends help and support her a lot. Technology has increased her employment options, as she can accomplish a wider range of tasks. It also increases the quality of her working life.

At work, she adapted her working environment to suit her better. The height of the computer was adjusted and made mobile. An extra light was put in to assist her in making the most of her remaining vision. She says her employer has been very good to her, making a big effort to help her

with the situation to her workstation.

All her co-workers were empathetic and supportive when she returned to work. They have a positive attitude towards her impairment. She says they are more inclined to joke about her impairment than be sorry for her. Her co-workers asked many questions about the things they wanted to know. She thinks, it helped a lot that her co-workers were young people.

One of the biggest problems she experienced was that she appears to look past people even when she feels she is looking directly at them. She says she finds it hard to tell people that she is actually looking at them and therefore talking to them and feels that she has to work harder to improve herself, as she is afraid that people will think she is taking chances and relying on her impairment to pull her through. This, she says, also applies to her studies.

Her co-workers therefore see her as both motivated and well adjusted. She says she is furthermore not expected to cope according to sighted people's rules. Her management is very supportive, and has been throughout the whole process. She was given time off for her operations and still taking her salary, and was given a whole new leave cycle when she returned to work.

She is aware of the country's law regarding disabled people. She says she's not sure about whether they get equal employment opportunities, as she has not needed to look for a job. She would say that any job that involved sitting behind a computer should suit for Persons with visual impairment just fine. It is walking around which would pose a problem.

Addis Hiwot Center for the Blind provides various trainings like: Rehabilitation, Typing, Braille, Computer Introduction, Telephonic and Visual Basic courses, which her center arranges for the Persons with visual impairment, she has been adequately trained to overcome her, the challenges at work.

She also says she experiences job satisfaction. She has a good deal of autonomy as she is allowed to do her own thing and arrange her job as it suits her best. She has thus been able to put new ideas into operation. She figured the telephone management system out on her own and computerized the codes and speed dials herself.

C4 says it took her a year to adapt completely. She had to accept that she could no longer be a secretary, could no longer struggle to talk to people. She has to walk against the wall and had to change her job. She says that she is doing the job she wants to do now. It will probably not be for life, and when she finishes studying, she'll move on to new things.

At last, she believes that as some doors close to one, others open. She says there are many other things one can do with his life. All you need is support.

## **4.6. COMPARISONS OF CASES**

### **4.6.1. INTRODUCTION**

Similarities and differences were identified between the case studies, based on the issues identified in the interviews. Comparisons were then drawn between those interviewed.

#### **4.6.1.1. Similarities between case studies**

#### **4.6.1.2. Emotional Adaptation**

All the Four Persons with visual impairment involved in the case study received rehabilitative training, and as a result appeared to cope and adjust in a more positive and motivated manner. In some cases Persons with visual impairment should train themselves, and consequently seemed to struggle considerably more to adjust and move forward. Furthermore, all the four Persons with visual impairment said that they had more independence now, as they had all lost some or all of their independence when they lost their sight. Technology, however, played a large role in their

regaining independence.

All participants feel like they face some sort of barriers at work that make coping harder. They feel that management and the uncaring attitude and ignorance it displays, plays a large role in holding them back.

The four Persons with visual impairment all felt a variety of basically similar emotions. Isolation, hopelessness and depression characterized their experience of becoming visually impaired. Some felt the need to pretend they were coping better than they were. Some felt frustration, fear and bitterness, along with a loss of control. Moreover, almost all of them began to feel stronger and more confident, if not fully adapted, within a year of their seriously starting to lose their sight. One can also see the idea that one continues to adapt coming through in their stories.

Each of the participants accommodated him/herself to the restrictions accompanying becoming visually impaired. C1, although he accommodated himself to his restrictions, still struggles as he feels management should make more of an effort to accommodate him. C2's accommodation was quick as he took an assertive and independent course. This is perhaps what is missing in C1's view of his situation. He, by comparison, seems inclined to feel sorry for him.

In a different way, each of the participants feels he or she has control over his or her life. C1 feels technology helped him regain some control, although in as far as the other elements of his life go he does not feel he has control. While C2 and C3 feel they never lost control, C4 says that taking action, and not being passive helped her regain control of her life. One can furthermore see that in all the case studies the participant is coping with the emotional demands of his or her job.

Although most of those interviewed expressed that they had experienced loss in some way, C4 and C2 were the ones to point out that new doors have opened to them that may not have, if life

had not taken this turn. Each of them feels they have some kind of meaningful activity in their life. C3 said her life is full of meaningful activity. C2 pointed out that balance and growth in life are important.

C2, C3 and C4 (those with training, support and challenging jobs) experience job satisfaction. C3 likes her job as it is challenging, and it helps that she is using what she studied. For C4, the autonomy that Addis Hiwot center for the blind gives her, along with the training she received and can use, provide her with job satisfaction. C1 and C2 are both too demotivated to experience job satisfaction as a result of their management's lack of support.

#### **4.6.1.2 Reactions of others**

The participants experienced their co-workers reactions to their being visually impaired in different ways, but on the whole their experiences were positive. C1 feels embarrassed and believes his co-workers think he is incapable. C3, on the other hand, said that although her colleagues are often surprised and perhaps slightly negative at first, they generally end up with a positive attitude when they see she is capable.

Only C1 and C2 think people express pity and embarrassment towards them. At the same time all of the participants, with the exception of C4, thought some people sometimes acted inappropriately towards them. On the other hand, all of the four participants experience the feeling that people are ignorant about the Visual impairment and their experiences and capabilities. Only C3 and C4 think people acknowledge their problems, yet only C1 and C4 feel they have to work harder to prove themselves.

Likely almost all of them feel they are expected to cope accordingly to sighted people's rules. C4 has received a great deal of support from her families, her friends and her employer, and they have assisted her a lot with all her problems, including those not related to work. She

understandably does not feel pressured to cope with sighted people's rules. C2 however does not think he should be accommodated by sighted people. He stubbornly says that although his employer would assist him with his personal problems and issues, he prefers them not to help him, as he does not want to be a burden.

C2, although he is not keen to recognize them, admits there are social barriers in his path. C1 feels that management is his major barriers, and feels inclined to suspect his co-workers and the public of pitying him. C3 thinks that his clients can be construed as a social barrier. C4 does not see herself as confronting any social barriers, as she receives so much support.

#### **4.6.1.3. Technological and other Aids, and the Environment**

Technological aids and equipment have been used in some form by all of the participants with visual impairment, to help them cope with their environment, and their life. Four of the positive consequences of technology in their lives seem, predominantly to be an increase in their independence, dignity and control over their lives. They are also more functional at work. All the four participants felt that their employment options had been increased by using technology. They furthermore feel they are able to accomplish a wider range of tasks and that technology increases the quality of their working life. Despite this, C3 prefers to work for herself, and C1 feels his present managers would need to change their attitude, if they were to offer someone like him an equal opportunity at work.

Those interviewed all have access to computers, and are segregated only in terms of their having specialized software on their computers. Socially some of them have separated themselves by moving their desks away from co-workers. With the exception of C2, who feels it to be unnecessary, each of the participants has adjusted his or her environment to suit him or her better.

The physical barriers that the case studies demonstrate include open plan environments that make

movement difficult and people walking around, who need to be avoided – as C4 does by hugging the wall when she walks. C2 uses a cane that helps him to negotiate his environment. C3 struggles to find her way around, and is still learning to be independent with only a cane to aid her. She finds it particularly difficult in the office if someone leaves something where it is not supposed to be.

#### **4.6.1.4. Legislation**

Although the participants are aware of the country's legislation regarding disabled people, including those who are visually impaired, they do not think there are equal job opportunities for persons with visual impairment. C3 notes that jobs are already scarce without employers having to deal with the accommodations that need to be made for the visually impaired. C1 does not think employers realize that affirmative action is actively supposed to include the visually impaired. As C4 has not had to look for a new job, but has remained with the same organization, she is not sure if there would be equal opportunities for her out there.

#### **4.6.1.5. Training and Support**

All of the participants feel they have received adequate support from co-workers and Addis Hiwot center. C1, however, questions management's level of support. C2 and C4 received training which influenced their lives in a tremendously positive way, whereas C1, and C4 basically had to train themselves to use their technology.

#### **4.6.1.6. Adaptation**

All the participants adapted to their impairment. They all believe persons with visual impairment can adapt to their new lifestyle. C1 says that it took him short time to adapt to the working environment. C4 says it took her one-year to adapt; and both C2 and C3 said it was a lifelong process, as one cannot ever adapt completely.

#### **4.6.1.7. Some differences between the case studies**

The four participants have different working environments and even lives. Only C2 and C4 appears to be doing more than just making the best of a bad situation. C3 is doing what she wants to do, and C1 says it's what he "wants to do now" while he studies to move on.

C4 and C2, who underwent the rehabilitation, seem to be more positive than the others. They are positive about the new directions life can offer them. Although each of them experienced a different group of emotions, the experiences were similar. Despite this some of them are more motivated than others. C2 and C4 are for example more motivated, while C3 is coping, and C1 is demotivated about life and his opportunities.

While C1 and C4 felt they had to work harder to prove themselves, C2 and C3 merely felt had to persist until they succeeded. C4's employer is very supportive about her private problems and assisting her. C1 feels his employer pays no attention to his non-work related problems. C2, not wanting to be a burden under any circumstances, does not want assistance with his personal, or any other problems.

The participant's opinions about whether people withhold their help once the visually impaired had adaptive technology at his/her disposal, is inconsistent. Only C1 and C4 seemed to think this is the case.

The few comments made about the negative impact of technology in the lives of the visually impaired include, according to C2, the fact that it is cumbersome, expensive and not always easily accessible. C3 thinks people can become overly involved in the technology and C4 says people are ignorant of the benefits of technology.

Various things are thought by the participants to put them at a substantial disadvantage within the workplace. C2 thinks there are many things visually impaired cannot do. A lack of the necessary

technology and equipment will, according to C3, make it hard for persons with visual impairment to accomplish the necessary tasks. Having to move around and not being able to sit in one place at your computer is what C4 sees as a problem.

The following are seen as the most serious problems to be faced at work: C1 thinks that lack of communication is a problem as management appears not to have time to speak to him, C2 sees sighted people's resistance to the idea that his abilities are intact as the biggest problem he encounters, C3 believes ignorance to be the most prominent problem she faces at work, C4's appearing to look past people makes life at work hard for her and lack of opportunities to move upwards in his organization, and his resultant negative attitude are the issues that bother him most at work.

## Chapter Five

### Discussion

- i. Persons with visual impairment do adapt to the work environment.

All four of the participants in this study have adapted to their work environments. It has taken them different lengths of time and amounts of effort to adapt, and the process is not necessarily complete. Yet they all agree that it is possible for them to adapt to the work environment.

- ii. Persons with visual impairment must make certain adaptations to cope at work under their new circumstances.

They have to make diverse kinds of adaptations, from accepting that they can no longer do the job they want to and have been doing, to learning to use new adaptive technology, to learning to move around and to find things, adjusting to people thinking they are stupid just because they cannot see, learning to talk to people despite their own embarrassment of their situation, or the sighted person's inappropriate response towards them.

- iii. Adaptive Technology and Equipment, Training and Support are necessary and helpful to Persons with visual impairment in the workplace.

Persons with visual impairment cannot function effectively in the work environment without the right technology or equipment that reduces or eliminates the obstacles they face at work. They need training to be able to use that technology effectively, and support from both management and co-workers to give them the knowledge that someone will help them if necessary, and also give them opportunities to improve upon what they are busy with at the moment.

To illustrate these needs and the probable results if they are met, one must ask what all the participants have in common. C2 and C4 both received rehabilitative training and as a result, have positive outlooks on their careers and the opportunities life offers them. They plan to move on and

achieve something with their lives; they look ahead and take on new activities, and believe it is possible to make something more of themselves.

C1 feels he lacks opportunities for growth, challenge and upward movement at work. He has not received much training to use technology or equipment that will assist him to move on at work, or even any form of rehabilitative training about coping as a Person with visual impairment. He has also not experienced active support at work from management and consequently is demotivated and has negative attitudes.

- iv. Some of the participants with visual impairment are doing jobs they want to do, and some are not.

Nowadays the person with visual impairment can do most jobs with the right training, equipment, technology and support. Education, the organization's attitude, the person with visual impairments Attitude and the track record of the person with visual impairment also affect whether or not they are doing the job they want to or not.

- v. Some person with visual impairment feel normal and have always felt normal; others need physical and social barriers removed, to feel normal; and yet others would feel normal if they could have those things they took for granted before, back.

Participants such as C1 and C2 both think person with visual impairment would feel more normal if physical and social barriers were removed. C4 specifically notes that she would feel more normal if she could still see and appreciate the things other people can.

Ignorance is seen as a major issue since sighted people react negatively or inappropriately towards person with visual impairment. This is due to misperceptions about person with visual impairment people's capabilities and a lack of knowledge about their potential if they have the necessary

technology, training and support.

Persons with visual impairment attitude seem to depend largely on what form their rehabilitation takes. Those that receive training and support are positive about life and their prospects. Other people pick up on this positive attitude and seem therefore to treat them positively too.

- vi. The positive reaction of colleagues, clients and managers depends on two things: their knowledge of visual impairment the person with visual impairment attitude to life and his/her impairment.
- vii. Most people with visual impairment need and can find some form of meaningful activity in their lives.

The participants mentioned various aspects regarding their present life that gave them the feeling that they have meaning in their life.

The opportunity to study, job satisfaction, and spending time with their families and colleagues are some examples of the activities that they feel give their lives meaning.

- A chance to prove themselves and opportunities to encounter new experiences.
  - i. The understanding and knowledge of others regarding Visual Impairment, i.e. sighted people's awareness of the issues in person with visual impairments lives and their capabilities.
  - ii. A positive attitude about their life and opportunities, due often to training and appropriate support. Supportive employers and co-workers in the work environment.
  - iii. Adaptive Technology that the person with visual impairment has been trained to use optimally.

## CHAPTER 6

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.1. CONCLUSIONS

Based on the findings of the research, the following conclusions were drawn.

- ❖ There are various similarities between the experiences described in the four case studies.
- ❖ Furthermore, there were experiences that differed from those of the other participants with visual impairment interviewed, during the search for appropriate candidates.
- ❖ If one then looks at the similarities, one sees a number of possible issues that the majority of participants with visual impairment might experience in some way or other.
- ❖ The issues that were not necessarily the same between the participants could be things some participants with visual impairment experience.
- ❖ Having explored how those becoming visual impaired adapt to their work environment in regard to various issues, such as their emotional reactions to events they experience, the technology they use to function more efficiently, the training they receive to be able to adequately use the adaptive technology at their disposal, the support they receive from co-workers and management, their co-workers reactions to their impairment and their knowledge and belief in the legislation relevant to the persons with visual impairment.

#### 6.2. RECOMMENDATIONS

From the discussions of the findings of the current study, the following recommendations have been made:

- ❖ Employers should become knowledgeable about the potential of persons with visual impairment, rights, needs and abilities, and the benefit of the right kind of training. In this way they can include these diverse members of society in their organizations and benefit far

## References

- MacLaoghlin, J. (2009). What Every professional Needs to Know about A Special Education. (2<sup>nd</sup> ed.). Crown Press.
- Mimillan, h. & Schamacher, S. (2010). Research in Education: Evidence –Based Inquiry (7<sup>th</sup> ed). Preason Education, INC,Upper Saddle River, New Tersey
- Patton, M.Q. 2002). Qualitative Research and Evaluation Methods. (3<sup>rd</sup> edu). London: Sage publications, Inc.
- Avolainen,, H., & et al (2006). When All Means All: Experience in Three African Countries with EFA and Children with Disabilities. Hakapaino Helsinki.
- United Nations Education, Scientific and Cultural Organization. (1994). The Salamanca Statement and Frame Work for Action: On special Needs Education: Access and Quality. Salamanca Spain.
- Varma, V.D., Evans,P. (1990). Special Education: Past, Present and Future (1<sup>st</sup> published). The Flamer Press London-New York. Philadelphia.

