

EQUITABLE ACCESS TO HEALTHCARE SERVICES FOR PEOPLE WITH  
DISABILITY IN THE REGIONS OF KHOMAS AND KUNENE

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## ABSTRACT

### *Equitable Access to Healthcare Services for People with Disability in the Regions of Khomas and Kunene*

This dissertation investigated equitable access to healthcare services for people with disabilities in selected health facilities in both the Khomas and Kunene regions of Namibia. The research question guiding the analysis was based on factors that hamper equitable access to health care for people with and without disability. This was done by addressing some contextual and personal factors within the parameters of the International Classification of Functional Disability and Health (ICF) model with a specific intention to establish if those factors inhibit access to healthcare. The mixed approach was used for data collection. A thematic analysis was used for the qualitative data collection, while household surveys were used, based on the themes that emerged from the qualitative data, for the quantitative approach. Participants of the study were drawn from health care facilities of selected clinics in the catchment area (the Khomas and Kunene regions). Each of the 947 cases included an individual with a disability and an individual with no disability, referred to as the control.

By using the equitable framework (based on the ICF model), for analysis, the findings of the dissertation indicate that there are no major problems for vulnerable groups in receiving healthcare, since everyone had access to it, instead access to health care is limited by some major barriers for some people with disabilities (PWD). On the other hand, not only are PWD faced with barriers, they also experience activity limitation, in seeing, hearing, walking, remembering, self-care and communication, factors that are treated as independent variables in this study. Of these factors, seeing was recorded as the main barrier for those PWD who had ‘some difficulty’ (36.1%) or ‘a lot of difficulty’ (22.6%). In terms of dependent variables, ‘lack of transport from

home to the healthcare facility' scored the highest in Kunene, followed by 'affordability of transport'. 'Negative attitudes of healthcare workers', 'standard of healthcare facility', and 'inadequacy of drugs and equipment at healthcare facility' were also among the 'serious/insurmountable' problems cited by PWD in the Kunene region. PWD also reported satisfaction with the time spent waiting, confidentiality and knowledge of healthcare providers at the health care facilities. In conclusion, the combination of many factors (contextual and personal) as per the ICF model, created barriers to accessing healthcare services. These could be too challenging to overcome, even with well-functioning, locally-based healthcare services in a given area. The availability of good healthcare tends to vary inversely with the population it serves. The study presents a modified access barriers and satisfaction model that support vertical equity for PWD. This was because PWD did have greater health care needs when they visited the health care facilities.

*Key words*

International Classification of Functional Disability and Health  
(ICF), People with Disabilities (PWD), activity limitation, barriers,  
vertical equity

## LIST OF PUBLICATION

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- 2) Van Rooy, G.,<sup>1</sup> Mufune, P., † and Amadhila, E. M. (2015). Experiences and Perceptions of Barriers to Health Services for Elderly in Rural Namibia: A Qualitative Study, SAGE Open doi:10.1177/2158244015569049
- 3) Arne H. E., Mannan, H., Khogali, M., Van Rooy, G.,<sup>1</sup> Swartz, L., Munthali, A., Karl-Gerhard H., MacLachlan, M. & Dyrstad K. (2015). Perceived Barriers for Accessing Health Services among Individuals with Disability in Four African Countries, PLOS One 10 (5) e0125915 doi:110371/journal.ponee0125915
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## **DECLARATION**

I, Gert Van Rooy, hereby declare that this study is a true reflection of my own research, and that neither this work, nor any part thereof, has been submitted for a degree in any other institution of higher education.

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Date \_\_\_\_\_

## ACRONYMS

CRPD	Convention on the Rights of Persons with Disabilities
CSDH	Commission on Social Determinants of Health
EU	European Union
GRN	Government of the Republic of Namibia
GHEI	Global Health Enquiry Initiative
NDA	National Disability Authority
ICPD	International Conference on Population and Development
ICF	International Classification of Functioning Disability and Health
ICIDH	International Classification of Impairment, Disabilities and Handicaps
ICD-10	International Statistical Classification of Diseases Related Health Problems
PHC	Primary Health Care
PIAS	Physical Impairment Against Segregation
PSU	Primary Sampling Unit
PWD	People with Disabilities
UDHR	Universal Declaration of Human Rights
SAFOD	Southern African Federation of the Disabled
SPSS	Statistical Package for Social Sciences
WG	Washington Group
WHO	World Health Organisation

## GLOSSARY

In this dissertation the following concepts are defined:

<b>Concept</b>	<b>Definition</b>
Accessibility	The need for health facilities, goods and services to be available to everyone without any discrimination and within the jurisdiction of the country or state.
Access	To a service or provider or an institution: defined as an opportunity to use appropriate services in proportion to needs.
Acceptability	The characteristics of the healthcare facility in respect of culture, appropriateness, gender sensitivity, respect of confidentiality and acknowledgement of the life cycle requirements
Activity	Performance of a task by an individual.
Activity limitation	Difficulties an individual has in performing an activity.
Adequacy	Refers to how the service conforms to social and cultural norms and expectations of the individual user.
Affordability	Refers to the relationship between the price of the service and the willingness and ability of the user to pay for it.
Availability	The quantity of services that are available, inclusive of goods and services, to the general public.
Body function	Physiological or psychological functions of the body's system
Body structure	Anatomical parts of the body
Environmental factors	The physical, social and attitudinal environment in which people are living and conducting their lives
Ethics	Ethical principal consistent with and closely related to human rights principle: equal opportunities
Equity	Implies equal access to available care for equal needs, equal utilisation for equal needs, and equal quality of care for all. No one should be left out.
Equal access.	Available services for everyone-meaning a fair distribution of resources based on health needs and access
Impairments	Problems in the body, the body's function or structure as a deviation or a loss.
Participation	Involvement in a life situation in relation to a health condition
Participation restriction	Problems in the involvement with a life situation.
Personal	Background of an individual life and living that is not part of a health condition or a functional state.
Quality	Health facilities as well as goods and services must be medically appropriate to provide good quality services

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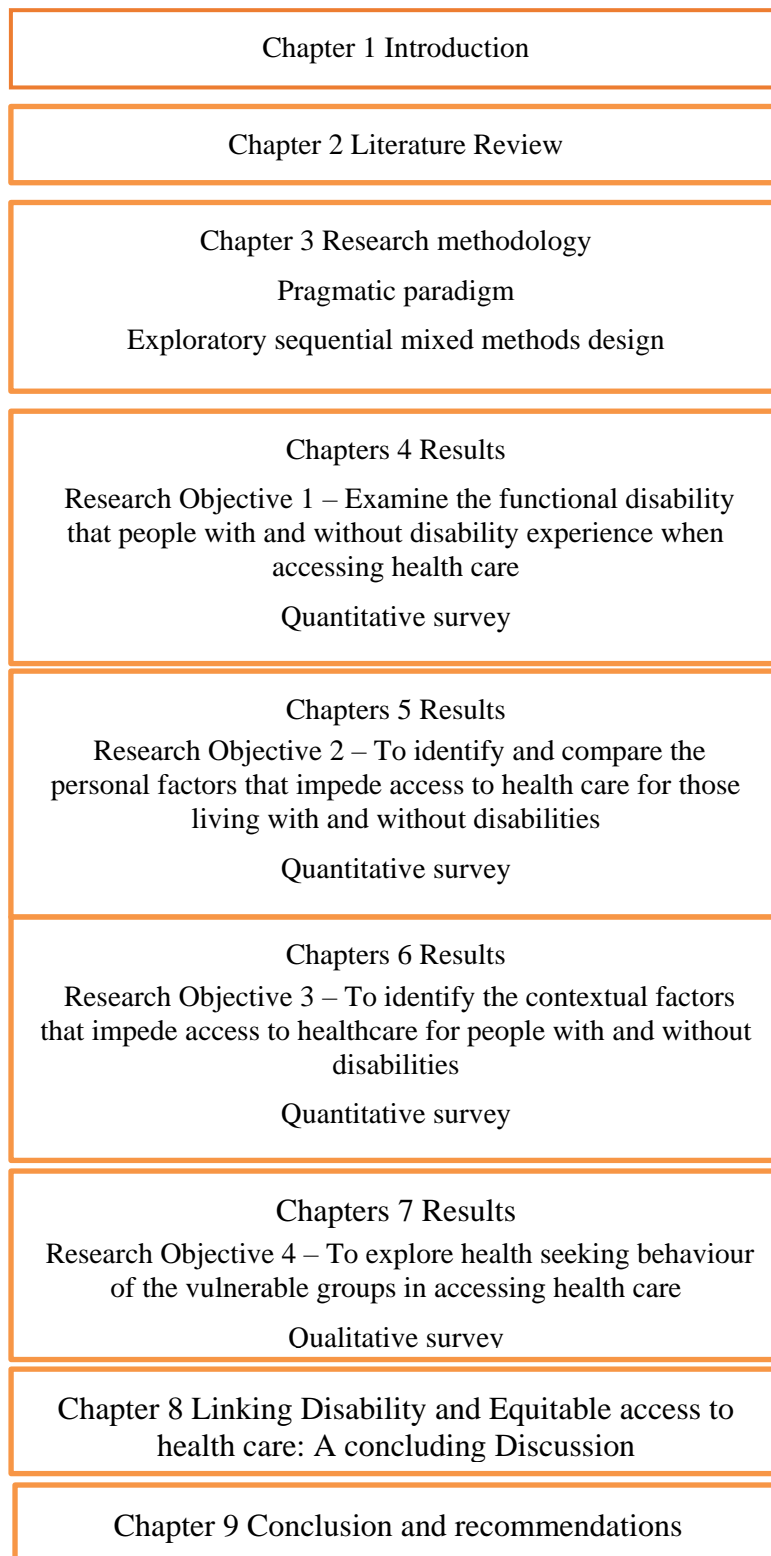
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A schematic illustration of the chronological arrangement of the chapters is offered below.



*Figure 1.* The research model for the dissertation



## CHAPTER 1

### INTRODUCTION TO THE STUDY

*It is time to broaden the expectations of what a healthcare system can do to include redesigning services to achieve equity (Wong, LaVeist, & Sharfstein, 2015, p. 1417).*

This chapter introduces the study: equitable access to healthcare services for people with disability in the regions of Khomas and Kunene. It starts off by introducing the research and stating the research problem. The next sections elaborate on the research question and objectives culminating in the main research question and research hypotheses. This is followed by the presentation of the theoretical framework, the definition of concepts that will be used for the dissertation and the methodology applied. The motivation towards undertaking the study is addressed and the chapter concludes with a schematic illustration of how the research questions will be answered and a summary statement.

#### 1.1 Introduction

There are few studies on people living with disability in Namibia. A study conducted by the Ministry of Health and Social Services (MoHSS, 2009), which explored the cause of disability and the acceptance of people living with disability, found that most of them are disabled by disease, trauma and explosives. It also established that most Namibians accept people living with disability. However, this study by the MoHSS did not look at access to healthcare in detail. This dissertation investigates and compares the mode and degree of access to healthcare for people with and without disability in the regions of Khomas and Kunene. Literature on access to healthcare such as Van Rooy, Amadhila, Mufune, Swartz, Mannan, & MacLachlan,

(2012, p. 761), and similar findings highlighted by Szczepura (2005) suggest that even though in theory the whole population, including people with disabilities, has access to healthcare, in practice there remains the question of the barriers that hinder access to healthcare for people living with disabilities. Van Rooy et al. (2012) states further that PWD face unique problems with conventional healthcare facilities and the healthcare system. For example, many rural clinics lack toilets which can be used by people with disabilities. Often there are no proper ramps to access the facilities for those with mobility challenges. This is important because people with disabilities could be discouraged from visiting clinics, thereby defeating the goal of equal access to healthcare.

In the same study, Van Rooy et al. (2012 p. 762) found that implementing the Vision 2030 objectives for disabled people could face several structural and service delivery process barriers. With regard to structural barriers, these include insufficient space for wheelchairs, long distances to clinics, and the lack of accessible medical treatment. In terms of process barriers, long waiting hours, lack of sign language interpreters, and insufficient health personnel were identified. These barriers may be particularly acute in rural areas because of long distances, poverty and lack of transportation. The argument therefore is that if policymakers do not have a clear understanding on how these barriers affect access to healthcare by disabled people in Namibia, this would reduce the potential for the realisation of Vision 2030 (Van Rooy, et al., 2012, p. 762). To address the problem of access, the definition adopted should be that “equitable” care must not vary in terms of quality with regard to personal characteristics such as age, sex, ethnicity, geographical location and socio-economic status, but should be linked to the timely use of healthcare to achieve the best possible outcomes (Szczepura, 2005, p142).

The next section provides a background to health and disability in Namibia. It discusses provision of and access to healthcare in Namibia, examines the policies and legislation the government has implemented to address the issue of disability and looks at associations and non-governmental organisations (NGOs) that support people with disabilities.

## **1.2 Health and disability in Namibia**

### **1.2.1 Public health service provision in Namibia**

Provision of health services for a highly dispersed population within a vast terrain, poses its own challenges. To strengthen the delivery of health services in Namibia the first National Health Policy Framework document was introduced in 1998. It provided the overall orientation for health and health action in Namibia. Subsequently, to bring health closer to the general public, an updated National Health Policy Framework (NHPF, 2010-2020) was released and that was informed by *Vision 2030* (GRN, 2004).

According to the Namibia Demographic and Health Survey (NDHS) (2013), the government of Namibia recognises that health is a fundamental human right, and it is committed to achieving health for all Namibians. The mandate of the Ministry of Health and Social Services (MoHSS) is derived from Article 95 of the Namibian Constitution, whereby the government is required to support the health and well-being of all people by putting in place legislation that helps to provide health care for all and social assistance to the country's most vulnerable groups (MoHSS, 2012a). Upon gaining independence in 1990, Namibia inherited a health service delivery structure that segregated people along racial lines and was based entirely on curative health services. Since then, the MoHSS has adopted a primary health care (PHC) approach for the delivery of health services to the

Namibian population. The core functions of the PHC directorate within the MoHSS are organised around four pillars namely: health promotion, disease prevention, curative services, and rehabilitation services (NDHS 2013 p 25).

The PHC programmes were established to reflect the eight core elements of PHC, namely:

- Promotion of proper nutrition and an adequate supply of safe water
- Maternal and child care, including family spacing
- Immunisation of children against the major infectious diseases
- Basic housing and sanitation
- Prevention and control of locally endemic diseases
- Education, awareness, and training on prevention and control of prevailing community health problems
- Appropriate treatment for common diseases and injuries
- Community participation in health and social matters

To implement the national health strategy, the MoHSS has established the following directorates at the national and regional levels (MoHSS, 2007):

- Primary Health Care
- Special Programmes
- Developmental Social Welfare Services
- Tertiary Health Care and Clinical Support Services
- Policy, Planning and Human Resource Development
- Human Resource Management and General Services
- Finance and Logistics

The MoHSS is the main provider of public health services in Namibia. In order to ensure effective service delivery, the Ministry established 13 regional health directorates that oversee 34 health districts. These services are provided through a four-tier system namely: outreach points, clinics and health centres, district hospitals and intermediate and referral hospitals. Furthermore, faith-based organisations support MoHSS on an outsourcing basis (World Health Organisation, (WHO), factsheet n.d.). In reaching the population, MoHSS provides services through 38 public hospitals, 43 health centres and 288 clinics (Namibia Statistics Agency (NSA), 2016). Namibia is a country recognised by its vastness and to reach the most remote areas, outreach is

provided by 1,150 outreach points (Namibia Demographic and Health Survey (NDHS), 2014, p. 3).

This in essence, presents geographical accessibility, which, however might result in high opportunity costs as a result of lack of transport (WHO nd). The NSA (2009/2010, p. 11) report states that 30% of the population are less than two kilometres from the nearest hospital or clinic, while 7% of the population have to travel more than 40 kilometres to the nearest hospital or clinic. In terms of urban dwellers, 93% are less than 6 kilometres away from a health facility, while it is 45% for rural dwellers. Figure 1 illustrates the provision of health services of MoHSS.



limitation means that the ability of the person to fully take part in societal activities, (for example, work or recreation is reduced). Because of this, a person with a disability often has to deal with negative attitudes, rejection and even isolation. Traditionally, persons with disabilities have been disempowered and marginalised. Furthermore, the same report states that they have been denied access to mainstream education and have been refused training and employment opportunities which are well within their capabilities. Given this background the Government of the Republic of Namibia has committed itself to building a 'Society for All' (Secretariat of the African Decade of Persons with Disabilities, 2007).

According to The Namibian Constitution (Government of the Republic of Namibia, 1990 p. 8), Article 10, "all individuals are equal before the law and no persons shall be discriminated against on the grounds of sex, race, ethnic origin, religion, creed or social or economic status." While the constitution does not specifically cite persons with disability, it is clear that they are included in this clause of non-discrimination.

Based on the Constitution of the Republic of Namibia, the government's *Vision 2030* aims to achieve equity in healthcare for all Namibians. This includes those individuals living with disabilities, which it states, must be treated with dignity, honour and respect. Vision 2030 indicates that by the year 2030, economic and social structures will be in place to eliminate marginalisation. People with disabilities will be given the assistance they need to enable them to participate effectively in education and employment opportunities. The Vision emphasises that "people living with disabilities (temporary or permanent) and other disadvantaged persons, are well integrated into the mainstream of society, and have equal rights under the law. They are encouraged and supported to participate

actively in the economy and society” (Office of the President, 2004, p. 119). Moreover, the updated NHPF that was informed by Vision 2030 includes a provision for mental health and disability, stated as a strategic objective to promote primary, secondary and tertiary prevention of disability (NHPF, 2010-2020, p. 14).

The policy stance of the Namibian Government is therefore consistent with the goal of achieving universal access to healthcare by 2015. This is indicated in the programme of action arising from the International Conference on Population and Development (ICPD) in 1994. At that conference, people with disabilities were identified as particularly vulnerable, with a need for recognition of their reproductive health needs, and the elimination of any discrimination relating to their reproductive rights.

In dealing with the philosophy of disability in the country, the government, through its line ministries, enacted legislations which were designed to deal with the issues of disability at hand. In 1997, the National Policy on Disability was produced. In 2004, the National Council Disability Act was promulgated, with the purpose of advising government on disability issues. With regards to mental illness, the Ministry of Health and Social Services produced a National Policy on Mental health (2005). The aim of this policy, in the absence of any data on mental health, was to confront the problem of mental health and to provide the necessary services for it. To address the shortage of the provision of prosthetics and orthotics services, the Policy on Orthopaedic Technical Services (2001) was produced. Having recognised the importance of education, and especially of inclusive education, the Ministry of Education issued a National Policy on Special Needs and Inclusive Education (2008), as a basis for working towards inclusive education (Lang, 2008, p. 30-38).

The National Policy on Disability, as the principal legislation on disability, is discussed in more detail below.

### **1.2.3 National Policy on Disability**

The Ministry of Lands, Resettlement and Rehabilitation in 1997 drafted the National Disability Policy. The fundamental principle of the policy was to endorse the social model of disability in which people are granted equalisation of opportunities and integration into society. The policy goes on to state that disability should be linked to the advancement of human rights and development. It identifies fourteen priority areas that should be addressed to effectively facilitate the social inclusion of disabled persons into the Namibian society (Lang, 2008). The drafting of the disability policy was a vision of the Namibian Government in its creation of a “society for all” which is based on the principles of participation, integration and equalisation of opportunities. The main objectives defined in creating a “society for all” are: (Ref. Disability policy).

- 1 raising awareness to educate and change public attitude towards people with disabilities
- 2 prevention, early intervention and health education to improve primary healthcare and education in the health sector
- 3 develop mandatory standards and guidelines for physical access in public buildings and access to information
- 4 access to education for all Namibians including those with disabilities, and
- 5 a vocational training program for people with disabilities.

The key implementation strategies designed for the successful implementation of the disability policy include awareness raising, prevention, intervention, health education treatment, therapeutic aids and orthopaedic technical services, environmental accessibility, access to information, adult education, social integration, environment, culture, religion, recreation, sport, social welfare, housing, social economic and legal protection, training, and family and personal integrity. Despite all these rhetorical statements, there seems to be little manifestation in the implementation or coordination of it (Lang, 2008). Therefore, there is a need to address the question of access to healthcare.

#### **1.2.4 Associations and Non-Governmental Organisations that are dealing with Disability**

The National Federation of People with Disabilities in Namibia (NFPDN) is the national umbrella body for disabled people's organisation in the country. Founded in 1990, the Federation has been funded by the European Commission and the Finnish Embassy. The overall mission of the Federation is "to support, empower, advocate and lobby on behalf of all people with disabilities in Namibia, to promote social justice, economic well-being and sustainable development of organisations that deal with disabilities in Namibia" (Lang, 2008 p. 39). It has six national affiliate members namely: the Namibian Federation for the Visually Impaired; the Namibia National Association for the Deaf, the Namibian Association of People with Physical Disability, the National Association of Differently Abled Women; the Disabled Youth Council of Namibia; and the Namibian Association for Children with Disabilities. The Federation has good working relationships with service providers working in the disability sector, including Leonard Cheshire, as well as the association for Children

with Language, Speech and Hearing Impairment in Namibia and the Onyose Trust (Lang, 2008 p. 11).

Currently there are a few national and international non-governmental organisations working within the disability sector in Namibia. For example, the Leonard Cheshire manages two residential facilities in Anamulenge and Katima Mulilo. Historically, they provided long-term residential care, but are now providing day care. The Leonard Cheshire in Namibia aims to offer children with disabilities medical, educational and social rehabilitation; to facilitate the integration of children with physical disabilities to attend school and be socially integrated within society; and to assist relatives and the local community to cope with children with disabilities at home (Lang, 2008 p. 40).

The overview on healthcare provision and legislation for people with disabilities within the Namibian context, shows that despite legislation having been enacted to address the healthcare needs of people with disabilities, little is known on whether the implementation of such legislation, with regard to access to public healthcare services, meets the needs healthcare of these vulnerable groups. Therefore, the argument is that in most cases individuals with disabilities in the context of Namibia might have some complex medical and nonmedical needs. However, the current facility directed healthcare system might also be poorly structured for people with disability in providing coordinated, optimal care. This illustration points to the fact that in most cases individuals with disabilities face multiple barriers in receiving quality health care services, ranging from structural barriers to procedural barriers (Hwang, et al. 2009 p. 28)

### **1.3 Problem statement**

There is insufficient knowledge of the difference that exists among people with and without disability, on how they access healthcare in both urban and rural settings.

### **1.4 Research questions and objectives**

Amin et al. (2011) argues that in order to have equitable health services, this should be supported by evidence from research and practice which contributes to policy revision and policy development. In the final analysis, it should be incorporating human rights and social inclusion as central features at international, regional and national levels.

In exploring equitable access to healthcare for people with disabilities in the Khomas and Kunene regions, the term persons with disabilities (PWD) will be adopted. The guiding definition for the study was premised on the International Classification of Functional Disability (ICF), which shows that disability is an outcome of an interaction between a person with impairment and the environmental and attitudinal barriers that she or he might face in life (Edmonds, 2005). (WHO Disability and health, 2014).

**Therefore, the main research question that guided this dissertation was:**

What are the contextual and personal factors that hamper equitable access to healthcare for people with and without disabilities in the Khomas and Kunene regions?

The research questions therefore address the following specific objectives:

1. To assess the level of activity limitation people with and without disability experience when accessing healthcare.
2. To identify and compare the personal factors (religion, sex, age, education, socio-economic status and activity limitation) that hamper access to healthcare for those living with disabilities and those living without disabilities in the Khomas and Kunene regions.
3. To identify and compare the contextual and system factors (such as the context that people are living in,) that impede access to healthcare by people with disabilities.
4. To understand the healthcare seeking behaviour and attitudes towards health and healthcare services by individuals.

#### **1.4.1 Research hypotheses**

In answering its research questions, this dissertation will have the following hypothesis:

H<sub>0</sub>: People with disabilities do experience the identified personal and contextual factors that hamper their access to healthcare at the same extent as people without disabilities.

H<sub>a</sub>: People with disabilities do not experience the identified personal and contextual factors that hamper their access to healthcare at the same extent as people without disabilities.

## **1.5 Contribution**

Sociology in most cases place the aspect and experience of health service delivery in a wider social context. It can therefore be argued that this contextualisation in all essence, provide and enhance our understanding of the way “things” are the way they are (Dew, Scott, & Kirkman 2016). Given this argument and by looking at people with disability, they are in most cases part and parcel of society that influence and shape their lives with regard to the interaction with each other. Therefore, in adopting the notion of personal and social issues, this dissertation contributes to sociological imagination (our life experience is part of our time in history, our place in culture and our social situation (Dew, et al. 2016 p. 4).

## **1.6 Theoretical perspective for the study**

The theoretical approach to the dissertation adopted the EquitAble model<sup>2</sup>, developed by the EquitAble authors<sup>3</sup>. This model based its foundation on the International Classification of Functioning Disability and Health (ICF), (Trani & Dubois, 2011), The EquitAble model focuses on activity limitation and participation as postulated in the ICF model. The EquitAble model shows how variables of activity limitations; contexts and systems, as well as personal and community variables, interact in informing universal and equitable access to healthcare. In unpacking this model in the context of the dissertation and the proposed study sites, the activity limitations, access relationship is influenced by a number of factors, such as the

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<sup>2</sup> <http://www.sintef.no/projectweb/equitable/project-description/>

<sup>3</sup> Swartz, L et al., (2011) Enabling Universal and Equitable Access to Healthcare for Vulnerable People in Resource- Poor Settings in Africa (Consolidated Report for Work Package 3 (Phase 1): Intensive qualitative studies.

context in which people live in (highly dispersed, displaced, chronic poverty, relative – but unequal - wealth) and the existing health system (the distribution of resources between different services, the emphasis on primary care, the extent of service integration). The link between activity limitations and access is also influenced by personal factors (coping skills, extent of activity limitation, type of bodily impairment, experience of secondary health problems, gender, age, language) and community variables (cultural understandings of disability, extent of family support, opportunities for inclusion) (EquitAble, 2011 p. 8).

In order to unpack the EquitAble model for this dissertation it is important to note that the context variables relate to those variables in terms of the circumstances people are living in. For example, the urban-rural divide in accessing healthcare. The person variables relate to type of disability, level of income and education. The last part of the model focuses on equitable access. Equitable access therefore refers to those health services that meet the needs of all people and are measured using the following indicators taken from the General Comment of the United Nations Committee on Economic, Social and Cultural Rights (2000). These are:

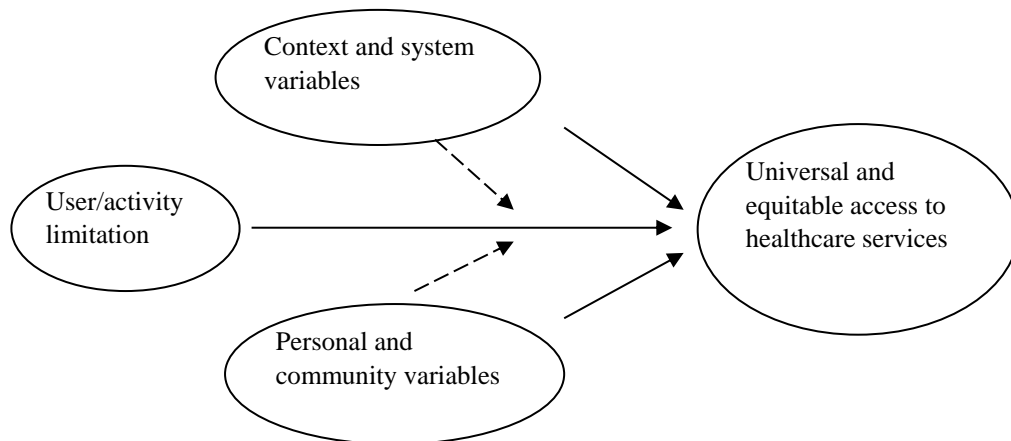
- 1) *Accessibility* refers to the need for health facilities, goods and services to be accessible to everyone without discrimination, and within the jurisdiction of the State. This first element of accessibility has been further broken down into the related dimensions of Non-discrimination; Physical Accessibility; Economic Accessibility (affordability) and Information Accessibility.
- 2) *Availability*, concerns the quantity of service available; functioning public health and healthcare facilities, goods and services, as well as programs, have to be available to the general public in sufficient quantities.

3) *Acceptability*, stresses that all healthcare facilities, goods and services must be respectful of medical ethics, be culturally appropriate, sensitive to gender and life-cycle requirements, as well as designed to respect confidentiality and improve the health status of those concerned.

4) *Quality*, by which is meant that health facilities, goods and services must be scientifically and medically appropriate to provide services of good quality. This final element is perhaps the least well developed but one that is of importance.

In the subsequent discussion of the study these indicators will be elaborated and forms part of the modified model of equitable access to health care for people with and without disabilities.

In examining equitable access, the concept of activity limitation and barriers will be discussed and how these impact on access to healthcare. It used the conceptual model to demonstrate that disability is not merely a scenario of A+B+C (A=impairment in bodily function, B=limitation in activity, and C= restriction in participation) but that it should be understood as a concept which covers all those impairments, activity limitations and restrictions which have an effect on health. Figure 2 shows the conceptual model.



*Figure 1.* Theoretical model depicting the relationship between activity limitation, context and systems variables and personal and community variables interact in universal and equitable access to health care

The arrows with dashes clarify the issue that having an activity limitation interacts with the context and systems variables as well as personal and community variables to determine access to healthcare. Furthermore, the model also addresses vulnerability factors by looking at a series of context, systems, personal and community factors that determine people’s access to healthcare independently of whether they have an activity limitation or not.

The adopted EquitAble model will therefore provide the framework on how the research questions will be dealt with in the subsequent discussion of the dissertation. When a person with disability seeks healthcare in a clinic, regarded as the first entry point of public health services, does the provider offer all the available services in all aspects to the user? In terms of access, it will further explore where the facility is located. Must the user spend extra resources to get to the facility? Another dimension highlighted by the model is the question of affordability: Does the price the person has to pay correspond with the service he is getting, together with equitable

access? The main concepts will be discussed next, to clarify how these concepts were defined and used in this dissertation.

## **1.6 Definitions of concepts for the dissertation**

### **1.6.1 The concept of health**

The Alma-Ata Declaration reaffirms that health is “a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity. It is a fundamental human right and the attainment of the highest possible level of health.” The World Health Organization (WHO) concept of health is embedded as physical, mental and social well-being that is able to function in the face of changing circumstances (p. 4). In the cultural and organisational view, health is seen as moving away from the concept of disease to reflecting on the cultural values and functional abilities of well-being (p. 4).

### **1.6.2 Disability**

In terms of the International Classification of Function (ICF) (WHO 2001) disability is presented as an outcome of an interaction between a health condition that a person might have and the context that person lives in. In terms of the interaction it can be either individual (impairments, activity limitation) or attributes of the environment (environmental factors). Therefore, this dissertation in understanding disability for its analysis, defines disability as an outcome of the interaction between contextual factors and personal factors as a continuum for an individual to function to his or her fullest.

### **1.6.3 Access**

In order to understand the concept of access, this dissertation will purposely use the Perchansky and Thomas theory of access for data analysis. In this

theory access is a degree to fit between the consumer and the service. It is optimised by accounting for accessibility (is it within reasonable proximity of the consumer), affordability (is the service affordable both for the provider and the user), acceptability (is the service responding to the attitude of the provider towards the consumer), availability (is the service offered sufficient to meet the needs of the consumer) and adequacy (is the service organised in such a way that clients can use it for their purposes).

#### **1.6.4 Equitable access**

Equal access means that all barriers are removed, while equal need means that everyone must have the opportunity to benefit (Zere, Moeti, Kirigia, Mwase, & Kataika, 2007) (p. 3).

#### **1.6.5 Equity**

As stated by Maclachlan, Mannan, and Auliffe (2011, p. e10), “equity in healthcare implies equal access to available care for equal need, equal utilisation for equal need, equal quality of care for all.” No one should be left out.

#### **1.6.6 Equality**

In order to understand equality within the framework of this dissertation it should be noted that it refers to the notion that everyone when accessing healthcare should receive the same treatment. There should be fairness in that everyone should start from the same place and get the same help. The dissertation, in understanding equality, focuses mostly on horizontal and vertical equity. Sen defines horizontal equity as the allocation of equal or equivalent resources for equal need, while vertical equity is the allocation of different resources for different levels of need (Sen, 1973,

p. 3). Culyer (2001, p. 283-84) argues that horizontal equity and vertical equity derive from the classical Aristotelian concept of “need”. A need should receive attention and resources (horizontal equity), and greater needs should receive proportionately greater attention and resources (vertical equity).

Having defined the main concepts that were applied in this dissertation the discussion now turns to the methodology that guided the study on equitable healthcare access.

### **1.7 Methodology used in the study**

In support of equitable healthcare access, this dissertation addresses the research problem of barriers coupled with activity limitations in accessing health care. In doing so it will adopt the exploratory sequential mixed method design to show that the contextual and personal factors of a healthy condition inhibit access to healthcare for people with disabilities and to a lesser extent for those without disabilities.

The qualitative exploration was a transformative framework where data was collected from vulnerable groups in both Khomas and Kunene regions on their experiences with healthcare providers and health services. The qualitative findings were used in the development of an assessment tool that was administered to a larger sample during the second phase, the quantitative phase (Creswell, 2014 p. 178). The quantitative phase comprises a household, individual and control survey that addressed those barriers that play a role in equitable access to health care. This inquiry constitutes the contribution the dissertation intends to make towards achieving the goal of equitable access to healthcare in Namibia.

## **1.8 Evolution of the study**

My personal involvement with the questions covered in this dissertation began with a study on “living conditions of people with disability” (2003). This was carried out in Namibia with the support of partners from SINTEF (Oslo), who have conducted similar studies in Malawi and Zimbabwe. My interest in the subject was further strengthened by my research work for SAFOD (Southern African Federation of the Disabled) and a publication on the experiences of HIV and Aids among people with disabilities. The cornerstone of this study was my involvement as a country coordinator for the EquitAble project. This was a four-year EU-funded project, conducted in four Southern African countries namely, Namibia, South Africa, Malawi and Sudan. Our international collaborator on the project was SINTEF and the project manager was Trinity College in Ireland. From this experience I came to the conclusion that I can make an important contribution to the body of knowledge by discussing those barriers that are prominent in the context of Namibia that might hinder access to healthcare for people with disabilities.

## **1.9 Summary**

This chapter covers the introduction of the study. It provides an overview of the context of healthcare within Namibia and highlights the main research question that was unpacked in the subsequent chapters of the dissertation. The discussions on the theoretical perspective of the dissertation together with the definitions of concepts used in the study and a brief overview of the methodology adopted provide the context within which the research questions were addressed.

The next chapter will focus on the relevant literature in support of the research questions.

## CHAPTER 2

### THEORIES OF DISABILITY; A LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviews the literature that informed the main research question, “*What are the contextual and personal factors that hamper equitable access to healthcare for people with disabilities in the Khomas and Kunene Regions?*” The purpose of the literature review is to clarify the key terms that will be used in the dissertation. It will also discuss the theoretical underpinnings in the literature about disability and equitable access to healthcare. The rationale for a literature review stems from the fact that an informed methodological construct of analysis can help in processing the findings of the study.

#### 2.2 Disability

Turnbull & Stowe (2001) define five models on thinking about disability. Their thinking in developing these models was shaped by two factors, namely: do lawyers and policy makers think differently about disability and is there a difference in people’s perception with regard to the various disciplines on thinking about disability and how society implements policies. In the final analysis, they defined models such as human capacity, public studies, cultural studies, ethical and philosophical studies and technology studies. These five models ask questions regarding the relevance of the core concepts and how well a policy performs on the core concepts (Stowe & Turnbull III, 2001).

Schalock, (2004) discusses four emerging disability paradigms which are characterised by functional limitation, personal well-being, individualised support and

personal competence. He concludes that these paradigms reflect a new way of thinking about disability and an appreciation for both the person-environment and social aspects of disability. In terms of policy implications, functional limitation should focus on the characteristics of the problem in the capacity to function. Personal well-being should look at funding and programs of personal well-being, individualised support in a policy should look at the support a particular person need, and personal competence should be driven by conceptual skills, social, skills and practical skills. The argument is that equal participation in a society can only be guaranteed if driven by some kind of policy. Tomlinson (2009) argues that states should ensure full and equal participation as per Article 1 of the CRPD. This means that the right to access healthcare should not be merely a point of access, but it should include core principles such as social inclusion, respect for differences, health-related education, and so forth. In the final analysis, as stated by literature, a policy and especially a disability policy should include overarching goals such as equality of opportunity, full participation, independent living and economic self-sufficiency (Schalock, 2004 p. 211).

According to a joint report of the WHO and World Bank World Report on Disability (WHO, 2011), more than 15%, or over one billion people in the world, have some form of disability. This report also states that close to 110 million children and 190 million adults have a problem with functioning. Furthermore, people with disability most often have less access to healthcare and therefore many of their health needs remain unmet (WHO Disability and Health Fact Sheet N°352, 2015). According to MacLachlan and Swartz (2009), the vast majority of disabled people live in low or middle-income countries in Africa where there is a very strong link between disability and poverty (p. vii).

With the aim of enhancing the rights of people with disability, the United Nations produced a document, the Convention on the Rights of Persons with Disabilities (CRPD), (2006). This is a human rights document, with the purpose of promoting, protecting and ensuring the full and equal enjoyment of all human rights and fundamental freedoms by all those with disabilities, and promoting respect for their inherent dignity (United Nations, adopted 2006, came into force in 2008).

The Convention is guided by a set of eight principles:

1. Respect for inherent dignity, individual autonomy, including the freedom to make one's own choices, and for the independence of the individual.
2. Non-discrimination.
3. Full and effective participation and inclusion in society.
4. Respect for differences and acceptance of persons with disabilities as part of human diversity and humanity.
5. Equality of opportunity.
6. Accessibility.
7. Equality between men and women.
8. Respect for the evolving capacities of children with disabilities, and for the right of children with disabilities to preserve their identities (United Nations, 2008).

In order for the Namibian Government to be in line with international reporting on disability, it signed and ratified the United Nations Convention on the Rights of Persons with Disability (CRPD) (2006/2008). This convention states that:

“To enable persons with disabilities to live independently and participate fully in all aspects of life, states’ parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communication technologies and systems, and to other facilities and services open or provided

to the public, both in urban and in rural areas. These measures, which shall include the identification and elimination of obstacles and barriers to accessibility, shall apply to, inter alia:

- Building roads, transportation and other indoor and outdoor facilities, including schools, housing, medical facilities and workplaces.
- Information, communications and other services, including electronic services and emergency services.

States' parties shall also take appropriate measures to:

- Develop, promulgate and monitor the implementation of minimum standards and guidelines for the accessibility of facilities and services open or provided to the public.
- Ensure that private entities that offer facilities and services which are open or provided to the public take into account all aspects of accessibility for persons with disabilities.
- Provide training for stakeholders on accessibility issues facing persons with disabilities.
- Promote access for persons with disabilities to new information and communication technologies and systems, including the Internet.
- Promote the design, development, production and distribution of accessible information and communication technologies and systems at an early stage, so that these technologies and systems become accessible at a minimum cost.”

(Convention on the Rights of Persons with Disabilities, 2006)

In compliance with this Convention, the Namibian Government made commitments to disability rights which have been upheld and protected, through making sufficient financial resources available to achieve these aspirations of the Convention. Hence, the government resigned the primary responsibility for disability to the Ministry of Health and Social Services (MoHSS).

### **2.3 Social exclusion**

Morris (2000) argues that inequality separates people out. His point of illustration is that, there are barriers and impairments, but we need to distinguish between these two notions. Barriers are a form of disabling (not being able to walk or see or having difficulty to learn), while impairments enable us to focus on exactly what it is which denies us our human and civil rights and what action needs to be taken. Hence people with impairments in all likelihood continue to encounter a range of economic, political and cultural barriers to mainstream living that more often than not renders them economically and socially dependent on their families, their friends and society as a whole. Their continued existence serves only to inhibit the moral, cultural and economic development of nation states and, indeed, human society as a whole (Colin Barnes, 2009, p. 7).

### **2.4 Vulnerability**

As stated by Amadhila et al. (2013) and Flaskerud and Winslow (1998), vulnerable groups might be defined as social groups that experience limited resources and consequent high relative risk for morbidity and premature mortality. It can be argued that this definition may include children, the aged, ethnic minorities, displaced populations, people suffering from chronic illnesses, and persons with disabilities. Furthermore, the definition of vulnerable groups chimes with the idea that vulnerability should be related to claims for special protection (for instance, in health policies), where there is (a) a greater likelihood of people experiencing ‘wrongs’, and (b) a duty to avoid identifiable ‘wrongs’ (Hurst, 2008). In the work of Eichler and Burke (2006) social discrimination and bias that arises based on the mentioned categories, might be a result of social hierarchies, similar exclusionary practices that

disadvantages and disempowers as well as undermines their human rights and their rights to healthcare.

The World Report on Disability (World Health Organization and World Bank 2011) estimates that over one billion people, or approximately 15% of the world's population, might be living with disability, but do not have equal access to healthcare, education, and employment opportunities, might not receive the disability-related services that they need, and are possibly excluded from everyday activities (World Health Organization and World Bank, 2011).

For the purposes of reporting on the vulnerable groups, this dissertation based its foundation on the EquiFrame (a novel policy analysis using the core concepts in identifying vulnerable groups in health policies).

## **2.5 Function and capability as a catalyst to understand disability**

“Function” refers to the state of “being and doing”, while “capabilities” refers to those valuable functions a person might need in order to be successful. This is supported by Clark (2005), who states that function is the achievement in what a person manages to “do”. It refers to the effect in using commodities at his disposal. This might be for example, how he or she might use a commodity such as bread, which depends on personal factors, as well as social factors such as age, gender, health, access to medical services, etc. Capability, as suggested by Clark (2006), therefore reflects a person's *ability* to achieve a specific function (for example, a person could have the ability to avoid going hungry, but might go on a hunger strike instead). Gandjour (2008) explains that “a function is an achievement, whereas capability is ability to achieve.” He adds that functions are mostly related to one's living conditions, while capabilities are linked to one's notion of freedom (Gandjour, 2008, p. 346).

## 2.6 Measuring disability

Disability in all its aspects tends to have a wide variety of definitions. According to Schneider (2009), Schneider et al. (2009), and the World Health Organisation (WHO) (2011), the measure of the occurrence of disability is often the result of the wording in a questionnaire or may just be in the mind of the data collectors. Usually a question about disability tends to call for a yes or no answer (as for example in the 2011 Namibia Census). As argued by Visagie (2015), when someone has an impairment it is often described as ageing, and this could have an impact on reporting the occurrence of disability. The Government of Namibia as stated by Secretariat of the African Decade of persons with disability committed itself to building a “Society for All”.

A study conducted by Eide, Van Rooy & Loeb, (2003), among people living with disability in Namibia examined *Activity limitation based on ICF model*. In this study disability was defined as “a restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being”. Impairments are disturbances at the level of the organ, while disabilities are descriptions of disturbances in function at the level of the person. This study was inspired by the ICF model and therefore it approached disability as activity limitation. Results of the Eide et al. (2003), study using the ICF model, reported a disability occurrence of 1.62%, while the 2001 Namibia Population and Housing Census using a medical model of disability, reported a disability occurrence rate of 5%. This is indicative of the different ways in understanding the concepts of disability.

Despite a very progressive legislation and a clear commitment from the government, the majority of people with disabilities (PWD) in Namibia still do not have the same opportunities to lead an independent life as do non-disabled people. Access to employment and learning is difficult; according to the 2011 Namibia Disability Census Report, 42.3% of people with disabilities found it difficult to engage in any learning and/or economic activity (females 51.1% and males 48.8%). For the Khomas region the ratio was 47.2% for females and 52.8% for males while the result for Kunene region showed that for 43.5% female and 56.6% male, access to employment and learning was problematic.

## **2.7 Measuring disability for the study**

The Washington Group on Disability Statistics, WG (2009), developed a set of six screening questions to establish the level of activity limitation. These questions were embraced in the ICF model in the domain of activities and participation. “Impairment-based” was part of the medical model of disability, but the focus has since changed and has shifted to difficulties in action and barriers to participation. Madans et al. (2011) was also of the opinion that WG was inspired by the UN Convention on the Rights of Persons with Disabilities that promoted equal participation as well as equal rights, in developing these set of questions.

This dissertation, in adopting a definition of disability for analysis purposes, extensively used the comparison as suggested by the Washington Group of Statistics (WG) (2009)<sup>4</sup>. This group sought to identify the presence of any functional difficulties in the context of six domains, namely, seeing, hearing, walking,

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<sup>4</sup> This group was established by the United Nations to coordinate international comparisons on health statistics

remembering, self-care and communication. The domains were defined as follows: seeing (how an individual uses his or her eyes and visual capacity to observe what is going on around him or her); hearing (how an individual uses his or her ears in a hearing capacity to know what is said and what are the sounds of the activity); walking (how an individual uses his or her legs to propel himself or herself from point A to point B); remembering (how an individual uses his or her memory capacity to recall what is happening around him or her); self-care (refers to the process of cleaning oneself and also how to put on some clothes), and communication (how a person is able to exchange information or ideas with other people around him or her) (Washington Group on Disability Statistics, 2009). This dissertation, in adopting a definition of disability for analysis purposes as suggested by the WG, used the proposed scoring option in identifying a person with activity limitation:

- 1 no difficulty
- 2 some difficulty
- 3 a lot of difficulty
- 4 unable to do it

If a respondent's answer to difficulties experienced in one or more of the six domains was 2 (some difficulty) or higher up to 4 (unable to do it) this respondent was identified as having some activity limitation according to the scoring proposed by the WG. Therefore, taken together, these domains are important in identifying the type of access disabled people faced when accessing healthcare in the social context.

It should be noted that the 2011 Namibia Population and Housing Census used an impairment approach to define disability as a long-term physical, psychological or mental condition that limits a person from carrying out everyday activities either at home, school or work (p. 53).

## **2.8 Disability models**

Models of disability are tools for defining impairment, through which strategies are devised for meeting the needs of disabled people. These models can be either descriptive or normative (Beaudry, 2016). Such models are sometimes treated with scepticism in that they might not reflect the real world (Sajid, 2009).

However, for discussion of this dissertation, models offer a useful framework for gaining an understanding of disability. It goes without saying that models of disability are essentially devised by people for other people. They reveal the ways in which we think of society and how this limits our access to work, goods, services, economic power, and political influence. Kearney and Pryor (2004) offered a scenario of disability which they referred to as “a discourse of dialectic”. They introduced a discourse of “personal tragedy model” and a “social model”. The personal model viewed disability as a medical issue, while the social model saw it as a societal and political issue.

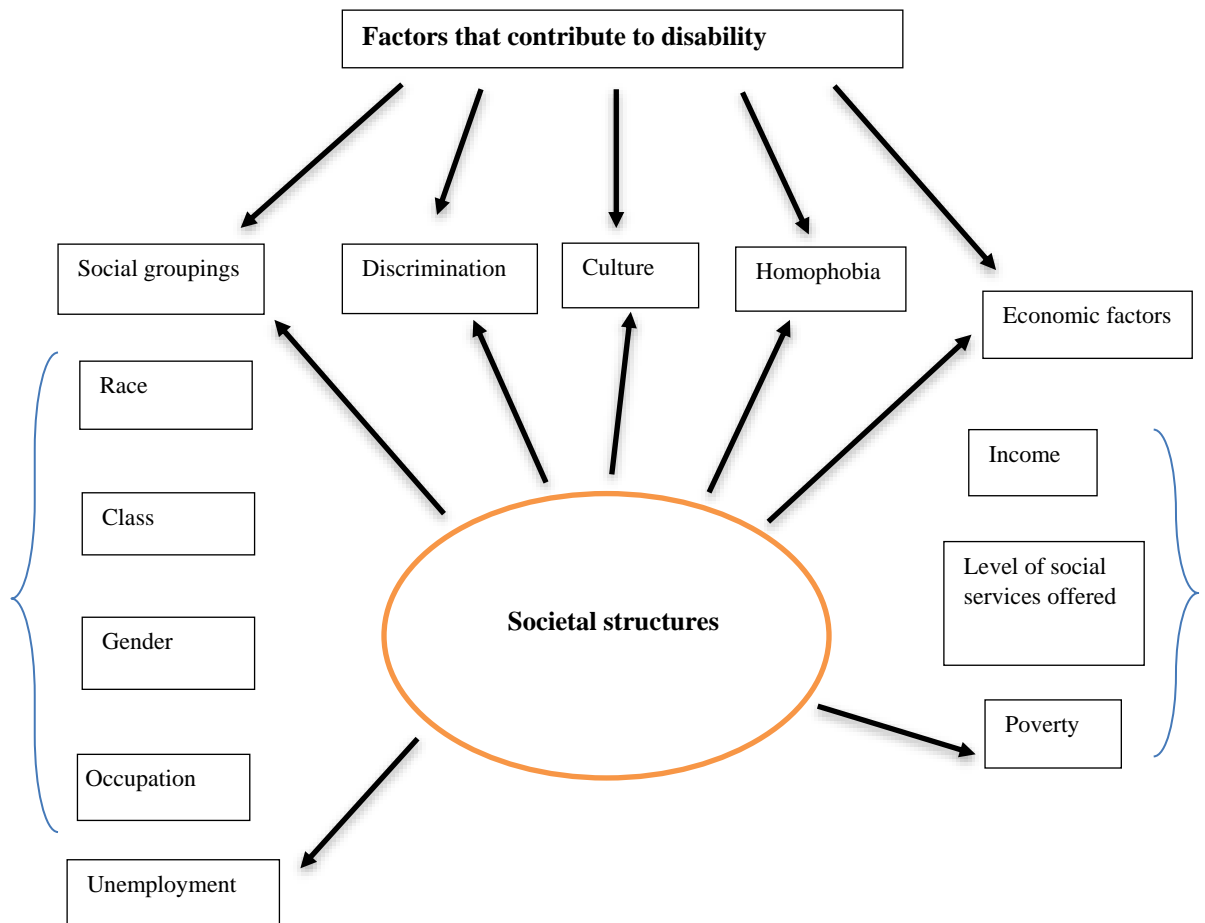
The discussion that follows will focus mainly on the social model, the capability approach, and the International Classification of Functioning Disability and Health (ICF) model. These are regarded as some of the most important models in understanding disability.

### **2.8.1 Social model**

The social model defines disability as a product of social and economic structures. It addresses the issue of oppression and discrimination of those with disabilities. The social model was structured mainly in opposition to the medical model, which sees illness and physical disability as a cause of social inequality,

ignoring social structures as a source of various forms of exclusion and other practices which might exist in society (Terzi, 2004). The social model instead focuses on living and working conditions which affect health. It assumes that both health and illness are integral parts of a social construct. It further specifies that inequality in health is a result of social groupings such as race, class, gender, age, occupation and employment status. Thus, the causes of illness in the social model are mostly traced back to economic factors, to income distribution, poverty, and the level of social services on offer. For the social model to achieve its intended purpose, the social determinants of health and illness need to be addressed. In themselves, disability and impairment do not seem to be part of this model; one becomes disabled or impaired in a given society and its environment (Dubois & Trani, 2009).

Disability is reduced to a social dimension, related in particular to oppression. It is seen as a disadvantage which places restrictions on one's active participation in the social structures of society. As indicated in the schematic presentation and argued by Taylor (2005), the social model holds that disability is created by social oppression, discrimination, culture, homophobia, social attributes, gender, occupation, unemployment, economic factors, and the level of social services offered. In accordance with the social model, disability is grounded outside the body and mind of a person, and instead is largely situated within the dominant society and governed by the barriers of environment, discrimination, and stigma that it creates (Taylor, 2005). Figure 3 illustrates the social model.



*Figure 3.* Schematic illustration of the social model

(This model was constructed and modified by the author from the ideas of Bampi et al. 2010, and Taylor, 2005)

As stated by Thomas (1999), the social model had its origin in the work of Oliver (1990), who used the Fundamental Principles of Disability document of the Physically Impaired Against Segregation (UPIAS). Oliver and Barnes (1998) argues that the barriers people experience are not inherent to their social nature, but are part of the social justice that should be dismantled. The argument is that disability is not a matter of impairments (impairments = disability), but of the barriers we face in society (social barriers = disability). These include the social determinants of health, such as social production, distribution and construction of health and illness, and the social organisation of healthcare. Thomas (1999) advocates the prevention of illness through

community participation and social reforms which address those living and working conditions which create disability.

This model draws on the idea that it is society which disables people. Society is designed to meet the needs of the whole population, the majority of who have no disabilities. Central to the social model is the recognition that there is a great deal that society could do to reduce, and ultimately to remove disabling barriers, and that this is the task and responsibility of society, rather than of the person with disability. The social model also advocates the breaking down of societal barriers. People with disability should be seen as equals and fully integrated into society (Taylor, 2005). Impairment is regarded as a human difference, not as a pathological condition. The social model thus highlights the problems faced by disabled people, from the perspective of how society treats disability as a personal tragedy with stigmata (Taylor, 2005, p. 501).

### **2.8.2 Problems with the social model**

The social model is limited to describing the experiences of people who do not have an obvious disability and whose impairments mostly do not conform with the traditional view of disability (Taylor, 2005, p. 505). In this model, the argument is about society and the body. The body is regarded as the one that might be impaired, while on the other hand society is seen as disabling the individual. Disability becomes the problem, while bodily impairment is overlooked. Another drawback of the social model is its denial of the role of biology, which results in the daily experiences of people with disabilities not being accounted for. Anastasiou and Kauffman, (2013), who support biological determinism explain disability in terms of generic determination in that disability is considered a biological category.

As this model is mostly concerned with how society views disability, the contextual factor of locality can contribute to creating a barrier. Negative attitudes in the social environment could emerge which might hamper access to healthcare for people living with disabilities. *The model supports the second research objective of personal barriers. In keeping with the social model, it can be said that society creates barriers for people with disabilities when seeking healthcare in the Khomas and Kunene regions of Namibia.* In this model, the participation of those with disabilities is hindered. For example, although society may have provided a health facility, its physical structure may not be conducive for use by a disabled person. This was observed in both Khomas and Kunene regions, where individuals with disabilities, especially those in wheelchairs, found it difficult to enter health facilities since they lacked proper ramps for ease of access. In addition, relying on the social model which emphasises function and ignores the component of impairment, could result in those with disabilities receiving different treatment.

### **2.8.3 Capability approach**

The capability approach focuses on a person's capacity to achieve a life that he or she hopes for. It details a person's way of living a good life, in which the individual subscribes to a set of norms and decides how to do things for him/herself. As indicated by Burchardt (2004), the leading protagonist of the capability approach was Amartya Sen (1980) and Martha Nussbaum (2000). The capability approach sees human life as a set of "doings and beings" (functioning) and it relates the evaluation of the quality of life to the assessment of the capability to function (Sen, 1989).

In support of Sen, Robeyns (2003) argues that capability is a person's ability to carry out an action and to perform various functions as part of living. Trani

and Bakhshi (2006) support this, noting that the capability approach is based on “being and doing” in relation to what an individual value. This entails moving disability from the specifics of a situation to equality and the possibility of choices (p. 6). The capability approach offers a framework for thinking about normative issues because it is concerned with making judgements about individual well-being (Robeyns, 2005, Mitra, 2006). According to Sen (1980), supported by Robeyns (2003), the core of the capability approach therefore lies in *function* and *capabilities* (Figure 4).



*Figure 4.* Function and capabilities: Capability approach

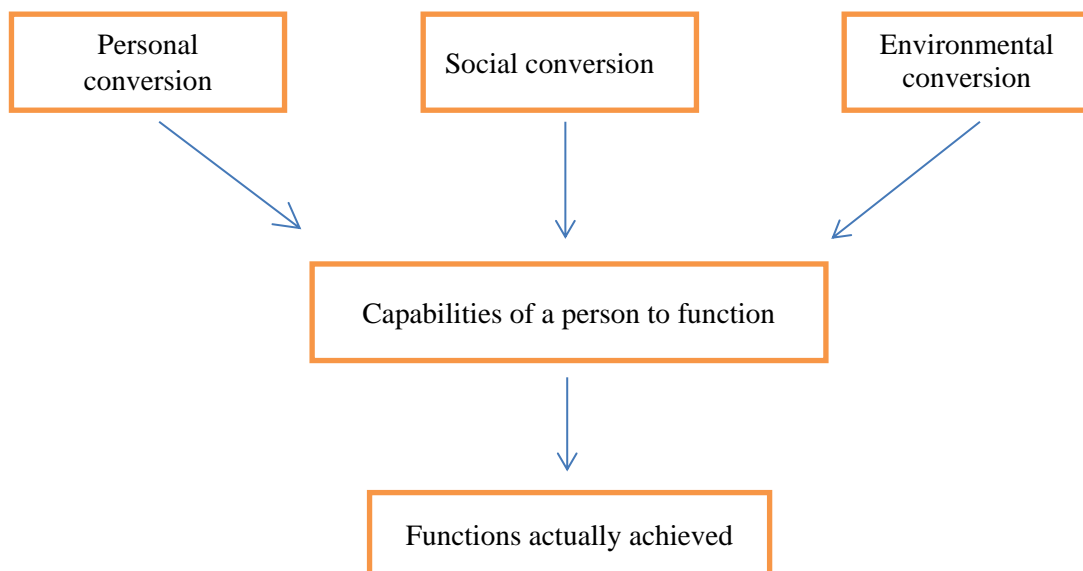
*(Adapted from the ideas of Sen, 1980)*

Sen’s Capability Approach (1989) argues that how wealthy or how resourceful an individual is, might not be of such importance. There is a need to evaluate how a person is able to perform in terms of his capability, which goes hand in hand with his aspiration for a good life. The capability approach introduced a dimension for the proper evaluation of what capabilities really are. This is the concept of how well or how badly a person can perform if he or she encounters any difficulty. The capability approach, as stated by Sen’s Capability Approach, (1989) and further analysed by Pogge (2002), can be used to evaluate an individual in terms of the following:

- Personal heterogeneities - people have physical characteristics connected to illness, disability, gender and age, which makes their needs diverse.
- Local environmental diversity - climate change, pollution, etc.
- Variations in social conditions - provision of education, public services, relationships, etc.

- Differentiation in relational perspectives - determine the expected commodity for a certain behaviour, consumption, etc.
- Distribution within the family - family roles, intra-family distribution of resources.

Mitra (2006) and Robeyns (2005) expanded the range of capabilities, introducing vectors such as “personal conversion” (how a commodity could be converted into a function; for example, if a person has any form of disability and cannot ride a bicycle, then the bicycle would be of no use in his function of mobility); social conversion (social and economic norms; for example, if a country imposed a legal requirement that a woman could not ride a bicycle unless accompanied by a man, then it would be impossible for her to use the machine to function); environmental conversion (how the environment enables the use of a commodity (for example, if there are no paved roads, a commodity such as a bicycle could not be used to achieve the person’s function). Figure 5 below illustrates these points in this discussion.



*Figure 5. Illustration of Mitra and Robeyn's expansion of Sen's capability approach*

*(Adapted from Mitre 2006)*

According to Robeyns (2005) we should be concerned not only with which functions a person can achieve but should also know more about the person, about his environment and the circumstances in which he is living. This would offer an in-depth understanding of those material and non-material circumstances which influence his capability. She argues that the functions and capabilities model should not imply that no attention should be paid to resources or social institutions. In some instances, it does make more sense to evaluate a person's functions more directly, as opposed to through his capabilities. Robeyns (2005) also states that in life it can happen that two people, while they may have the same capability set, could achieve different levels of functions (Robeyns, 2003, p. 13-14).

The above discussion on the capability approach lends itself towards an opportunity in the partaking of a particular activity in society. The capability approach is premised on capability and function within the context of contextual factors, in that a person with disability should have control or have access to his capabilities. The capability approach therefore asks the question: "do people have the capabilities within their own capability set, or are they punished by members of their families or societies in the kind of life they are living?" (Robeyns, 2005); "Secondly, is the right to healthcare a derivative right?" (Ram-Tiktin, 2012); and "thirdly, what role can the capability approach play in understanding disability?" In support of the understanding of disability for analysis purposes, Mitra (2006) states that disability is simply an inability to do something, but it seems that disability has become the subject of a variety of definitions. The capability approach offers an investigation into whether someone's capability is within the normative values of his typical function references of class and age, determining whether his deviation from his normal typical function negatively affects his ability to execute his life plans (Ram-Tiktin, 2012, p. 341).

The capability approach could therefore be summed up as being mainly concerned with the individual and how she or he is able to convert her or his primary goods into his ability to make ends meet. *The argument here is that in the context of the Namibian society it might happen that someone with a disability might receive more resources (grants), in order for him or her to have the same capability as a person without a disability* (Pogge, 2002).

#### **2.8.4 Problems with the capability approach**

The capability approach does not offer an explanation for collective capabilities, since it is mostly concerned with the individual (Trani et al., 2011). In the context of disability, it would therefore be prudent to improve the collective capability of a community in order to address disability, as opposed to taking an individual approach as advocated by the capability approach. Nussbaum (2009) is mostly concerned with the frontiers of justice, arguing that people with cognitive disability should be given full equal rights. However, her findings do not clearly stipulate how the contextual factors and the personal factors should be dealt with in the law so as to offer disabled people equal entitlements to medical care, housing and other economic needs.

As argued by Mitra (2006), the traditional or utility approach will be the factor to be considered. Under personal factors, the capability approach is able to define the interaction of a person with his limitations when confronted with barriers to fulfilling his daily functions (Trani & Bakhshi, 2006). The capability approach *informs objective 2 of this dissertation, which seeks to identify the personal factors hampering access to healthcare by people with disabilities.*

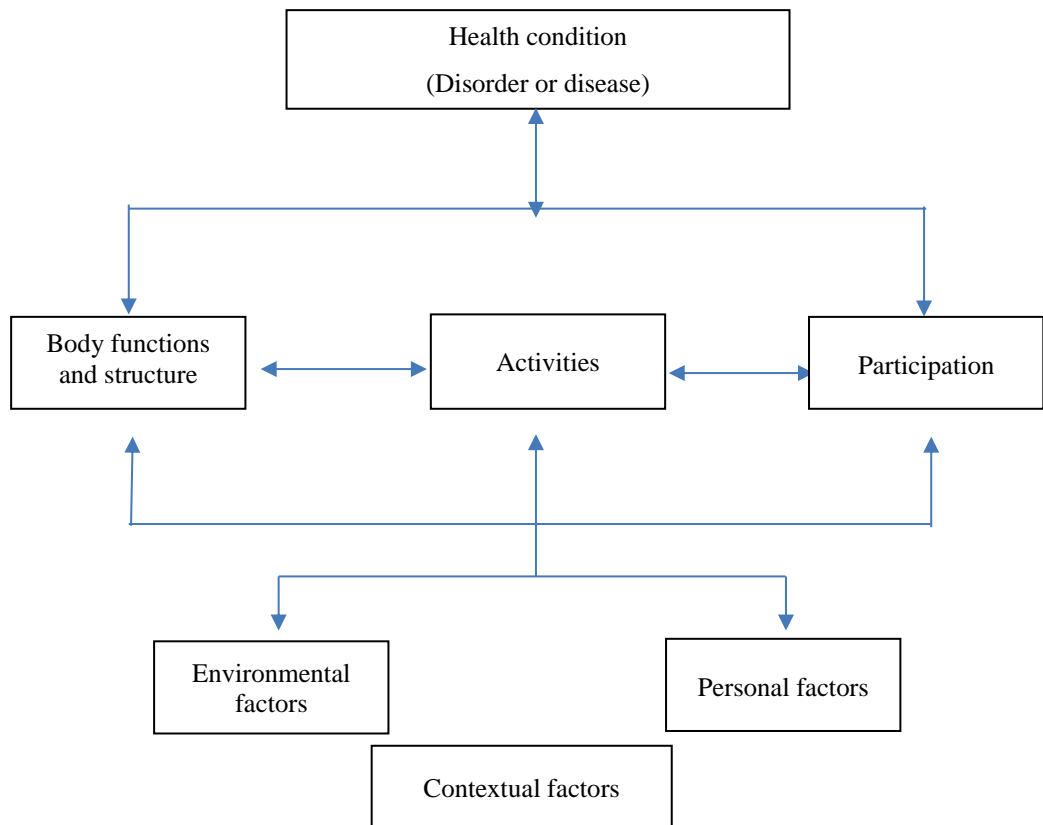
### **2.8.5 International Classification of Functioning (ICF) disability**

Trani and Dubois (2011) argue that both the capability approach and the International Classification of Functioning Disability and Health can be considered as major frameworks for understanding disability. The ICF model can be used to promote appropriate disability surveys, while the capability approach is embedded in the individual's interaction within a community that considers his or her capabilities to function as a person.

The ICF helps to contextualise a person's function as an interaction of his/her health condition, environmental factors, and personal factors. Therefore, function and disability in the context of the ICF relate to:

- Body function and structure of a person.
- Activities people perform.
- Factors in the environment that they experience.

The ICF model is illustrated in Figure 6 and a summarised explanation is given in Table 1 below.



*Figure 6.* ICF model showing the integration of the various components  
(Adapted from WHO, 2002 p. 9)

As illustrated in Figure 6 above, disability and functioning are viewed as outcomes of interactions between health conditions (diseases, disorders and injuries) and contextual factors. Among contextual factors are external environmental factors (for example, social attitudes, architectural characteristics, legal and social structures, as well as climate, terrain and so forth); and internal personal factors, which include gender, age, coping styles, social background, education, profession, past and current experience, overall behaviour pattern, character and other factors that influence how disability is experienced by the individual (WHO, 2002, p. 11)

Table 1

*Terminology used in the ICF model*

<b>Component</b>	<b>Body function &amp; Structure</b>	<b>Activity</b>	<b>Participation</b>	<b>Contextual factors</b>
<b>Definition</b>	The physiological functions of the body system	Execution of a task or action by an individual	A person's involvement in a life situation	Contextual factors that together constitute the complexity of an individual's life and how his health background is classified - environmental and personal factors
<b>Negative aspect</b>	Impairment	Activity limitation	Participation restriction	Barriers/hindrances

(Source: Dahl, 2002)

Historically, the ICF model belongs to the World Health Organisation (WHO) family and specifically the ICIDH (International Classification of Impairment, Disabilities and Handicaps), as well as the ICD-10 (International Statistical Classification of Diseases and Related Health Problems). Originally published in 1893, the ICD is now in its 10<sup>th</sup> revision, while the ICIDH, first published in 1980, is undergoing its first review (Gray & Hendershot, 2000).

Bilbao et al. (2003) argue that the ICF focuses on the aetiology of a disease and disorder, rather than on the effect that a disorder might have on the individual's functioning. The same disorder can have a variety of different consequences, depending on the individual's personal strength, the stage of the disorder, and the availability of healthcare, assistive devices or the support of his family (Bilbao et al., 2003, p. 240).

Steiner et al. (2002) present the ICF model as consisting of two parts. Part one looks at function and disability and focuses on bodily functions, structures

and participation in activities. Function refers to common activities such as walking, taking a bath, going to school, or accessing all the health services that are included in this domain of the model. Part two describes the contextual factors, both environmental and personal. This part of the model refers to disability not as an intrinsic feature of the individual but as arising from the way the individual interacts with the environment.

Given that the social model is mostly concerned with disability in the context of society, and the capability approach is more concerned with functions and capabilities, the ICF model, which focuses on environmental and personal factors, will be the primary methodological construct of analysis for the study.

The discussion of the different models of disability links with the main objective of this dissertation, which focuses on investigating how contextual and personal factors influence access to health services, as perceived by the people with disabilities in the study sites of the Khomas and Kunene regions. The question that arises from the discussion on the different models is: “are we disabled by society or by our functions?” (Beaudry, 2016). In answering this question this dissertation, in dealing with the main research question posed above, adopted the EquiAble model which is premised on the ICF model, but which also includes elements of the social model and the capability approach. In stating the theoretical framework that guided this dissertation, disability should be seen in the context of the individual’s interaction with the social, economic and physical environment thereby producing advantage or disadvantage which is also a form of capability (Burchardt, 2004). Table 2 summarises the discussion on the three disability models highlighted above.

Table 2

*Mapping of disability models.*

<b>Models of disability</b>	<b>Description</b>	<b>Causes</b>	<b>Focus of interventions</b>	<b>Advantages</b>	<b>Challenges</b>	<b>Role of body impairment</b>	<b>R</b>
<b>Social model</b>	Disability is a specific product of social and economic structures addressing discrimination of PWD, that might be a result of an institution or exclusion from society	Disability is a specific product of social and economic structures addressing discrimination of PWD, that might be a result of an institution or exclusion from society	Disability is a specific product of social and economic structures addressing discrimination of PWD, that might be a result of an institution or exclusion from society	Disability is a specific product of social and economic structures addressing discrimination of PWD, that might be a result of an institution or exclusion from society	Disability is a specific product of social and economic structures addressing discrimination of PWD, that might be a result of an institution or exclusion from society	Disability is a specific product of social and economic structures addressing discrimination of PWD, that might be a result of an institution or exclusion from society	Dis
<b>Capability approach</b>	Disability occurs when an individual is deprived of practical opportunities or functioning as a result of an impairment or health condition	Recognizes that poverty can be the cause of disability	Social parameters that determine when and if a given limitation in functioning becomes a disability	Places human diversity central in its framework and provides a more accurate depiction of overall well-being	Two primary components in the capability approach, namely capabilities and functions. Functions are an individual set of achieved doings and beings of what he/she manages to do or to be. Capabilities are an individual's potential to	Interaction between impairment and other conditions related to the individual	Em

					achieve certain functioning		
<b>International Classification of Functional Disability and Health</b>	The ICF, focusing on health, sees it as a dynamic interaction between a health condition and contextual factors.	Health condition represents diseases, trauma, injury or disorder, while contextual factors include aspects of human-built social and attitudinal environment that might create a lived experience of function and disability as well	Performance qualifier – describe the extent of participation restriction based on your individual environment; Capacity qualifier- your extent of activity limitation in your ability to execute a task in a uniform environment	Personal factors such as age, sex, coping styles, social background and education that might influence how disablement is experienced by the individual	Activity limitation, difficulty an individual might have in execution his/her activities	Impairments are problems in body function as a significant deviation or loss	Environmental factors Physical social attainment environment in various people and their

(Source): Anastasiou, et al., (2013), Oliver (2013), Samaha (2007), Smeltzer (2007), Shakespeare, et al., (2002), Leimkuehler (n.d.) (Jette, 2005), (Terzi, 2004) & Mont, (2007).

## 2.9. Access in health seeking behaviour

Access in the context of health-seeking behaviour can be grouped at most into five dimensions that could influence it: *availability*, *geographic accessibility*, *affordability*, *adequacy* and *acceptability* (Obrist et al., 2007). Peters et al. (2008) explain *geographical accessibility* as the physical distance or travel time from the service delivery point to the user. *Availability* means having the right type of care ready for those who are in need of it. *Affordability* refers to the relationship between the price of the service and the willingness and ability of the user to pay for it, while *adequacy*

*and acceptability* refer to how the service conforms to social and cultural norms and the expectations of the individual user (p. 162). Therefore, in order for a person to receive quality care, these main conditions of access should be met. With geographical access, the argument is that good roads, especially in rural areas, and travel times are in an inverse relationship to accessing a facility. Availability is the opportunity to access healthcare when needed. Financial accessibility can be a constraint for those users who may not be able to afford the required fees. Acceptability, as stated by the Alma-Ata Declaration, means that healthcare should be in line with cultural norms (Peters et al., 2008).

In support of Peters et al. (2008), Fortney, Burgess, Bosworth, Booth, and Kaboli (2011) argue that access is mostly a face-to-face encounter and does not take into account digital utilisation; they propose amending the dimensions of access as geographical, temporal, financial, cultural and digital. “Geographical” is viewed as the ease of travel to a facility; “temporal” is the time required to receive a service; “financial” refers to the cost of the care; “cultural” is the acceptability of healthcare; and “digital” is about synchronous or asynchronous digital communication with providers (Fortney et al., 2011, p. S643).

Levesque, Harris, and Russell (2013), view access either as a service that a provider or institution presents as an opportunity, or as the ease with which a consumer or community is in a position to use or make use of the appropriate services. For them, access is an attribute of services that is determined by factors such as availability, price, quality, and goods and services. It can also be etymologically defined as a place through which you enter, have the right to use, or the right to visit (p. 1). A further dimension of access, which might have an impact on barriers, is the inverse care law. Tudor Hart (1971) explains that: “Good medical care tends to vary

inversely with the need for the population it serves” (p. 405). His argument is that the rationale for resource distribution should be in accordance with social and geographical differences; however, if that is not possible, it should at least show some form of uniform distribution (Tudor Hart, 1971).

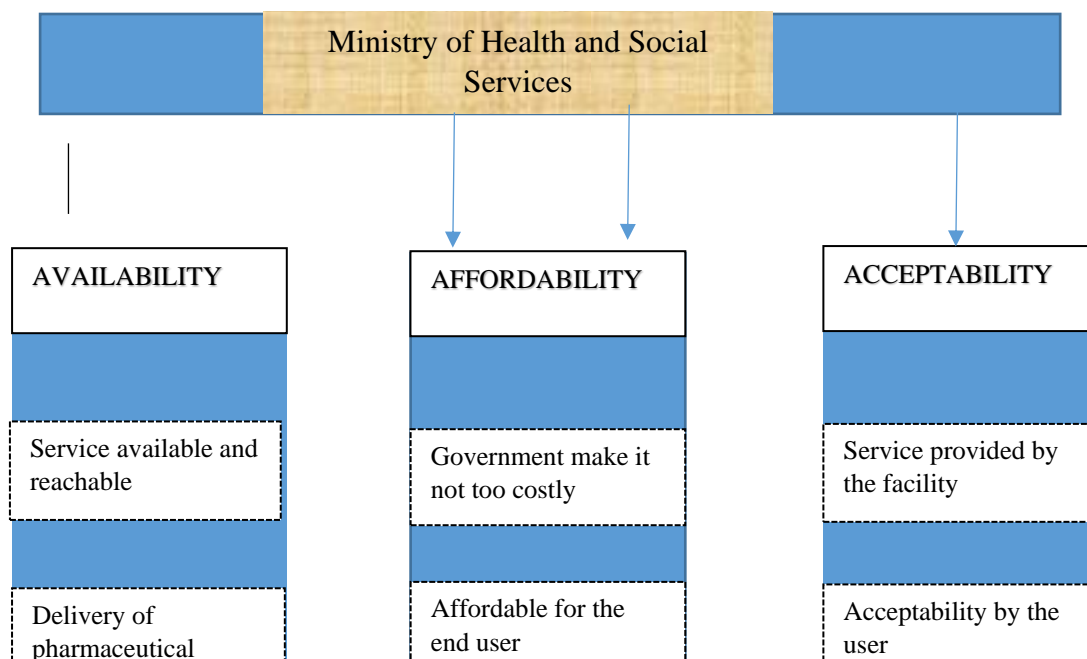
A final question remains about access: Is it controlled by a law? Peters et al. (2008) argue that “there is no law that determines access to healthcare.” If we really need to talk about access, we should view it in the context of the quality of geographical access, availability, financial accessibility and acceptability, as these factors need to be taken into account in particular when talking about access to healthcare (Peters et al. 2008, p. 166).

Oliver and Mossiales (2004) regard access as “the ability to secure a specific set of healthcare services at a specific level of quality that must conform to a set of minimum standards” (p. 656). Scheer, Kroll, Neri, and Beatty, (2003), maintain that access is generally defined as “the use of services when there is an actual need for healthcare, but when the lack of access occurs, then these services are not utilised” (p. 221). Today, the core value of health as viewed by various authors is based on the concept of equity. For these authors, equity could have a direct bearing on access to health for marginalised groups and specifically for vulnerable groups. The concept of equity in healthcare stems from the Universal Declaration of Human Rights (UDHR), which under Article 25 states that:

*“Everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food, clothing, housing and medical care and necessary social services and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control”* (Sen, 1997, p. 1).

## 2.10 Access to healthcare: the case of Namibia

Murray and Clark (2000, p. 719) argue that the goal of any health system should be to improve the health of its population it serves, and if it does not succeed in it, it's better not to have a health system at all. The point of illustration is that health must reflect the health status of its population as a key outcome, but if it fails it can lead to inequalities in providing the services. In dealing with health inequalities the question of access to essential medicine that saves life and improves health outcomes might become a challenge for both the public and private sector. Therefore, in order to understand the issue of access to healthcare and within the context of Namibia, an access framework as adopted could answer some of these questions (Figure 7).



*Figure 7. Access Framework (ideas adopted from Frost & Reich) to show access in the context of Namibia*

The Ministry of Health is the custodian to provide health services to all those in need

*Availability:* Delivery of the health service should be available and reachable. It should also be in a position to supply all the needed medicine and drugs when prescribed

*Affordability:* Government should ensure that the service as provided, should be affordable to those making use of the service. It should not be too costly.

*Acceptability:* those making use of the service should be able to find it acceptable by virtue of the standard of the facility and its treatment protocols.

In summarising the framework, it is important to highlight the fact that access to health services might differ in some instances due to the influence of factors that act as barriers as well as those facilitating the services. However, the argument is that the mentioned processes play a significant role in access. A fuller discussion on

the A's will follow later in showing equitable access to health care in the context of the two study regions.

An important piece of legislation on access was included in a recent Act of Parliament.

The National Health Act of 2015, no 2 of 2015, under article 40(1) (para 25), states that “Every person in Namibia has access to a state hospital or a state service and is entitled, subject to this ACT and to such hospital rules as may be made as contemplated in section 43(2)(b), to -

- (a) Receive treatment or other medical care, and
- (b) Benefit from any of the health services under this ACT.”

According to Amadhila (2012), few studies focus on access to healthcare. She cites the work of Bell and Lithinda (2002), and of the Ministry of Health and Social Services. The former mostly focus on improving equity in healthcare for Namibia, while the latter is concerned with access to orthopaedic workshops for those with disabilities. In her Master's study, Amadhila (2012) highlights the fact that there is limited literature on access to healthcare for the physically impaired and argues that her study will contribute to policy formulations that are inclusive of people with physical impairments, as part of realising the goal of Vision 2030 (Amadhila, 2012 p. 16). Amadhila et al. (2013), state that the delivery of healthcare to vulnerable groups in all aspects is faced with problems of health policies. She employed the EquiFrame<sup>5</sup> to analyse 10 health policies using “core concepts” and “vulnerable groups” to identify their relevance in addressing access to healthcare (Amadhila, et al. 2013). Van Rooy,

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<sup>5</sup> EquiFrame is a novel analytical and peer-reviewed framework that serves to identify the strengths and weaknesses in current health policies with regard to the degree in which a policy promotes and protects the core concepts and vulnerable groups (Mannan, et al., 2013, p.2)

et al. (2012), observe that the Namibian Government saw their Community Based Rehabilitation as a critical component in integrating people with disabilities. They produced a policy on Orthopaedic Technical Services<sup>6</sup> that was guided by the principle of equity in line with the Namibian Constitution (Van Rooy, et al., 2012). In the promotion of health for all, MacLachlan et al. (2012) support the principle that equitable healthcare should be based on the needs of people, as well as their socio-economic status (MacLachlan et al., 2012, p. 1). Their argument is that health policies should make an effort to address those who are excluded in terms of accessing healthcare (p. 1).

Additionally, Zere et al. (2007) argue that the Ministry of Health and Social Services does not have a clear definition of access, nor does it take into account the different health needs of people. They maintain that resources should be allocated to those regions which have few resources and that this would result in equitable access to healthcare. They advocate for vertical equity (Zere, et al., 2007, p. 2). This dissertation supports the idea of Zere et al., (2007) on the use of vertical equity to achieve equitable access for those with disabilities. Kuwana (2014) argues that “of profound importance is the impact of barriers to access on the health outcome and quality of life for children with disabilities. The inadequate access to healthcare services presents a daunting challenge to the attainment of the health for all initiatives” (p. 2). This suggests that any health service should be accessible, affordable and acceptable. She points out that barriers faced by adults in accessing healthcare are also having an impact on children (p. 24).

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<sup>6</sup> Namibian Policy on Orthopaedic Technical Services (OTS), 2001

Bell, Taathi, and Low (2002) argue that, despite the Bamako Initiative of decentralisation, it is generally accepted that at the central level a health ministry should advise on the allocation of capital funds and establish the norms and standards of healthcare infrastructure. In the case of Namibia, there should be a meaningful dialogue between those who are involved in healthcare planning, as well as between the healthcare management teams concerned with the allocation of capital budgets to the various regions.

The Community Health Workers (CHW) programmes received a variety of criticisms, as recorded by Low, Ithindi and Low (2003). The criticisms were twofold: that the programmes were seen either as ineffectual in improving healthcare or as being fraught in relationships between partners. Low, et al. (2003) claim that in the case of Namibia this could be overcome. They point out that, firstly, there was a need to clarify the objectives of a CHW programme, and secondly, that it should have a careful plan. They conclude that CHW programmes have a legitimate and important role to play in delivering healthcare in developing countries.

A recent study by Lessen et al. (n.d.) focused on Universal Health Coverage, which formed part of the post-2015 developmental agenda for Namibia. In their paper, they made use of four distinct criteria to achieve Universal Health Coverage. These were staff deployment, scarce skills allocation, staffing norms and task sharing. Basing their study on the regional HIV occurrence, they showed how the Workload Indicators of Staffing Needs could be used to achieve Universal Health Coverage. However, their work mainly focused on achieving Universal Health Coverage using the work load indicators and did not necessarily address access to healthcare for people living with disabilities.

In the context of South Africa, Vergunst, Swartz, Mji, MacLachlan, and Mannan (2015) found that people with disabilities are faced with barriers when accessing healthcare. In particular, this is a result of a lack of information about interventions that might improve the lives of people with disabilities in low-income and middle-income countries (p. 1). They conclude that there are practical barriers that need to be addressed and suggested that attitudinal barriers could be addressed more cost-effectively (Vergunst, et al. 2015, p. 1).

For Commer (2013), the problem with access to healthcare in the context of Namibia is that it is mostly geared towards sub-optimal service. She highlights the barrier of transport as a major problem for parents of children with mental disabilities in accessing healthcare. Her argument is that there is a need to address general concerns about healthcare with the aim of improving services for children with mental health disabilities (Commer, 2013 p. 271).

As pointed out by Mannan et al. (2013):

*The World Report on “Working together for Health” noted that Africa has the greatest disease burden of any continent but has the poorest health services. Thus, the three African countries that are the focus of this analysis each represent distinct challenges in terms of equitable access to health care. These three countries allow us to address access where a large proportion of the population is displaced (Sudan), where they are highly dispersed (Namibia), and a high disease burden (Malawi) (Mannan, 2013, p. 3).*

The latest work on access to healthcare that comes closest to the topic of this dissertation is that of Van Rooy et al., (2012), who focused on structural-environmental barriers and health service delivery barriers. The authors showed that in a rural environment most of the people with disabilities have to walk to the health centres. While they may not all experience the effects of disability in the same way, they all face the problem of transport. The study concluded that the healthcare

authorities in Namibia should consider the unique issues that affect access to healthcare for people living with disability (p. 774). Another study by Van Rooy, Mufune, and Amadhila (2015) on barriers for the elderly confirmed that in accessing healthcare the elderly are mostly confronted with structural and process barriers. They point out that equitable access to healthcare for the elderly can only be achieved if the unique issues that affect healthcare for older adults in Namibia are addressed in terms of culture and the role of the extended family. Older people get free healthcare, but they have to support the extended family system, while family members are supposed to support them with their income when they want to access healthcare (Van Rooy, et al. 2015, p. 9).

Since this dissertation deals with the contextual factors and personal factors which might hamper access to healthcare, it reinforces the argument of Rogers (1997) which examines vulnerable populations or populations that are at the risk of poor physical and social health. This includes groups that might be more vulnerable to ill health than others (p. 66). The groups listed by Rogers are the aged, women (who suffer more stressors than men as a result of the various roles they fulfil), and those who lack social support, have had little or no education, lack any income, or face changes in life (Rogers, 1997). In terms of contextual factors, Rogers refers to vulnerability that might arise either from factors within the individual (internal factors) or from factors in the environment (external factors). Such personal and environmental components can have either a detrimental effect on one's health or help to promote it (Rogers, 1997).

The delivery of healthcare in low and/or middle-income countries might be influenced by a range of barriers connected with accessing healthcare (Trani, Bakhshi, Noor, Lopez, & Mashkoo, 2010). In particular, as argued

by Vergunst, Swartz, Mji, MacLachlan and Mannan (2015), those with disabilities might encounter attitudinal barriers which could hinder their access to healthcare.

There is an increased awareness among researchers about the problems faced by marginalised groups in low-income countries (Eide, et al., 2003, p. 1). That people with disabilities should be treated the same way as those without disabilities has been ratified by the Convention on the Rights of People with Disabilities (Article 25d), United Nations (2006). This might jeopardise efforts by the UN to achieve its Millennium Development Goals on access to healthcare (Vergunst, et al. 2015).

In addressing research objective 2 (*to identify the personal factors that hamper access to health care for those living with disabilities*) of the study in identifying personal factors, access is rooted in the concept of barriers which is an overarching theme of this dissertation in discussing equitable access to healthcare. However, we need to distinguish between two types of operational barriers, those of demand and supply. Demand-side determinants (barriers) are factors which influence the use of health services at individual, household or community level, while supply-side determinants (barriers) are aspects inherent in the health system itself which hinder service uptake by individuals, households or the community (Jacobs Ir, Bigdeli, Annear, & Van Damme, 2011).

Literature holds the thinking that healthcare is based on the equilibrium of demand and supply (Ensor & Cooper, 2004). The point of departure is that demand-side barriers are those which can create a demand for healthcare. This notion of access is also related to a patient-provider, face-to-face encounter (Fortney, et al., 2011). Levesque et al. (2013) propose five dimensions of access which underscore the contrasting notions of supply-side and demand-side access. When an individual (in our case a person with a disability) creates a demand for healthcare, the factors are: 1)

approachability, 2) acceptability, 3) availability, 4) affordability, and 5) appropriateness. These should correspond with the individual's ability to attain access by virtue of: 1) ability to perceive, 2) ability to seek, 3) ability to reach, 4) ability to pay, and 5) ability to engage (Levesque, et al., 2013, p. 5). Taking into account this background and looking at the results of the EquitAble data, in the demand for healthcare there might be a number of barriers, such as lack of transport, negative attitudes of health workers, lack of accommodation at the facility, standard of the health facility, and the patient not knowing where to go. Facing demand barriers (as shown in Table 3), people with disability experience the effects of these barriers in accessing healthcare. Thus, it could be argued that access to healthcare is primarily based on the demand it creates.

Table 3  
*Demand and supply barriers to access health care.*

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**Dimensions of barriers**

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Accessibility

- Lack of transport (D)
- No service available (S)
- Physical access to facility (S)
- Standard of the healthcare facility (D)
- You did not know where to go (D)
- Don't have the necessary documents (S)
- Journey to healthcare is dangerous (D)

Availability

- The healthcare providers' drugs or equipment were in adequate (S)
- Could not take time off work or had other commitments (S)
- You tried but were denied healthcare (S)

Affordability

- Could not afford the cost of the visit (S)
- Could not afford the cost of the transport (S)

Acceptability

- There is no accommodation at the healthcare facility (D)
- Negative attitude of healthcare workers (D)
- Because of faith/belief (S)
- You were previously badly treated (S)
- Communication with health workers (S)
- You thought that you were not sick enough (D)

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Notes D=Demand; S=Supply (Table constructed on the listed barriers of the study using the example of Ensor and Cooper (2004) on health care utilisation

*(The table was constructed on the 18 barriers of the survey questionnaire which will be used in the subsequent analysis)*

Table 3 is a clear illustration of the barriers encountered by people with disability in the context of Namibia. The author, in constructing the table, used data collected from the EquitAble survey and as reported on by Eide et al. (2015) who highlight those barriers that have an impact on people with disability with regard to access to health care using the four "A" and identify which of those barriers are the

supply barriers and which are the demand barriers. This was done in lieu of the argument by Ensor and Cooper (2004), that demand barriers are an important factor in the supply of healthcare. They point out that the poor generally do not use healthcare facilities, as this is purely based on demand and supply. A demand for healthcare arises when an individual feel that he is sick and is therefore willing to seek healthcare service. The important factors when seeking healthcare service are the price of the healthcare service and any other costs it might include. These are the household and community factors (Ensor & Cooper, 2004). Household factors are associated with age, sex, income, educational attainment, knowledge and so forth, while community factors include cultural and religious influences and other social elements which play a role in the life of the individuals (Ensor & Cooper, 2004).

Further analysis of Table 3 above, indicates that, in terms of accessibility, some of the supply-side barriers are those pertaining to accessibility such as: “no service available”, “physical access to the facility”, and “don’t have the necessary documents”, influence health seeking accessibility. Supply barriers were also prominent under *availability*, in that the “healthcare provider’s drugs or equipment were inadequate” or “could not take time off from work due to other commitments”. The most common demand barriers under *acceptability* are: “there is no accommodation at the health facility”, “negative attitude of healthcare workers”, and “you thought that you were not sick enough” which clearly indicate that (and in support of the notion by Eide et al. (2015) people from rural areas in Namibia experience the impact of barriers more severely than those from urban areas.

In addition, a study by Smith et al. (2004) on women seeking reproductive and maternity care in Zambia found that, even though such care was free, women were faced with hidden costs for certain items, such as the cutting of the

umbilical cord and for drugs (p. 125) (as stated by many women with disabilities), and since they could not afford these, the hidden costs became a barrier for them in seeking reproductive or maternity care (Smith et al., 2004). Van Rooy et al., (2012) observed (and supported by Bachman, Vedrani, Drainoni, Tobias, and Maisels (2006)), that lack of access to healthcare is a result of either physical barriers on the one hand or communication and attitudinal barriers on the other hand. Bachman et al. (2006) also found that a patient who had a cognitive impairment might have difficulty in communicating with a service provider, resulting in limited access to healthcare.

Conventional thinking in terms of barriers can also make it difficult for people to do the things they like to do. When we go shopping or walking or go to work, we take it for granted that it is the same for everyone else, but for people with disabilities, these actions can present obstacles. Moreover, when talking or thinking about barriers, we tend to focus on factors that are related to physical obstacles, but there are also barriers which are invisible. Accessibility, for example, is related to attitudinal barriers. Discrimination against people with disability shows in the way people act with them or treat them. With informational barriers, information and/or communication are presented in such a way that a person cannot really understand what is being said. Technological barriers are such that the technology only serves certain people's interests, rather than those who need to use the technology. In some organisations there are policies that are not inclusive of the needs of everyone served by the policy. People with disabilities can be faced with environmental as well as architectural barriers, for example, when trying to access a building, and this can further hamper their participation in a given society (Coate, 2014).

From the above discussion it is evident that people with disabilities are confronted with a number of challenges when they try to navigate the world in which they are operating.

A barrier to healthcare is thus one of the numerous factors which can prevent an average citizen of a nation from receiving the necessary healthcare, or receiving inferior healthcare compared to others. This is confirmed by Scheer, Kroll, Neri, and Beaty (2003), who state that barriers to access are those factors which prevent a person from getting or using the appropriate services.

In illustrating the impact of barriers in access to health care and as stated by Van Rooy et al., (2012), for the subsequent analysis of this dissertation in terms of barriers, it is important to offer a checklist of barriers (structural-environmental barriers and health services delivery process barriers) that people with disabilities might expect to face when accessing healthcare. This is to highlight both the contextual and personal factors that people with disabilities might experience when accessing healthcare. The importance of this checklist is to show the effects of certain barriers on access to healthcare for people with disabilities and how this access differs from the able-bodied person (someone without disability)

#### **2.10.1. Access and barriers as a subsidiary to healthcare**

#### **2.10.2 Cultural barriers**

As argued by Drainoni et al. (2006), cultural barriers to accessing healthcare are those related to negative attitudes, misperceptions, and lack of knowledge. Negative attitudes can result in caregivers either withholding treatment or giving inferior treatment. With misperceptions, they focus more on the disability and

less on the person as a whole. These factors can result in the person seeking healthcare not trusting the service, relying instead on self-treatment (p. 103).

### **2.10.3 Language**

Language differences can also create an impediment to effective and ethical rural healthcare. In their studies, Chipp et al. (2010) and Hamrosi, Taylor, and Aslani (2006) found that rural residents had greater difficulty with the labels on medication and on interpreting written information and instructions. Hwang et al. (2009) established that rural people living with disabilities had limited communication with providers. Issues of language seem to be related to issues of ethnicity.

### **2.10.4 Geographical/environmental barriers**

Geographical isolation, poverty, illiteracy, transport difficulties and other related factors have a major impact on the delivery of healthcare, especially for people who are living with a disability. This is supported by Brems, Johnson, Warner, and Roberts (2006), who state that:

*“Optimal healthcare delivery, regardless of location, is technology-demanding, costly without economies of scale, and dependent upon a skilled workforce. These features of healthcare systems are difficult to satisfy, even in urban areas. In rural areas, these features, in combination with rural limitations, make development and maintenance of efficient and effective healthcare delivery difficult”* (p. 105).

Geographical challenges such as mountains, gullies, rivers, or unpaved roads can present physical barriers to accessing healthcare (Van Rooy et al., 2012). Because of such geographic challenges, “some rural residents make trade-offs between their safe travel in inclement weather and accessing healthcare in a timely manner”

(Chipp et al., 2011). “The more remote the area in question, the greater the problems of access to medical care due to geographic distances, transportation problems, lack of insurance, and an inadequate supply of local providers” (Lishner, Levine, & Patrick, 1996). Geographical barriers include the urban-rural divide whereby medical practitioners choose to work in urban settings as opposed to rural settings. Rural residents also have very “limited access to specialised providers and consultants (i.e. cardiologists, oncologists, psychiatrists), and additional resources due to the rural geography” (Chipp et al., 2011b, p. 2). It is not just mere distance, but also the difficulty of travel as well as the unavailability of specialised services which create problems in Namibia’s rural areas.

#### **2.10.5 Attitude**

According to Etowa et al. (2007, p. 68), “racist attitudes of health-care providers present an obvious barrier, the lack of diversity among health-care personnel also makes it difficult for some women to access suitable health-care providers.”

#### **2.10.6 Health affordability**

Etowa et al., (2007), further argue that poverty acts as a determinant of healthcare because it restricts access to healthcare services and treatment. Chipp et al. (2010) specify that rural residents incur more expenses travelling to regional centres to receive healthcare, because such care does not exist in their local communities and/or facilities. In Etowa et al., (2007), about 57% of their respondents reported that they did not have enough money for medication. In particular, women often failed to seek medical attention because they could not pay for transport to the clinic. Similarly, Goins, Williams, Carter, Spencer, and Solovieva (2005a p. 210) found that “financial constraints posed considerable barriers to accessing needed healthcare among study

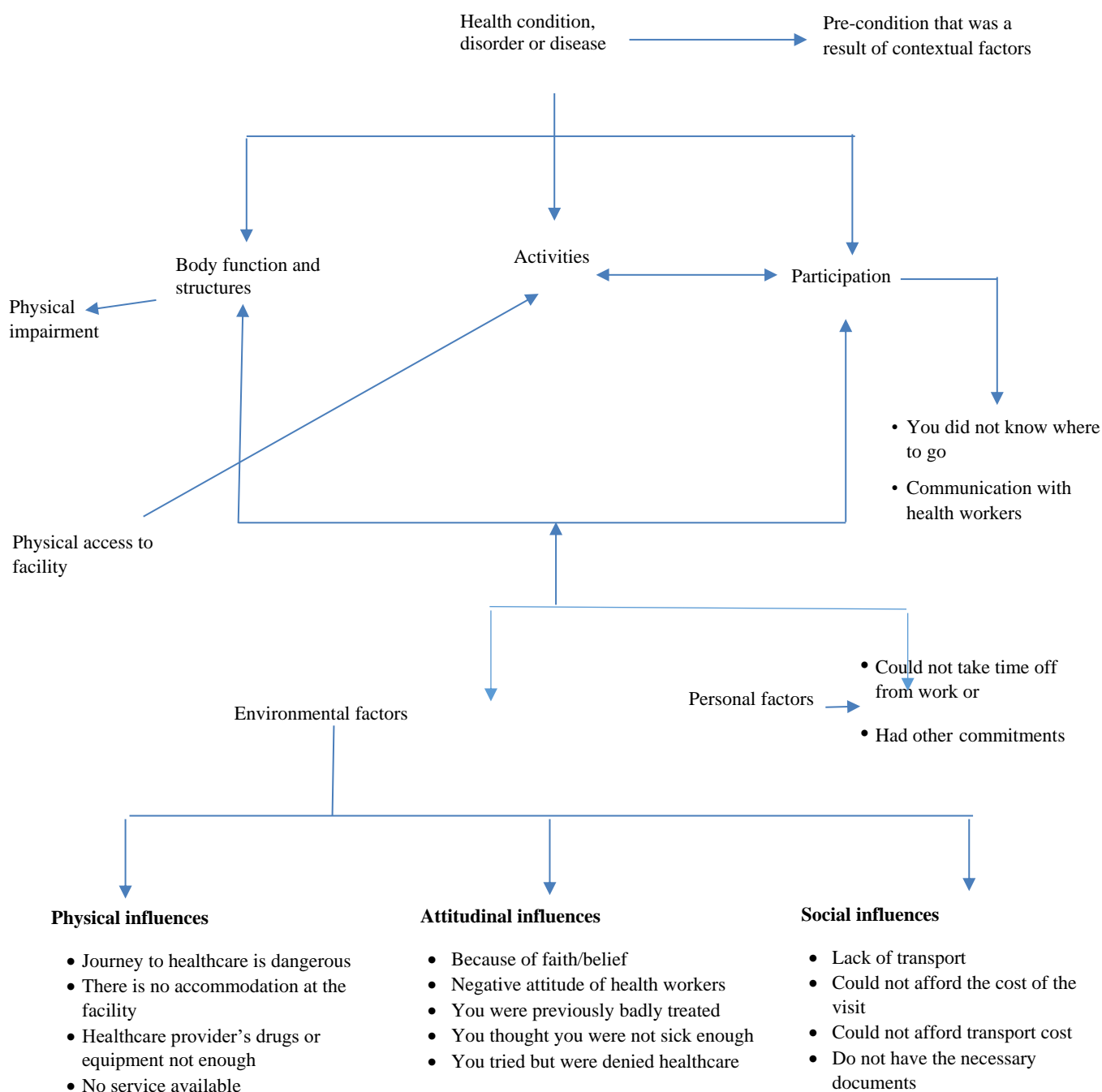
participants, including issues related to healthcare expenses, inadequate healthcare coverage.” Research by Hwang et al. (2009b) demonstrated that people living with disabilities need a wider range and depth of services, and this resulted in higher costs of healthcare for them. In Namibia, where most people with disabilities are unemployed (and do not have insurance coverage of any kind), the costs of transportation, medicine and other services can be prohibitively high.

#### **2.10.7 Delivery process barriers**

Personnel at some facilities lack adequate professional knowledge. This is brought about by a combination of insufficient training and the limited numbers of healthcare workers. The problem is not restricted to poor countries but also affects rural places in developed countries. For example, Goins et al. (2005) found that in Canada there were concerns about the limited number of physicians and long-term care options. Discussions about the limited number of physicians highlighted difficulty with recruitment and retention, the need for more specialists, an overall limited choice of physicians, and the aging of local doctors (Goins et al., 2005). In Namibia, most rural residents depend on healthcare given by local nurses, rather than doctors or other specialised personnel. The limited number even of nurses means that few competent personnel are available to treat rural residents. Hwang et al. (2009) conclude that, whereas most people tend to be satisfied with the overall competence of physicians, many believe that healthcare providers need to know more when it comes to dealing with those living with disabilities.

It is clear, therefore, that vulnerable people experience a host of barriers in accessing healthcare. Furthermore, the healthcare they receive might not be in their best interests, which could eventually compromise their approach to seeking

healthcare. Figure 8 below summarises the discussion on the host of barriers as experienced by those seeking health care.



*Figure 8.* Summary of conceptual factors encountered by people with disability when accessing health care using the ICF framework for illustration: (Adopted from Smith, et. al., 2004)

Figure 8, as adopted from Smith, et al. (2004), was used to illustrate the influence of the identified barriers in this study. The conclusion that people with disabilities encounter a variety of barriers suggest a complexity of physical, societal and attitudinal pressures at work that influences access to healthcare for people with

disabilities. During the process of data analysis 18 barriers were identified that have an influence on the life of both the disabled and the non-disabled. In the illustration of these 18 barriers and their impact on healthcare access, the author used the ICF model to illustrate the impact of these barriers. In the context of the above discussion on the issue of barriers, it is worth mentioning that the African model of disability as argued by Berghs (2017) is encapsulated within the context of *Ubuntu*. The author is of the opinion that Africans have their own histories and they take into account some epistemological and ontological models to inform their understanding of disability (p. 5). While Berghs (2017) optes for an understanding of disability in the context of *Ubuntu*, authors such as Mckenzie, Mji & Gcaza (2014) are of the opinion that understanding disability in the African context would be more appropriate if there is a common understanding of disability within the context of human rights using instruments such as the UNCRPD and ICF models in understanding disability in research. For them most of the African countries which do not have access to literature in the English language, tend to focus more on the medical impairment-oriented approach to disability. Be that as it may, these authors argue along the core of this dissertation that there is a need to adopt the ICF model in order for researchers to design disability studies that are internationally comparable (p. 4-5).

## **2.11 Equity in health access**

Since equity is another operational definition of the dissertation, the Alma-Ata Declaration is of relevance in the understanding of the role of equity in health:

*A state of physical and mental wellbeing in the absence of a disease but should be a fundamental right to attain the highest possible level*

*of wellbeing. It goes on to state that “primary health care should be the foundation”, and that it should be premised on the basis of an acceptable method, and technology that is universally acceptable to both the individual, his community, and this country by virtue of it being affordable in order for people to be self-reliant and self-determinant (Alma-Ata Declaration, 1978, p. 1).*

With regard to equity in healthcare the following question arises: Can equity be perceived as unfair or unjust for some, but not for others? From this, a question of fairness in health arises. A dictionary definition of fairness states that it is, “*the state, condition, or quality of being fair or free from bias or injustice*”. This brings out the concept of equity as freedom from bias or injustice, and of equal distribution, or the fairness of distribution. Thus, there could be an element of inequity in accessing healthcare, with an accompanying need to explain when any particular distribution could be regarded as inequitable (Sen, 1973). A further illustration of equity in healthcare is offered by Braveman (2003). According to her, equity in itself cannot be directly measured, as it is a normative concept. She suggests that healthcare inequalities should rather be looked at in the context of various social groups, in particular advantaged and disadvantaged groups, and how these reflect specific forms of inequality (Braveman, 2003). In her work, “*Health disparities and health equity*”, Braveman (2006) interrogates several authors. On the one hand are those who are for equity in healthcare and on the other hand are those who are for equality in healthcare (including or excluding healthcare).

According to Braveman (2006), the weakness of the first group of authors is that they offer no explicit social or economic advantages and have difficulty in defining the need for care. The second group does not provide guidance; they do not explain the difference between health determinants and healthcare, and they omit

considerations of human rights. The relevance to social justice is not clear. Some are too technical; they do not address healthcare determinants, they leave room for misinterpretation, and they do not explain the difference between more advantaged and less advantaged groups (Braveman, 2006, p. 171-177). Given this scenario, Braveman (2006) defines health disparities and healthcare inequity as follows:

*A health disparity/inequality is a particular type of difference in health or in the most important influences on health that could potentially be shaped by policies; it is a difference in which disadvantaged social groups (such as the poor, racial/ethnic minorities, women, or other groups that have persistently experienced social disadvantage or discrimination) systematically experience worse health or greater health risks than more advantaged groups (p. 180).*

Low et al. (2003), following the Global Health Enquiry Initiative (GHEI), emphasise that equitable access to healthcare is not a sufficient guarantee for achieving healthcare equity (Low et al., 2003, p. 2). They argue that equitable access to healthcare will remain insufficient for health equity if we do not tackle healthcare inequalities. In support of their argument, the authors refer to five aspects on the healthcare equity goals continuum: *1) no equity goal; 2) equal provision per person; 3) equal access for equal needs; 4) equal utilisation for equal needs; and 5) equality of health status (p. 2)*. To achieve any of these goals in Namibia's context, it would require a focus on practicality, efficiency and focus (Low et al., 2003, p. 6). This is further strengthened by Culyer (2007), who states that if we really need to understand the concept of equity, there should be a distinction and a concern, and this distinction and/or concern should be between health and healthcare (p. 14). His point is that healthcare is there to improve health. It is not an end in itself; only health can be regarded as an end in itself.

Braveman (2006) also argues that health is a specific subset of differences that need to be given special attention, in that it is a reflection of the social and ethical values of a person (p. 188). This argument is supported by Asada (2005), who suggests that health in itself is a multi-purpose good that is useful for the life plan, and that the characteristics of health are the moral basis for the interest in health distribution (p. 703). This implies that we cannot assume that healthcare will result in equality in health. We need to investigate whether wealth and health are related in all aspects. Those who need healthcare the most are the ones who are placed at the back of the queue in getting healthcare. If we are concerned with equity, we should add a component of financing of healthcare (p. 14-15). This brings to the fore two distinct forms of equity in health, vertical equity and horizontal equity (Wang & Yaung, 2013).

The concluding remarks in the understanding of access in terms of equity is that many authors have set out to define and interpret the concept of equity, both in social justice and health (Sen, 1973, p. 1). The working definition of equity was first framed by Whitehead (2000). He held that everyone should have a fair opportunity to attain their full health potential and that no one should be at a disadvantage when seeking healthcare (p. 7). For Whitehead, equity needed to be brought down to a level where everyone could access healthcare, even at the lowest social level. This view was further refined by Gwatkin (2007), who notes that scholars such as Kawach, Subramaniam, and Almeida-Filho (2002), Braveman (2006), Starfield (2006), and Lowenson (n.d.) had all elaborated on the theme of equity in healthcare. Braveman (2006, p. 168), however, also subscribed to Whitehead's understanding of healthcare disparities or healthcare inequalities. She believes that access to healthcare should be based on the principles of equal access, equality of care and equal utilisation of healthcare resources. Equal access implies equal entitlement to

available services for everyone, meaning a fair distribution of resources based on healthcare needs as well as access. In terms of equality of care, there is a prevailing notion that everyone can expect the same standard of professional care without any discrimination on the basis of their social groups. However, with utilisation of services, there are differences in the rates of utilisation of certain services by certain groups related to certain belief systems. The emergence of health equity was further strengthened by the Commission on Social Determinants of Health (CSDH), set up by WHO in 2005. Thus, the WHO is regarded as the origin of the concept of equity.

According to the WHO initiative for global health, the status of a population in accessing healthcare is based on its social condition. The CSDH (as cited in Friel, 2009) argues that inequalities in health happen, but these can be avoided. However, if they are not avoided, then they are defined as inequitable. Friel (2009, p. 1) argues that if there is a need to talk about health equity, we also need to talk about the idea of social justice.

However, the WHO (“WHO | The World Health Report 2008 - primary Health Care (Now More Than Ever,” n.d.) goes a step further by claiming that healthcare equity should not only be based on social justice but should also revolve around people’s needs and expectations, and should secure the health needs of communities (p. 18). Friel (2009, p. 2) further asserts that this report revisited the vision of the Alma-Ata Declaration on primary healthcare, and, based on the CSDH, advocates a reorientation of a healthcare systems equity, through universal access and protection. Friel’s (2009) argument is that inequalities in healthcare is an outcome of the social stratification of the society. Those who are at the lower end of society and are living in poverty may be excluded from a host of societal structures and benefits. In support of Friel’s argument (2009), the author suggests that, in order to achieve

healthcare equity, we should refocus our developmental goals to ensure that all people are included in the structures of society in order to ensure that they are able to lead a healthy life. In support of access to healthcare, this dissertation will discuss the Perchansky and Thomas' model of access to healthcare which can be linked to the development of disability research in the region as argued by Swartz (2014) who presents five key challenges of disability research which he refers to as the five E's namely "experience, expertise, enumeration, evidence and expectations which he propose as the driving force to disability research for the sub-Saharan Africa (p. 2 & 6).

## **2.12 Summary**

In terms of *research objectives of this dissertation*, Moodley and Ross (2015) found that people with disabilities are more likely to report having poor health as opposed to non-disabled people. Their findings support the idea that if your activity limitation is rising, you might experience a health condition or impairment. In the same context of treatment therapy Vale, Ascensão, Raposo and Figueiredo (2017) found that barriers are created by the built environment which not only effects connectivity in urban space but also in the permeability of urban space and can be directly linked to the disability of an individual. An example of permeability is the case of a sidewalk that is not well lit. For a person without disability in terms of connectivity his movement might be unaltered but for a person in a wheelchair who uses the same sidewalk connectivity might be severely strained as his movement might be constrained by this barrier, forcing him to take an alternative route (Vale, et al. 2017).

The chapter continued to explore disability definitions with the aim of identifying a universal definition of disability. It was concluded that disability in itself

is an intricate concept that depends on a variety of factors. In order to situate the definition of disability for analysis purposes of this dissertation, the notion that “disability” moved away from the individual towards his interaction as a person and the environment (Putnam, 2005 p. 193), was instrumental in guiding the analysis.

The discussion also focused on literature that provided a background of access to healthcare for people with and without disability and that addressed the concepts of access and barriers. The conclusion arrived at from the discussion is that access to healthcare is not a concept on its own but that it is influenced by accessibility, availability, affordability and acceptability that are rooted in the notion of barriers.

Therefore, in support of the analysis of the findings of this dissertation the cited authors will be extensively used as most of their work was based on research findings that are relevant to the context of Namibia and therefore relevant to the analysis of this dissertation. Eide, Van Rooy, & Loeb (2003), Zvavamwe, & Ehlers, (2009), Bell, Taathi & Low (2002), Van Rooy, et al., (2012), Madams, et al. (n.d.), Van Rooy, Mufune & Amadhila (2015), Firmpong (2013), Van Rooy, et al., (2014), Smith, Murray, Yousafzai & Kasonka (2004), Xavier Gómez-Olive et al. (2009) and Van Rooy et al., (2015).

This chapter addressed important literature that informed the definition of disability, and access and barriers to healthcare as used in the context of this dissertation. In the next chapter, the author will explain the methodology used for this study.

## CHAPTER 3

### METHODOLOGY

#### **3.1 Introduction**

This chapter will begin by highlighting and explaining the difference between qualitative and quantitative research, and how these relate to the mixed method research approach used for this study. Having contextualised the research design to be used within the bigger picture of social science research methods, will lead to a discussion of the mixed<sup>7</sup> method approach to research where “method” refers broadly speaking to the methods of data collection, of research, and of related philosophical issues.

Thereafter, the context of the dissertation will be presented followed by a discussion of the research design. The research methodology that guided the implementation of this research will include a description of instruments used for data collection, the sampling methods employed, the methods of data collection and an analysis plan. The chapter will conclude with a reflection of the ethics involved in the research and a summary of the main points.

#### **3.2 Research comparison: qualitative, quantitative and mixed method research**

In social science research there are currently three major research approaches namely, qualitative, quantitative and mixed method research. These can be broadly defined as follows:

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<sup>7</sup> Mix include within a research paradigm mixing QUAN + QUAL - Johnson et al. (2007, p121).

*Quantitative research* - relies on the collection of quantitative data.

*Qualitative research* – that relies on the collection of qualitative data.

*Mixed research* – which involves the mixing of quantitative and qualitative data.

(Source: Johnson, 2014 & Creswell, 2003)

The differences between these three research approaches are summarised in Table 4

Table 4

*Differences between qualitative, quantitative and mixed method research.*

	Quantitative research	Mixed research	Qualitative research
Scientific method.	Deductive, “top down”	Deductive and inductive	Inductive, “bottom up”
	Researcher tests hypothesis and theory.		Generates a new hypothesis and grounded theory through the data.
View of human behaviour.	Behaviour is regular and predictable.	Behaviour is somewhat predictable.	Behaviour is fluid, dynamic, situational, and social.
Most common research objectives.	Description, explanation and prediction.	Multiple objectives.	Description, exploration and discovery.
Focus.	Narrow - tests a specific hypothesis.	Multilense focus.	Wide-angle and deep-angle -examine to learn more.
Nature of observation.	Study behaviour in controlled environment.	Study behaviour in one or more contexts.	Study behaviour in natural environment and the context of occurrence.
Nature of reality.	Objective - agree on what to observe.	Common-sense -realistic and pragmatic view of the world.	Subjective, personally constructed.
Form of data collection.	Collect quantitative data (using closed-ended instrument, rating scales, behaviour responses).	Multiple forms.	Collect qualitative data (in-depth interviews, open- ended questions).

Nature of data.	Variables.	Mixture of variables, words and images.	Words, images, categories.
Data analysis.	Identify statistical relationship.	Quantitative and qualitative.	Search for patterns, themes and holistic features.
Results.	Generalised findings.	Corroborated findings and generalised.	Particularistic findings. Present multiple perspectives.
Form of final report.	Statistical report, correlations, comparisons, means, reporting of statistics.	Eclectic and pragmatic.	Narrative report with contextual description, direct quotes from participants.

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*(Adapted from R.B. Johnson, 2014)*

As defined by Johnson and Onweuegbuzi (2004), Johnson, Onwuegbuzie and Turner (2007), Reswell (2014), and Bian, (n.d.), a mixed method of research involves the collecting and analyses of data using both qualitative and quantitative methods in one study. The central argument is that, taken in combination, these two approaches will offer a better answer to the research question.

The following section describes the three basic types of a mixed methods design.

### **3.3 Mixed methods research designs**

Mixed methods design subscribes to a common-sense, realistic and pragmatic view of the world. As a philosophical underpinning for mixed methods studies, this worldview is not so much concerned with methods but focuses on the research problem and the use of different approaches to best understand the problem

(Creswell, 2014). The aim is to show a philosophy that can fit together both qualitative and quantitative research into a workable solution (Johnson, et al., 2004, p. 16). The three basic mixed methods designs are the following;

The convergent parallel mixed methods design can be understood as obtaining different but complementary data on the same research question. Both qualitative and quantitative data are collected (parallel), analysed separately and then the results are integrated in an overall interpretation (convergence). This method is used when the researcher looks for convergence, divergence, contradiction, or the relationship between the two sets of data.

The explanatory sequential mixed method is one in which the qualitative approach is used to explain quantitative results. The quantitative data is collected first and analysed to identify quantitative results that need explanation (explanatory). The design of the qualitative study that follows is thus based on what was learned from the quantitative study. Here qualitative and quantitative data are collected at different times (sequential) and analysed and reported on separately. The discussion of the results specifies how the qualitative results helped to explain the quantitative results. The sample for the two studies may be the same or a different group of individuals.

The exploratory sequential mixed method begins with a qualitative research phase which informs the quantitative study. The qualitative data is collected first and the results of the analysis (for example grounded theory, thematic analysis) are used to develop the quantitative study. The purpose of this design is to generalise qualitative findings to a larger sample. It can thus be applied when the aim is to explore qualitative findings (exploratory) in order to build a research instrument for the next quantitative phase. Qualitative and quantitative data are collected at different times

(sequential) and analysed separately. The participants in the quantitative study are not the same individuals who provide qualitative data.

Before elaborating on the research design for this dissertation a look at the context in which the study took place will be offered.

### **3.4 Study context**

This study was part of a larger international project, the EquitAble project (see [www.sintef.no/projectweb/Equitable](http://www.sintef.no/projectweb/Equitable)). It was a four-year project with researchers from Ireland, Norway, Sudan, Malawi, Namibia and South Africa, looking at access to healthcare for vulnerable groups in resource-poor settings in Africa. Four sites were selected for data collection in each country, except for Namibia which had five sites for data collection (Khomas, Hardap, Kunene, Omusati and Zambezi).

The design of the international EquitAble project of which this study was part, included two components that were closely linked and integrated (see [www.sintef.no/projectweb/Equitable](http://www.sintef.no/projectweb/Equitable)). The qualitative phase explored the perceptions of healthcare users (including persons with and without activity limitations) and providers concerning the facilitators and barriers to equitable and universal access to healthcare for all. The quantitative component was large scale survey that investigated the relationship between access to healthcare services and activity limitations.

#### **3.4.1 Study regions**

Data was collected in the Khomas and Kunene regions (See Figure 9). The reason for choosing these two regions was to show differences in access to healthcare, taking into account the following arguments. Khomas is the central part of the country, with an abundance of healthcare facilities, and also hosts diverse language groups which are representative of all parts of the country. Kunene was chosen because it is

representative of a high number of ethnic minorities as well as having a relatively low number of people with physical disabilities.

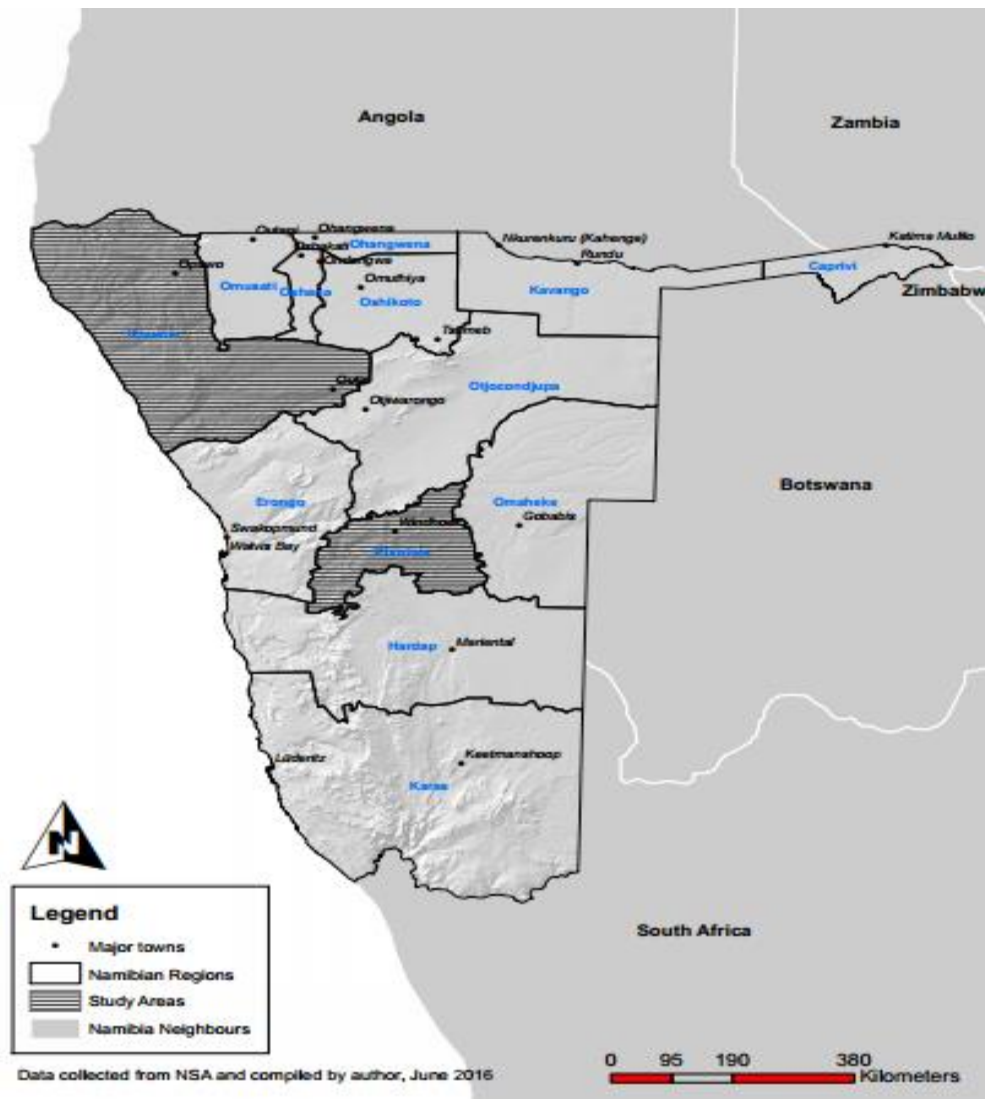


Figure 9. Map of the study regions

Given that the focus of the study was on equitable access to healthcare for people living with disabilities, selecting specific healthcare centres as study sites was based on the consideration of selecting an urban site and a rural site that were frequented the most by people with disabilities. Table 5 below summarises the important characteristics of the two study regions.

Table 5

*Summary of the study regions*

<b>Khomas</b>	<b>Kunene</b>
<p>The total population with disabilities according to the 2011 Population and Housing Census was 10,713 (5 230 females, and 5 483 males), equivalent to 3% of the whole population.</p>	<p>According to the 2011 Population and Housing Census, the number of people in Kunene with disabilities was 3 197 (1 418 females, and 1 779 males), representing 4% of the regional population.</p>
<p>In terms of activity status, the 2011 census found that among those in Khomas aged 15 years and above, a total of 988 could not work because of disability (471 females, and 517 males).</p>	<p>In terms of activity status for those aged 15 years and above in Kunene, a total of 304 could not work due to their disability status (135 females, and 169 males).</p>
<p>The specific data collection sites in the Khomas region, including the households surrounding the sites, were:</p> <p>Okuryangava clinic (in close proximity to the Disability Resource Centre)</p> <p>Katutura Health Centre (mostly a referral for Okuryangava clinic), and</p> <p>Dordabis clinic (which is situated in rural Khomas).</p>	<p>Given that a number of ethnic minorities live in the region, the sites selected for this study were:</p> <p>Opuwo clinic (Opuwo is regarded as the main town which serves the surrounding areas),</p> <p>Etanga (a very remote area in the mountains of the region), and</p> <p>Okangwati (where the ethnic minorities are mostly Vembas).</p>

A more detailed background of the two study regions is offered next.

### **3.4.2 Background of the Khomas region**

Khomas is one of the fourteen regions of Namibia. Its name refers to the Khomas Highland, a high plateau which dominates this administrative unit. With an area of 14,272 m<sup>2</sup>, the region has a population of 340,900 (2011 census). It has a diversity of language groups that represent all parts of the country. The city of Windhoek is the capital both of Namibia and of the Khomas region. Although one of the smallest of the 14 regions in the country, it is one of the most populous. It is one of only three of Namibia's regions that has neither ocean nor foreign soil as its borders. It is perfectly situated at the centre of the country, making it an ideal base from which to explore the rest of this beautiful land. Boasting with some of the best infrastructure in Namibia, the region also has an abundance of healthcare facilities. The objectives of the Ministry of Health and Social Services for Khomas can be summarised as follows: to ensure efficient regional management; to improve quality of health services in all hospitals; to provide a quality primary healthcare service and to improve developmental social welfare services.

Disability is catered for under the Rehabilitation and Social Welfare services. The objective of this division is to ensure a healthy and safe environment, aimed at improving the living standards of the disadvantaged in Namibia (the disabled, women, children, youth, the elderly, and the vulnerable), at the same time protecting the rights and dignity of those affected by prejudice and abuse. In terms of facilities, the Khomas region has two hospitals, two health centres, and eight clinics (source: <http://www.mhss.gov.na/national-directorates/>).

Figure 10 shows a map of all the health facilities in the Khomas region while Figure 11 indicates the three selected facilities in this region.

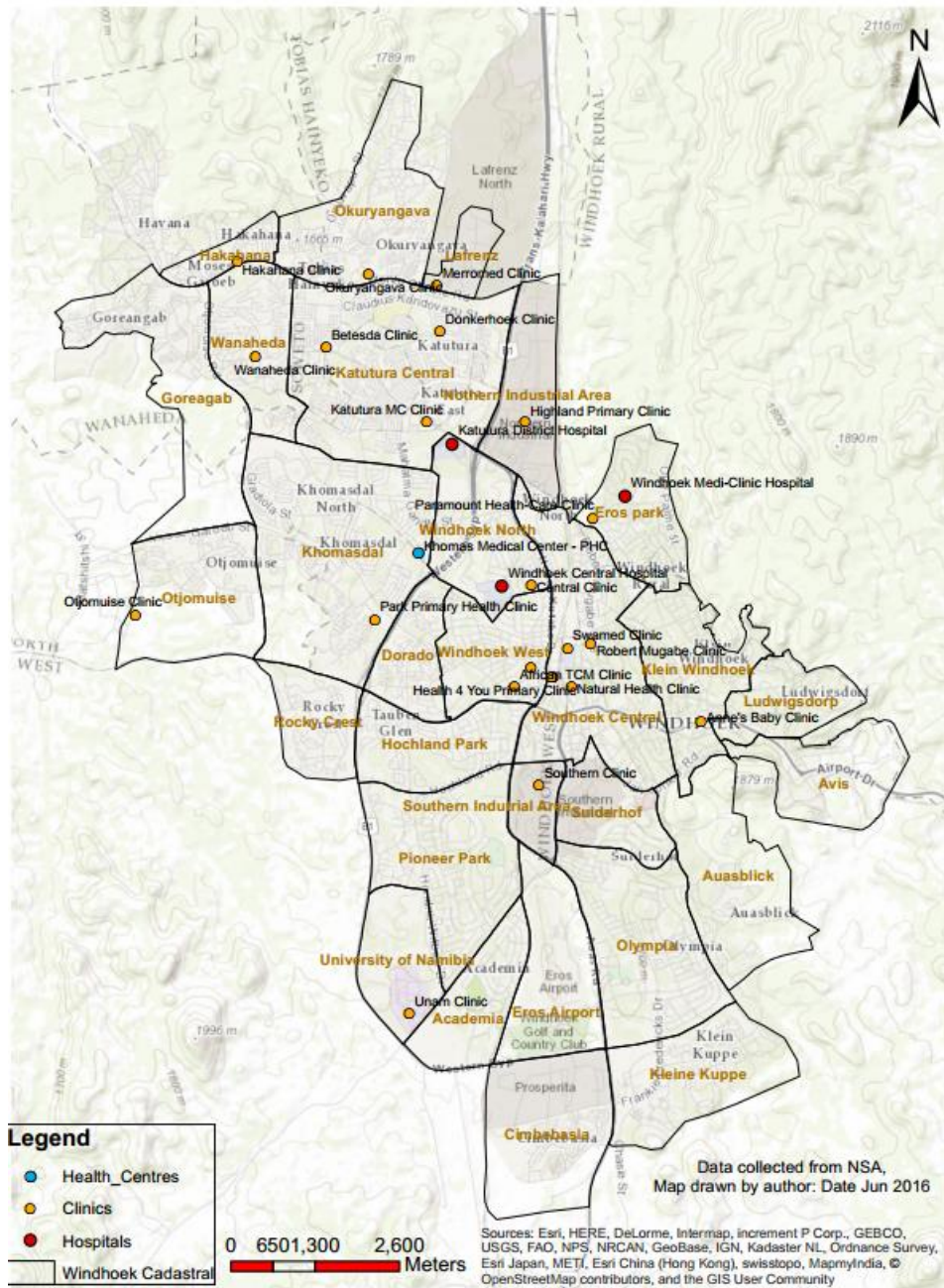


Figure 2. Map of the health facilities in Windhoek, Khomas Region.

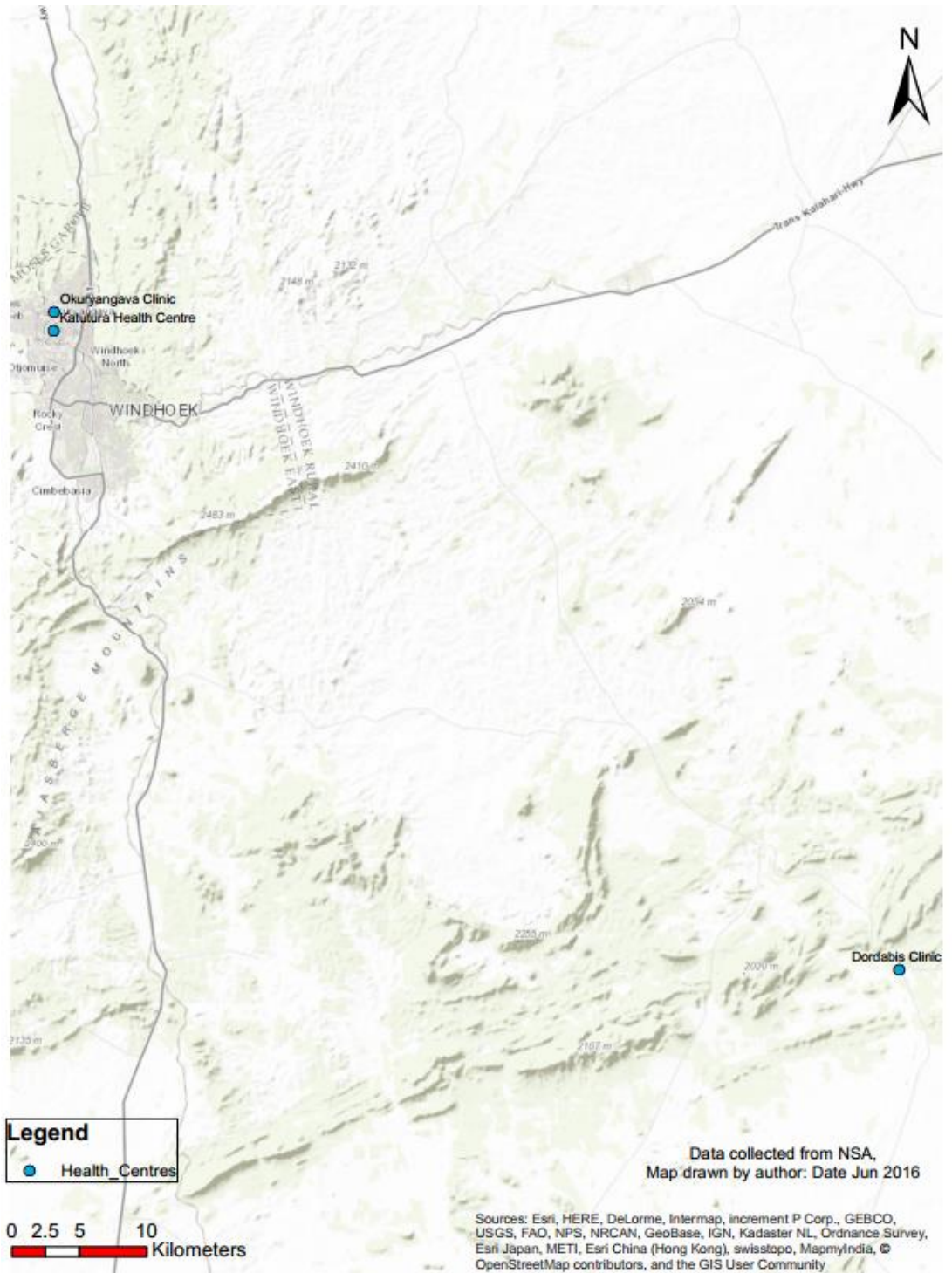


Figure 3. Map of health facilities visited in Khomas Region

### 3.4.3 Background of the Kunene region

The Kunene region is situated in the north-western corner of Namibia. It is bordered to the north by Angola and to the northeast by the Omusati, Oshana and

Oshikoto regions, while to the south are the Erongo and Otjizondjupa regions. The Atlantic Ocean forms the boundary of Kunene to the west. The estimated area of the region is 115293 square kilometres, and the population density is 0.8 square kilometres per person (Source: Namibia Population and Housing Census, 2011).

The terrain is semi-arid, merging into the desert as it approaches the Skeleton Coast. The region is dry for most of the year and is characterised by dust storms, especially from August to October. Rainfall is scanty and only for two to three months in the year. The western part of the region usually receives less rain than the eastern parts. Summer day temperatures are often very high, reaching up to 35 degrees centigrade, with minimum temperatures of 14 degrees centigrade.

The Kunene is the only perennial river in the region and is the site of the Ruacana and Epupa falls. The first of these is an electricity generating point, the latter mainly a tourist attraction. The majority of the inhabitants of this region and their livestock depend on water in the rivers, fountains and springs that are in abundant supply and boreholes that are sunk by the Department of Rural Water Supply.

The capital of the Kunene is Opuwo, which is one of the fastest growing towns in the region. The population of the region is 86 856 (female population 43 253, male population 43 603), with a growth rate of 2.3% per annum (Source: Namibia Population and Housing Census, 2011). Most of the population live in the rural areas. There are three administrative health districts, Opuwo, Khorixas and Outjo. The heads of the district health services are Principal Medical Officers. The greatest challenge is in improving the access to health services for the scattered and highly mobile population. The region is served by three referral district hospitals which are moderately accessible to the rural communities. Twenty clinics and three health centres also serve these communities, and there are plans to construct three more

clinics. The region also runs three out-reach programmes, one in each district. (Source: <http://www.mhss.gov.na/national-directorates/>).

Figure 12 shows a map of all the health facilities in the Kunene region while Figure 13 indicates the three selected facilities in this region.

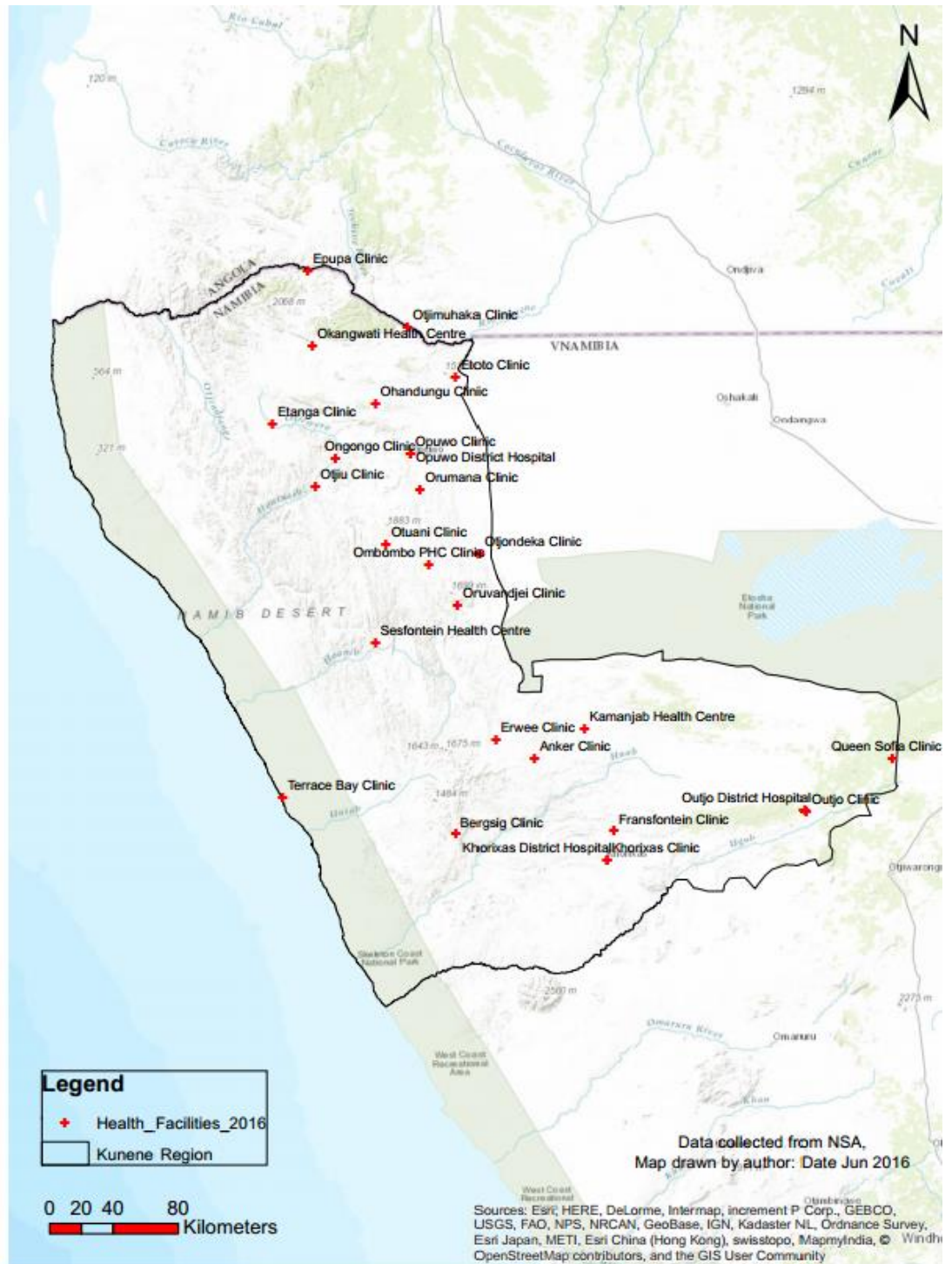


Figure 4. Map of health facilities in the Kunene Region



Figure 5. Map of health facilities visited in Kunene Region

Having set the scene, the research design used in this dissertation will be attended to next.

### 3.5 Research design

The dissertation adopted the exploratory sequential mixed methods research design in answering the hypothesis: “There is insufficient knowledge of the difference in people with and without disability in accessing health care in both an urban and rural setting”. This design was considered to be the most appropriate design to explore and investigate the research hypothesis and the subsequent main research question “What are the contextual and personal factors that hamper equitable access to healthcare for people with disabilities in the Khomas and Kunene regions?” Reasons for this choice of research design were that the insufficient knowledge of the way in which people with and without disability access healthcare required a qualitative approach to *explore* and identify the themes (personal and contextual barriers and facilitators) grounded in the data obtained from the participants. To *explain* the relationships between access to healthcare (contextual and personal barriers and facilitators) and activity limitations found in the qualitative data, a quantitative approach that measures this relationship is appropriate. The instrument used to collect and analyse the quantitative data was developed from the qualitative findings.

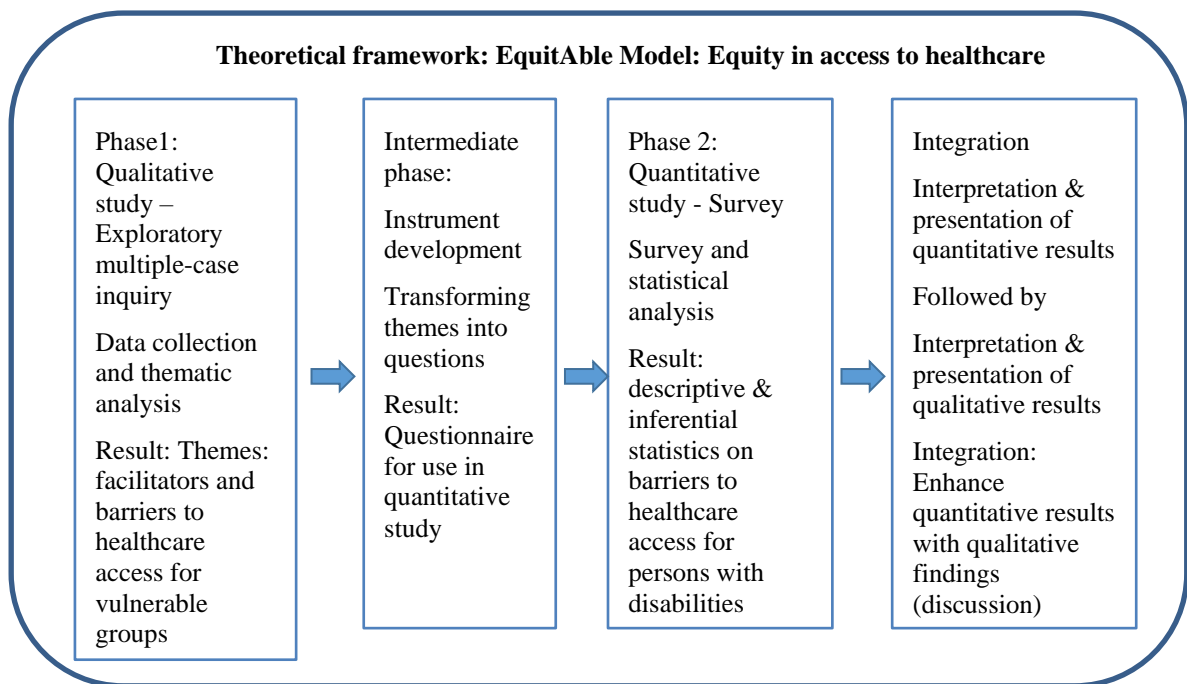
Applying the exploratory sequential mixed methods research design in this dissertation, the two distinct and successive phases of research will start with an exploratory qualitative inquiry and the thematic analysis of the qualitative data. The themes that emerged from this analysis informed the development of the quantitative data collection tool (questionnaire). This research instrument (themes transformed into questions) was then applied in the second quantitative phase of the survey research and statistical analysis of the quantitative data. Therefore, in this design, the level of interaction between the two phases of the study was interactive rather than independent as the first qualitative phase built onto the second quantitative phase while the data

was integrated during the interpretation phase of the study (Creswell & Plano Clark, 2011).

The overarching theoretical perspective that frames this research design is the EquitAble conceptual model that addresses equity in access to healthcare for people with activity limitations. This transformative design helped to shape the purpose of the questions, the nature of the data collection, its analysis and reporting of the results (Tashakkori & Teddlie, 2003, p. 232). Moreover, the transformative research approach amplifies the voices and experiences of identified groups in advancing their social justices using the feminist, queer or disability theory (Barnhardt, Reyes, Rodriques and Ramos, 2016).

The schematic diagram below illustrates the research design employed in this dissertation.

**Schematic illustration of the exploratory sequential mixed methods research design used in this dissertation**



(Source Creswell and Plano Clark, (2007))

In analysis of the findings for this dissertation the quantitative research method has equal priority and is equally important when it comes to addressing the research questions. This equal priority is referred to as QUAL→QUAN in mixed methods research notation.

It should be mentioned that the building of the research instrument (thematic analysis of the qualitative data leading to themes that were transformed into questions in building the research instrument) will not be discussed as this is beyond the scope of this dissertation which focuses primarily on the survey research, statistical analysis and reporting of these results.

The focus will now turn to the research methodology used in the implementation of the two research methods, starting with the qualitative inquiry.

### **3.6 Qualitative inquiry**

The following aspects of the qualitative inquiry will be discussed: the procedure for selecting the cases; the interview protocol and the data collection method used to collect the qualitative data, and finally the analysis employed to extract themes related to the facilitators and barriers experienced by vulnerable groups when using the healthcare facility.

#### **3.6.1 Selecting cases**

A purposive sampling technique was used to select the cases. The criterion for selection was based on the twelve vulnerable groups (users of healthcare facilities) that were derived from the policy analysis conducted as part of the EquitAble project. Each of the identified “vulnerable group” was defined as a case. Users of healthcare facilities who had the same characteristics as a defined “case” were selected as participants. The selection criterion was applied by assessing the characteristics of the population and matching those individuals, who had the same characteristics, as the “cases” (Yin, 2009).

The population was defined as Namibians living with and without disability in the two selected sites (health facilities) in both the Khomas and Kunene regions. A “healthcare user” was identified as someone using a healthcare facility. The healthcare facility was viewed as the best possible place to recruit participants, choosing from those visiting the facility especially those who belonged to one of the twelve vulnerable groups.

The twelve cases were defined as: “Limited resources”, “Mother-child mortality”, “Increased relative risk of morbidity”, “Women-headed households”, “Children (with special needs)”, “The aged”, “Youth”, “Ethnic minorities”,

“Displaced populations”, “Living away from services”, “Suffering from chronic illness”, and “Disabled”.

### **3.6.2 Interview protocol**

In-depth interviews with participants was chosen as one of the most appropriate data collection strategy as the aim was to investigate the perceptions and experiences of healthcare service users. An interview guide was compiled that consisted of a broad range of questions that dealt with access to health care. Participants were asked to describe their perceptions of or experiences with the following:

- 1 Their understanding of health
- 2 Questions on their general health status
- 3 Questions on their health needs
- 4 How the participants access healthcare (the health facility)
- 5 Factors that influence their access to healthcare: how the participants experience these factors
- 6 The kind of healthcare services provided at the facility they usually visit
- 7 Which of these services were used most often?
- 8 Reason for choosing specific healthcare services
- 9 Their experience in using these healthcare services

### **3.6.3 Data collection methods**

Qualitative data were collected from those using the healthcare facilities, with permission having been granted by the Ministry of Health and Social Services ethics committee to conduct those interviews. Interviews were carried out with healthcare users (the vulnerable groups having been identified, as stated earlier)

and service providers using the interview guide. The interviews were conducted in the preferred language of the participants by a research assistant who was trained in data collection techniques. Interviews were recorded, and trained interpreters were also used in the instances where the interviewer's preferred language was not the same as that of the participant. The interviews took place either in the healthcare facility or in the participant's home, and in a few cases in both.

The researcher approached the superintendent of the healthcare facility before the interviews were conducted. All the respondents were interviewed at their premises, and each interview lasted for about one hour.

In the Khomas region, a total of 34 interviews was conducted with healthcare service users (17 females and 17 males), and in the Kunene region a total of 68 (43 females and 25 males) interviews was carried out. Table 6 below, indicates the interviews per study site as well as the vulnerable groups (cases).

Table 6

*Vulnerable groups interviewed.*

Vulnerable groups (Cases)	Sites of data collection (healthcare facilities)					
	Kunene region			Khomas region		
	Opu wo	Etan ga	Okangwa ti	Katutu ra	Okuryang ava	Dordabis
Disability	1	4	2	6	7	5
Chronic illness	1	2	1	1	1	0
Limited resources	0	3	4	0	1	0
Woman headed household	1	2	3	0	0	1
Pensioner	1	2	4	2	0	0
Youth	1	4	4	3	4	1
Orphan/ child with special needs	0	1	0	0	0	1
Living away from service	0	4	7	1	0	0
Ethnic minority	1	1	5	0	0	0
Displaced population	0	3	2	0	0	0
Other	0	3	1	0	0	0
Not specified	0	0	0	0	0	0
<b>Total</b>	<b>6</b>	<b>29</b>	<b>33</b>	<b>13</b>	<b>13</b>	<b>8</b>

The audio recorded interviews were transcribed and saved as MS word documents for the thematic analysis which is the topic of the next section.

### **3.6.4 Thematic analysis**

The qualitative design of the study informed a disability inquiry in understanding the population sociocultural perspective (thematic analysis) (Creswell, 2014) rather than the biological understanding of disability.

For the purpose of analysis, the author imported the transcribed interviews into AtlasTi and analysed them in accordance with themes emerging from the interview guide. Themes were initially broadly defined under the headings of 1) meaning and understanding, 2) social context, 3) access to healthcare, and 4) quality

of healthcare in support of the main research question of this dissertation. Repeated inspection of the transcripts by the author allowed for the coding of categories and sub-themes under each of the broadly defined themes.

The qualitative data analysis software package AtlasTi was used to facilitate the process of thematic analysis. This software package allows for the coding of a number of different media, inclusive of text, images and audio (Petrova, 2014). It facilitates the importation of transcripts and through the process of coding, allows the building of sub-themes and themes for purposes of analysis. Through the network analysis offered by AtlasTi, the author was able to visualise the data, as well as generate a list of codes used. Some of these outputs were included in the dissertation. It should be emphasised that AtlasTi by itself is not a substitute for thought process that goes into coding of transcripts and identification of themes, but rather that it facilitates this process. The diagrammatic illustration of the qualitative multiple case study research design (see Figure 14) concludes the discussion of the qualitative inquiry.

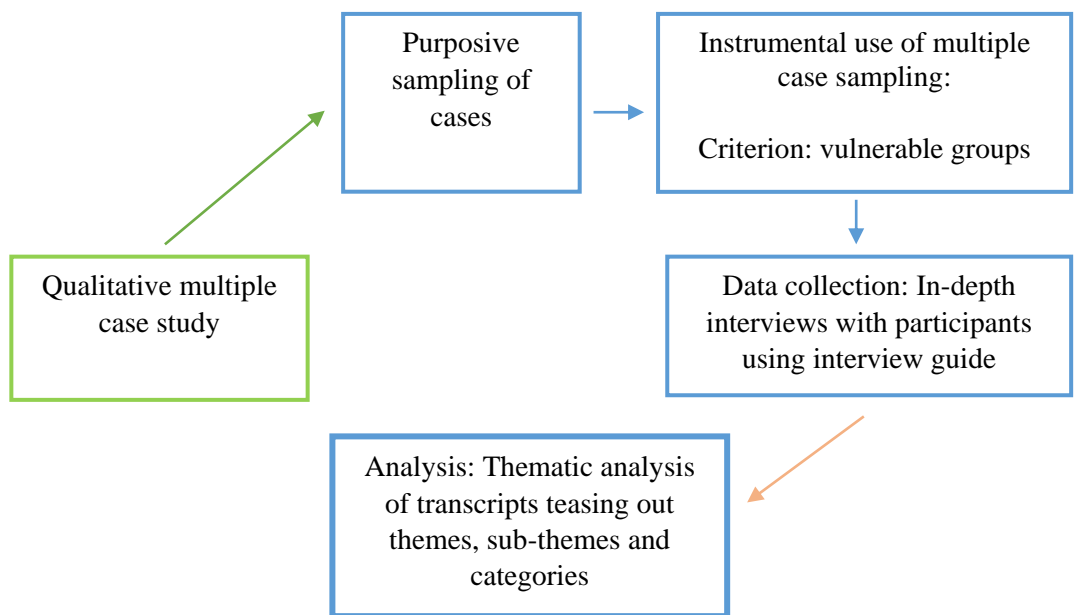


Figure 6. Research design for exploratory qualitative inquiry

Having completed the discussion of the qualitative inquiry methodology, attention will now be focused on the quantitative survey research.

### 3.7 Quantitative survey research

As the study mainly focused on two regions of the country (Khomas and Kunene regions), the sampling employed for the study was a sampled survey. The reason for selecting a sampled survey was that the proportion selected, in this case, people with and without disability, can be an approximate value of the true population that can be empirical and statistically representative (Gomm, 2009).

This second phase of the study comprised a large-scale survey that collected quantitative data on the household and individuals (household members). Two household members were interviewed in each household: an identified disabled member (person with activity limitations) that constituted the “case” and a non-

disabled member as “control” that matched the “case” on the characteristics of age and sex. “Cases” refers to those household members who, on the screening question (which will be discussed in more detail later), answered that they had at least “some difficulty” in performing tasks while “controls” denoted household members said that they had “no difficulties”. In the analysis of the data, these are referred to as PWD (person with disability) and Non-PWD (person without disability) respectively. The sampling of the households and cases and controls is explained next, followed by a description of the research instrument and measurement scales. The method used to obtain the quantitative data and the analysis plan will conclude this section.

### **3.7.1 Quantitative sampling**

The sampling for the survey followed a two-stage cluster sampling. The number of households for the sample regions was set at 400-500. For the purposes of this study, a household was defined as a group of people who shared a dwelling, kitchen, and economic resources for at least 4 to 6 months of each year (excluding institutions).

The sampling procedure was as follows:

Within each of the sites, a cluster was a clearly defined geographical area (in this case an Enumeration Area, EA). In each cluster, a random sampling procedure was applied. The stratification was done in terms of distance from the health centre, and by type of dwelling. Using a random sampling procedure, 150 households were identified in each selected site. In the selected households, the researcher identified a household with a disabled person, using the Washington City Group Screening instrument, comprised of six screening questions (Appendix A)

*(Operational definition of disability. Identification of individuals with disability: responding “some” to at least one question on the WCG series of 6 questions).*

Within a stratum (similarities), there were different ways of selecting the households:

- i) Random number selection
- ii) Every *n*th household while walking in a specific direction,

A household questionnaire was used for all the household members.

For an individual with a disability an individual questionnaire was used. For the selection of “control” respondents, the procedure was as follows. In each household with a disabled member, another member of the same household was included as control and asked to respond to the control questionnaire. This was a shortened version of the individual questionnaire. To match the control, age and sex were used as the criteria. A household was skipped if it was not possible to match a “control” with the disability “case”, and a neighbouring household was approached instead for a control interview.

### **3.7.2 Quantitative research instruments**

The following survey tools were used to collect the quantitative data.

#### **3.7.2.1 Household questionnaire**

The household questionnaire was a 12-page document and was completed by the head of the household. It began with the composition of the household members, inclusive of their relationship to the head of the household, sex, age, marital status and illness. This was followed by the disability screening of each household member, the purpose being to identify members with and without activity

limitation using the Washington City Group Screening instrument described above. Questions were asked about levels of education, literacy, and work status. Responses were also elicited on household income and expenses, ownership of household possessions, population displacement, and the use of healthcare facilities.

### **3.7.2.2 Individual questionnaire**

This was a 20-page document and was administered to the person with disability in the household. The focus of the questionnaire was on functional difficulties and access to healthcare issues. It began by asking the individual about his or her level of difficulties in performing certain tasks, again using the Washington City Group Screening instrument with the answers ranging from (1) “none” to (4) “unable to do”. Other questions were on pain, fatigue, health conditions, participation restriction, assistive devices, environmental factors, health service awareness, healthcare utilisation, and attitudes towards health services. The questionnaire concluded by asking the respondents if they considered themselves as having a disability or not.

### **3.7.2.3 Individual control questionnaire**

The third and final questionnaire was the control questionnaire which was administered to the matched “control” respondent. The questionnaire was completed with a household member in the same household or in the neighbour’s household depending on whether the matching control was a member of the household or not. It was a shortened version of 14 pages. This questionnaire asked the individual about his or her level of difficulty, ranging from (1) ‘none’ to (4) ‘unable to do’, followed by issues of fatigue, health conditions, participation restriction,

environmental factors, health service awareness, healthcare utilisation, and attitudes to health services.

### **3.7.3 Measurement scales**

Two scales were constructed to measure the concepts activity limitation and socio-economic status. These scales are discussed in detail in the following sections.

#### **3.7.3.1 Activity limitation scale**

Activity limitation was measured using the six screening questions developed by the Washington Group on Disability Statistics (WG, 2009). Respondents were asked to rate the difficulty they had in seeing, hearing, walking or climbing steps, remembering or concentrating, self-care, and communication, on a scale with the categories of (1) “no difficulty”, (2) “some difficulty”, (3) “a lot of difficulty”, and (4) “unable to perform”. The six items were added together to form the activity limitation scale with a range of 1 to 4. A score of 4 meant that the respondent was unable to perform any of the listed activities. In terms of reliability and sample adequacy, exploratory factor analysis performed on the items of the scale computed a Cronbach’s  $\alpha=.57$  which confirmed that the scale was reliable. The KMO of .64 substantiated the sample adequacy for the overall data set.

#### **3.7.3.2 Possession Scale as proxy for socio-economic status**

As a proxy for socioeconomic status, a possession scale (PS) was constructed based on household ownership measured in terms of items the respondents owned. They were asked to answer “yes” or “no” on a list of 28 items. The selection of the items was primarily based on experiences from previous studies in constructing

household indices but was also a collective agreement among the project team. The items included were radio, refrigerator, hi-fi/music stereo, microwave, internet access in the home, electricity, DVD/VHS player, solar energy system, cell phone/mobile, electrical generator, telephone in the house, personal computer, iron, bicycle, fan, motorcycle/quad bike, heater, dishwasher, air conditioner, bed(s), stove (gas/electric), livestock, stove (paraffin), washing machine, sofa, satellite dish, television, and a car. The items were added together, then divided by the number of items to form a possession scale ranging from 0 - 0.86. A score of zero meant no items, while .86 meant 86% of the items ( $M = 0.25$ ,  $SD = 0.19$ ). Therefore, if a household possessed 28 items, the PS score would be  $28/28=1.0$ , but if it owned no items, the PS score would be  $0/28=0$ . Thus, the scale could range from 0.-1. However, the scale for the study refers to **0-86** only, since no household could possess all 28 items. In fact, no one in the sample owned more than 24 items. Exploratory factor analysis on the items of the scale yielded a Cronbach's  $\alpha = .89$  and a KMO = .92.

#### **3.7.4 Data collection methods**

The administration of the questionnaires took place at the residence of the household. The researcher first approached the head of the household for permission to conduct the interviews. A disabled person in the household was identified using the six screening questions of the Washington Group<sup>8</sup>. Once a person with disability had been identified in the household, permission was then sought from the head of the household to conduct the interview.

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<sup>8</sup> *The Washington Group Six questions will be discussed in detail under the section Activity limitation.*

The schematic illustration, Figure 15 below explains the processes of data collection for the survey interviews

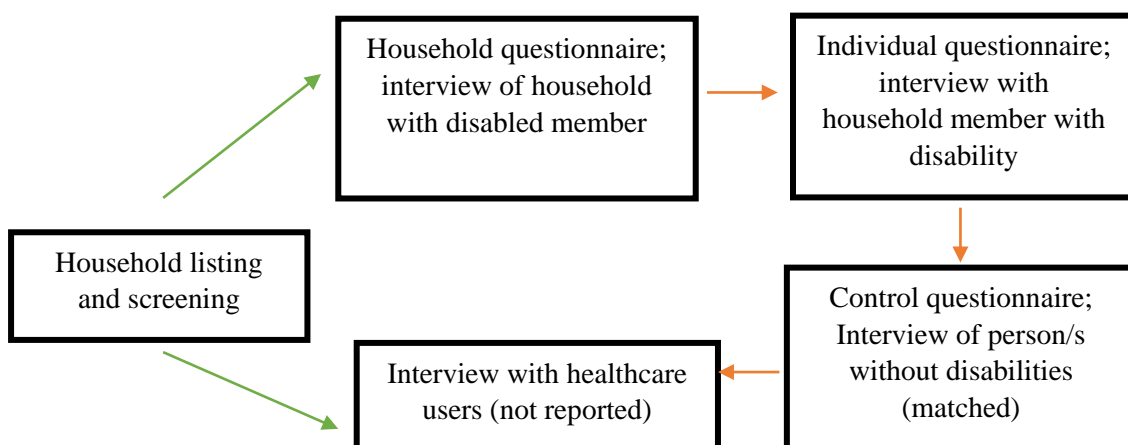


Figure 7. Overview of the quantitative data collection process.

Table 7 below presents the number of households and individuals interviewed per region. In total, structured interviews were conducted with 946 respondents in 691 households. Of the 579 respondents with disabilities, 173 resided in Kunene region and 406 in Khomas region. Matched control respondents totalled 367 of which 24 were from the Kunene region and 343 from the Khomas region.

Table 7

*Number of households and respondents interviewed per region.*

Number of:	Region		
	Kunene	Khomas	Total
Households with a person with disability	110	292	402
Households without a person with disability	23	266	289
Individuals with disability	173	406	579
Individuals without disability	24	343	367

### 3.7.5 Analysis plan

As the analysis of the study is based on the mixed method research, it will take the form of multiple analysis. In the analysis of the quantitative data, the Statistical Package for Social Sciences (SPSS) Version 24 was used. Since the analysis was based on investigating the results in terms of disability status, it included but was not limited to the following:

The analysis was initially descriptive in order to explore and develop an understanding of the data. Descriptive analysis statistics included computing counts, percentages, means, medians, ranges, standard deviations, and variances as appropriate for all variables.

#### 3.7.5.1 Inferential analysis

Bivariate analysis was based on comparing PWD and Non-PWD access to healthcare in terms of the barriers they experience in obtaining healthcare. To test for significant differences between a range of independent nominal and interval variables or predictors and the dependant variable disability status, Pearson's Chi-

square tests and Independent Samples t-tests were computed as appropriate. The level of significance adopted was .05, with values equal to or below the alpha value indicating that PWD and Non-PWD were statistically different from each other with respect to the 5 (five) variables representing barriers to accessing healthcare.

Bivariate linear regression was employed to measure the effect of 6 (six) selected independent variables on the aggregate level of impairment (activity limitation scale score). The six predictors included sex, age, region, education, urbanity and socio-economic status. The rationale for the subsequent bivariate linear regression analysis of the same predictors on each of the six activity limitation domains (seeing, hearing, walking, remembering, self-care and communication) was to determine whether the level of activity limitation can be predicted from any of these six independent variables. The significance level was determined at .05.

Binomial logistic regression analysis was performed to assess the influence of the selected predictors of the 6 (six) barriers for both PWD and Non-PWD. The predictors comprised of the variables region, sex, age, educational level, activity limitation and socio-economic status. The purpose of the analysis was to establish whether disability status can be predicted based on of these six independent variables and the significant contribution or otherwise of each predictor to the model. The significance level of the contribution of each predictor to the model was determined at 0.5.

#### **3.7.5.2 Scale Reliability and Adequacy**

Exploratory factor analysis was performed on the items of the two scales, namely, the Activity Limitation Scale and the Possession Scale. To determine the reliability of the scales Cronbach's alpha was computed to ascertain that the items of

the scale were related to each other and measured the underlying construct. An alpha of 0.7 or higher was considered as sufficient to demonstrate reliability.

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy provides an index (between 0 and 1) of the proportion of variance among the variables that might be common variance (i.e., that might be indicative of underlying or latent common factors). The SPSS software package suggests that a KMO near 1.0 supports a factor analysis and that anything less than 0.5 is probably not amenable to useful factor analysis. Kaiser (1974, cited in Dziuban and Shirkey 1974: 359) had refined the index further and suggested that anything in the .90s was ‘marvellous’, in the .80s ‘meritorious’, in the .70s ‘middling’, in the .60s ‘mediocre’, in the .50s ‘miserable’ and below .5 ‘unacceptable’

[http://www.aliquote.org/articles/tech/multivar/22\\_Appendix\\_6.pdf](http://www.aliquote.org/articles/tech/multivar/22_Appendix_6.pdf)).

### **3.8 Research ethics**

The National Disability Authority (NDA) guideline for disability research describes ethics as “a matter of principled sensitivity to the rights of others” (NDA, 2005). For this study, every effort was made not to cause physical harm to the respondents during the research process. A conducive and safe environment, for example, using a separate room for interviews was always considered. When a respondent was unclear about the questions, no pressure was used to secure answers. Before an interview, the purpose of the interview was explained, and the respondent was assured of confidentiality and that the answers would not be shared with anyone outside the requirements of the study and the university. Assurance was also given to the respondents that, should they feel that some of the questions were too personal, they were free not to answer them, and also that they had the right to stop the interview

at any time if they so wished. Ethical approval from the Ministry of Health and Social Services was obtained to conduct the study at the various healthcare facilities (see appendix 1).

It should be noted that to maintain research ethics I ensured the following:

- Enumerators for the data collection were trained on all aspects of data collection, including on how to behave ethically.
- The researcher was present to observe the conduct of the interviewers.
- The researcher was at hand to address any eventualities that might have arisen during data collection, such as any possible unethical conduct by the enumerators.

### **3.9 Challenges in the implementation of the sampling**

In a selected PSU, if it happened that no six sites in an area could be obtained, the next PSU was oversampled with the aim of getting the required households. In some other instances, if the number of households in the PSU was less than the required number that household was increased in the next PSU in order to get at least 150 households.

Initially, matching of the “control” presented a problem. Often the precise matching of age and sex in the same household was not possible. Subsequently, this selection criterion was relaxed, and an able-bodied person was interviewed in the same household, as long as the selection met the criterion of sex. In the absence of an able-bodied person in the same household, a neighbour was interviewed as a “control”, matching by sex.

### **3.10 Summary**

This chapter provided an overview of the methodology of this dissertation. It highlighted the importance of using the exploratory sequential mixed-methods research design for answering the research questions of the dissertation. It also presented the research instruments, sampling of the respondents and the analysis plan for the qualitative and quantitative data. In answering the main research question with its four sub objectives, the next chapter will introduce the findings of this dissertation by presenting the discussion of activity limitation as the first part of the conceptual framework (discussed in chapter 1) in line with objective 1 of this dissertation.

## CHAPTER 4

### AM I DISABLED? RESPONDENTS' BIOGRAPHIES AND ACTIVITY

#### LIMITATION –ACCESS RELATIONSHIP: A QUANTITATIVE COMPARATIVE ANALYSIS

##### 4.1 Introduction

The previous chapter covered the introduction of the study that included the theoretical framework for the analysis as well as the literature review and the methodology of the study. This chapter will present a profile of the respondents in section one, while section two will continue with a discussion on activity limitations, which is the first part of the conceptual model that was used for analysis. Section two addresses research objective one, namely, *“To assess the level of activity limitation people with and without disability experience when accessing healthcare”*.

The findings of the chapter draw on the quantitative data collected using the household, individual and control questionnaires. Data used originated from the EquitAble project collected from the five regions of Namibia. However, as explained in the methodology section, only data from Khomas and Kunene regions was used in the subsequent analysis (946 cases).

Right from the onset it is important to state that in the analysis there was a small number of missing values, which often resulted in variations in the *N* in the different variables.

##### 4.2 Characteristics of the respondents

Table 8 presents a summary of the profile statistics both for the full sample and for the study regions, in order to contextualise the study.

Table 8

*Characteristics of sample and study regions.*

<b>VARIABLE</b>	<b>TOTAL SAMPLE</b>	<b>KHOMAS</b>	<b>KUNENE</b>
Male	0.41	0.41	0.46
Age	42.39 (22.54)	37.00 (18.35)	39.55 (22.93)
Urbanity	0.48	0.82	0.86 <sup>9</sup>
Education			
<i>No formal education</i>	0.25	0.10	0.54
<i>Less than primary</i>	0.27	0.25	0.22
<i>Completed primary</i>	0.32	0.39	0.20
<i>Secondary education</i>	0.12	0.19	0.03
<i>Tertiary education</i>	0.04	0.07	0.01
Possession scale	0.25 (0.19)	0.36 (0.18)	0.14 (0.13)
Activity limitation	1.33 (0.41)	1.21 (0.30)	1.40 (0.42)
Barriers to health service scale	1.45 (0.49)	1.27 (0.34)	1.72 (0.45)
<i>N</i>	1624	749	197

*Note: Figures in the table refer to ratio and mean values with standard deviation in brackets.*

The gender balance as a ratio varied significantly, with  $\chi^2(4, N = 1612) = 16.815, p = 0.002$ , within the regions, but not within the study areas of Khomas and Kunene regions. The sample seems to have been more in favour of female respondents than of males. This was not a matter of selection bias, but rather of the reality on the ground, as the study was conducted both at healthcare facilities among those seeking healthcare and in households in the selected regions. Age also showed a difference both within the regions and in the study areas. Although the mean age of respondents was higher in Kunene than Khomas, this result was not significant. With the urban-

<sup>9</sup> Although an equal number of households were interviewed in urban (Opuwo = 225; average household size = 4.1) and rural Kunene (Okangwati = 150, Etanga = 75; average household size = 5.1), the disability prevalence was considerably lower in rural (n=18) than urban areas (n=155). Thus, even though the urban/ rural distribution for all persons living in the interviewed households (N = 2139) was almost equal (47% versus 53%), the data which this study's analysis was based on (that comprised only the PWD and Non-PWD interviewed) reflects the predominantly urban location of that sub-sample.

rural distribution, no significant difference was reported, as most of the selected cases were from the urban areas.

Level of education was measured on a five-point scale, recording the highest level achieved. As indicated in Table 8 above, there was some variation, in that Kunene region reported a very high ratio of no formal education, compared to Khomas region and the total sample. Khomas, on the other hand, showed diversity in that there were a number of respondents who had completed less than primary, primary education or tertiary education. Kunene reported a very low ratio in terms of tertiary education. These differences in educational levels between the two regions were significant ( $\chi^2(4, N = 924) = 201.54, p < .001$ ).

Respondents were asked to rate their difficulty in accessing healthcare: “Considering your own experiences, tell me whether the following make it difficult for you to get healthcare”. The answers were categorised as “No problem” (1), “Small problem” (2), “Moderate problem” (3), “Serious problem” (4), and “Insurmountable problem” (5). A barriers scale was constructed by summing the values across all 18 barriers and dividing this sum by the number of items (18). The scale scores range from 1 (no barriers experienced) to 4 (all barriers experienced). Exploratory factors analysis of the 18 items yielded a Cronbach’s  $\alpha$  of .86 and a KMO of .86. This barrier scale was used to determine how accessible the healthcare facility was to the respondents. Table 8 above, shows that respondents from the Kunene region reported a mean score of 1.72 ( $SD = 0.45$ ) on barriers to health services, while respondents from Khomas region indicated a significantly lower mean ( $M = 1.27, SD = 0.34$ ) ( $222.56 = 12.36, p < .001$ ). This shows that healthcare services were apparently less accessible in Kunene region than was the case for Khomas region.

Having presented the profiling of the respondents the following section will discuss activity limitations as the first part of our conceptual model (user/activity limitation).

### 4.3 Activity limitation

As explained in chapter one above, disability in all its aspects cuts across a number of sectors. In investigating these sectors, questions such as the following arise: “Are deaf men more likely to have education than deaf women?” and “Do we find more people with intellectual disability in rural areas as opposed to urban areas?” The WCG screening instrument could be an ideal tool to answer such questions on disability (Groce and Mont, nd).

Thus, for the purposes of the analysis for this dissertation PWD were identified using the six screening questions of the Washington Group. Respondents were asked to rate the difficulty they might have in doing certain activities (functional difficulties) in the context of six domains, those of seeing, hearing, walking, remembering, self-care and communication. Possible responses ranged from 1 (none), 2 (some), 3 (a lot) to 4 (unable to perform). Respondents were identified as having an activity limitation if their responses included at least “some” difficulty in one or more of the six domains. Authors such as (Mactaggart, Kuper, Murthy, Oye & Polack, (2016), Loeb, Eide, and Mint (2008) Miller, Mont, Maitland, Altman & Madams (2010), used the six domains to calculate the proportion of those with a disability, based on three possible cut-off values in accordance with the degree of difficulty.

Following their proposed analysis, this section will first present an overview of activity limitation for PWD only. Thereafter it will discuss each of the six domains assessed against the respondents’ demographic variables sex, age, region, education

and socio-economic status. The reason for this presentation of the analysis is based on the understanding that equitable access to healthcare is not only influenced by the context people might live in or how the health system is stratified or their community setting, but also by some personal factors such as the demographic variables mentioned above (Swartz, 2011).

Table 9 below, describes the six core domains by the degree of difficulty experienced by the respondents.

Table 9

*Occurrences of activity limitation by domain and degree of difficulty. Percentage (n). (N=576) PWD only.*

Core domains	Degree of difficulty			
	No difficulty	Some difficulty	A lot of difficulty	Unable to perform
Seeing	38.4 (221)	36.3 (209)	22.7 (131)	2.6 (15)
Hearing	79.3 (457)	13.0 (75)	6.3 (36)	1.4 (8)
Walking	63.5 (365)	13.6 (78)	18.8 (108)	4.2 (24)
Remembering	81.0 (464)	12.2 (70)	5.4 (31)	1.4 (8)
Self-care	89.4 (515)	4.0 (23)	4.2 (24)	2.4 (14)
Communication	91.1 (525)	3.3 (19)	2.6 (15)	3.0 (17)

Table 9 above, shows that difficulty with seeing appeared to be the foremost reason for PWD experiencing an activity limitation to nearly two thirds (61.6%) of the PWD reported having 'some difficulty' (36.3%), a 'lot of difficulty' (22.7%), and 'unable to perform' (2.6%) in performing certain tasks because of problems with seeing.

Close to a third of PWD were affected by problems with walking. Compared to the other domains, 'walking' reported the second highest proportion (18.8%) for a 'lot of difficulty', and the highest (4.2%) for 'unable to perform'. This

implies that PWD experience a lot of difficulty in performing certain activities due to walking problems although less PWD were affected as opposed to those with seeing problems.

Hearing and remembering problems were reported by close to (20%) of the PWD. About (12%) of PWD experienced “some difficulty” and only (1.4%) said that they were “unable to perform” certain activities because of these health problems

When looking at the domains “self-care” and “communication” where 10.6% and 8.9% of the PWD respectively reported difficulties, it should be pointed out that about a third of PWD that indicated that they had difficulties with self-care and/ or communication said they were “unable” to perform activities. This shows that even though problems with “self-care” and “communication” affected relatively few PWD compared to the other core domains, the severity of these activity limitations appeared to be higher than the other domains. The estimates as presented in Table 8 were not always mutually exclusive, since some individuals in the findings embraced more than one domain.

In conclusion and as argued by Schneider (2009) it can be said that difficulties rather than disability would provide a more comprehensive and inclusive measurement. Seeing appeared to be the most predominant activity limitation experienced by PWD followed by the domain “walking”. Looking at the core domains in terms of severity it emerged that problems with walking, self-care and communication were the domains that impeded the performances of certain activities the most.

#### 4.4 Descriptive analysis of activity limitation by demographic variables of respondents

What is the importance of this? In answering activity limitation as the first part of the conceptual model that frames this dissertation, this analysis will give detailed information about the relationship that might exist between the level of activity limitation the PWD experience in each of the domains (seeing, hearing, walking, remembering, self-care, and communication) and their location, sex, level of education, age and socio-economic status. This descriptive analysis reflects on the profile for each activity limitation domain: how does the level of impairment relate to the location of the PWD? Are PWD in Khomas region more affected than those in Kunene region? Are males more affected than females? The *independent variables* were region, sex, and level of education, age, and socio-economic status and the *dependent variables* were the six domains of seeing, hearing, walking, remembering, self-care, and communication. As indicated earlier, these domains are part of the ICF model and offer a fuller understanding of disablement in the context of *activity and participation* (Vargus-Adams & Majnemer, 2014).

As explained in the methodology section, a broad measure of level of impairment that includes everyone with at least one domain coded as “Some difficulty”, “A lot of difficulty”, or “Unable to do it”, was used in this study to identify PWDs.

According to the conceptual model, personal (demographic) factors might act as a facilitator or barriers to the level of impairment. Table 10 below presents the relationship between the personal factors for both PWD and Non-PWD.

Table 10

*Characteristics of PWD and Non-PWD - all respondents.*

<b>VARIABLE</b>	<b>PWD</b>	<b>NON-PWD</b>
Male	.42	.42
Age	43.1 (20.70)	28.7 (12.71)
Urbanity	0.79	0.89
Education		
<i>No formal education</i>	0.27	0.05
<i>Less than primary</i>	0.28	0.19
<i>Completed primary</i>	0.29	0.45
<i>Secondary education</i>	0.11	0.24
<i>Tertiary education</i>	0.06	0.07
Possession scale	0.28 (0.19)	0.36 (0.19)
Activity limitation	1.41 (0.35)	1.01 (0.05)
Barriers to healthcare service scale	1.42 (0.42)	1.25 (0.35)
<i>N</i>	579	367

*Note: Figures in the table refer to ratio and mean values with standard deviation in brackets*

*(It should be noted that, when there were differences between PWD and Non-PWD, in some cases a Non-PWD was interviewed in the neighbour's household as indicated in the methodology section)*

No significant difference was established between PWD and Non-PWD with regard to the variable sex as the proportion of males to females was exactly the same for both groups. Age, however, showed a difference in that PWD were significantly younger than Non-PWD  $t(920.43) = 13.14, p < .001$ . The mean ages for male and female PWD were 43.01 and 43.0 respectively. For Non-PWD, the mean age was 27.7 for females and 30.16 for males.

Even though most of the respondents were selected from urban Khomas region and urban Kunene region, there was a difference in the proportions of PWD and Non-PWD that resided in rural and urban areas, as significantly more PWD were

from the rural area compared to Non-PWD  $\chi^2(1, N = 946) = 14.08, p < .001$ ). In terms of level of education, Table 10 above, reveals that compared to PWD, Non-PWD reported a higher ratio of respondents having completed primary education and above, while over half (55.0%) of the PWD either had no formal education or “less than primary education”. Overall, Non-PWD seemed to have received significantly more education than PWD  $\chi^2(4, N = 924) = 105.33, p < .001$ ).

The two groups also differed with regard to socio-economic status as the mean possession score for PWD (0.28) was lower than the mean score for Non-PWD (0.36). This result was significant  $t(900) = 6.0, p < .001$ , indicating that PWD had a significantly lower socio-economic status (were poorer) than Non-PWD.

The results of the activity limitation scale score, (that measures the level of impairment or restriction of an individual in executing certain tasks) were to be expected, namely, that the mean score would be significantly higher for PWD compared to Non-PWD. Mean activity limitation for PWD was 1.41 ( $SD = 0.35$ ), while for Non-PWD it was 1.01 ( $SD = 0.05$ ).

In terms of barriers, an important result was noted in that PWD reported a significantly higher mean barrier score ( $M = 1.42, SD = 0.24$ ) than Non-PWD ( $M = 1.25, SD = 0.35$ ). This indicated that PWD experienced more barriers when accessing the health facility than Non-PWD; hence access is not experienced in the same way, even though both groups receive the same public health care provisions.

In conclusion it can be said that the relationship between the personal factors for both PWD and Non-PWD established that, overall, PWD were older, less educated, less urban and poorer than Non-PWD. They were more restricted in

performing certain tasks due to their activity limitation and faced more barriers in accessing healthcare than Non-PWD.

The discussion will now move to the bivariate linear regression analysis that investigates the potential effect of the demographic variables (personal characteristics of respondents) on each of the six activity limitation domains.

#### 4.5 Profile of activity limitations: Bivariate analysis (linear regression) of the six activity limitation domains by respondents' demographic characteristics

This section addresses the question: *What is the relationship between the core domains and the demographic characteristics (personal variables) of the respondents?* Are respondents in Khomas region more affected than those in Kunene region? Are males more affected than females? In what ways does the location of the respondent relate to his or her impairment?

The bivariate regression analysis that addresses these questions first reflects on the relationship between the aggregate level of impairment (activity limitation scale score) and the predictors sex, age, region, education, urbanity and socio-economic status. Thereafter, the influence of the predictors on each of the six activity limitation domains will be investigated.

Table 11 below, presents the bivariate regression which shows the relationship between activity limitation and the predictors.

Table 11

*Bivariate regression of sex, age, region, education, urbanity and socio-economic status on Activity Limitation (WG6) (N=946).*

<b>Predictor</b>	<b>Beta</b>	<b>t-value</b>	<b>Sig.</b>
Sex	-0.18	-0.55	Not Significant
Age	0.32	10.33	< .001
Region	0.23	7.27	< .001
Education	-0.32	-10.09	< .001
Urbanity	0.15	4.46	< .001
Socio-economic status	-0.21	-6.34	< .001

Results indicated in Table 11 above shows that sex did not have an effect on activity limitation. However, age was a significant predictor as age increased so did the level of activity limitation. As noted by Van Rooy et al., (2015), and supported by the results in Table 11 above, the older you are the more you experience the effect of an activity limitation. In terms of region, more activity limitations were reported in Kunene region as compared to Khomas region. The model thus predicted that if you live in the Kunene region you will be more likely to have a higher activity limitation score. Table 11 also shows that urbanity is an important predictor for activity limitation as the result indicates that rural respondents were more likely to experience activity limitations than urban respondents. This finding is corroborated by Eide et al., (2015). In the same study and supported by the findings in Table 11, higher levels of socio-economic status were associated with a decrease in the level of activity limitations.

The following section will investigate the influence of the predictors on each of the six activity limitation domains. For the purposes of the analysis, the dependent variables are the responses to the disability screening questions.

Table 12

*Bivariate linear regression of sex, age, education, urbanity and socio-economic status on Activity Limitation Domains (N = 943).*

	<b>Predictor</b>	<b>Beta</b>	<b>t-value</b>	<b>Sig.</b>
<b>Seeing</b>	Sex	0.06	1.74	Not Significant.
	Age	0.36	11.58	< .001
	Region	0.02	0.61	Not Significant
	Education	-0.09	-2.62	< .01
	Urbanity	0.05	1.40	Not Significant
	Socio-economic status	0.01	0.16	Not Significant
<b>Hearing</b>	Sex	-0.03	-0.99	Not Significant.
	Age	0.10	2.95	< .01
	Region	0.13	3.96	< .001
	Education	-0.15	-4.70	< .001
	Urbanity	0.01	0.34	Not Significant
	Socio-economic status	-0.10	-2.91	< .01
<b>Walking</b>	Sex	-0.02	-0.52	Not Significant
	Age	0.37	12.18	< .001
	Region	0.16	4.94	< .001
	Education	-0.28	-8.73	< .001
	Urbanity	0.12	3.56	< .001
	Socio-economic status	-0.20	-6.18	< .001
<b>Remembering</b>	Sex	0.01	0.16	Not Significant.
	Age	0.09	2.60	< .05
	Region	0.18	5.48	< .001
	Education	-0.22	-6.70	< .001
	Urbanity	0.14	4.29	< .001
	Socio-economic status	-0.14	-4.17	< .001
<b>Self-care</b>	Sex	- 0.05	- 1.56	n.s.
	Age	0.06	1.77	n.s.
	Region	0.19	6.02	< .001
	Education	- 0.19	- 5.69	< .001
	Urbanity	0.08	2.54	< .05

	Socio-economic status	- 0.16	- 4.76	< .001
<b>Communication</b>	Sex	-0.06	-1.68	Not Significant
	Age	-0.08	-2.54	< .05
	Region	0.17	5.16	< .001
	Education	0.17	5.15	< .001
	Urbanity	0.07	2.25	< .05
	Socio-economic status	-0.14	-4.16	< .001

Table 12 shows the effect of the five predictors (sex, age, education, urbanity and socio-economic status) on the six activity limitation domains.

Difficulty in seeing was predicted to increase with age. Likewise, education seemed to have an effect in that the more educated the respondent was, the less likely it was that she or he would experience a problem with seeing. Sex, region, urbanity and did not have a significant effect on difficulty with seeing.

Both sex and urbanity did not significantly affect the difficulties with hearing (Table 12). Similarly, the same trend emerged as with the case with seeing in that the problem of hearing increased with age. Higher levels of hearing difficulties were predicted to be encountered by the Kunene region sample rather than the Khomas region sample. With regard to education, lower levels of education were significantly associated with greater levels of difficulties with hearing. Socio-economic was identified as a significant predictor of difficulties with hearing as greater level of hearing difficulties predicted a decrease in socio-economic status.

Sex did not show any significant prediction value for reported difficulties with walking as shown in Table 12. All the other predictors had a significant effect on difficulties with walking. Age predicted that the older the respondent was the more likely she or he would be faced with the limitation of walking.

Walking difficulties were more likely to be encountered by the Kunene region sample than the Khomas region sample. Furthermore, higher levels of education were associated with lower levels of difficulties with walking. With regard to urbanity, rural respondents were more likely to be confronted with limitations of walking than urban respondents. Finally, lower levels of socio-economic status were predicted to be associated with greater levels of walking difficulties.

The same pattern as was observed with difficulties in walking applied to difficulties in remembering in that all predictors except sex affected the level of this domain significantly (Table 12). Thus, an increase in age and a decrease in socio-economic level predicted greater levels of difficulty with remembering. Kunene region respondents were more likely to have experienced remembering difficulties compared to Khomas region respondents and the more educated the respondent was the less likely was she or he to experience the limitation of remembering. Rural respondents were predicted to report greater levels of difficulty remembering than urban respondents.

Sex and age did not have a significant influence on the level of difficulty with self-care as portrayed in Table 12. Greater levels of self-care difficulties were predicted to be faced by the Kunene region sample compared to the Khomas region sample. A decrease in the educational level was associated with the likelihood of greater limitations with respect to self-care as was a decrease in socio-economic status. Urbanity predicted that rural respondents would report greater levels of self-care difficulties than urban respondents.

There was no gender effect predicted on difficulties with communicating but getting older was predicted to lead to an increase in the problem of communicating. Furthermore, greater levels of communicating difficulties were more likely to be

encountered by the Kunene region sample compared to the Khomas region sample and respondents living in rural areas were predicted to face greater communication problems than urban respondents. Higher levels of education were associated with a greater likelihood of being confronted with difficulties in communicating. Socio-economic status played a significant role in communicating, in that a decrease in socio-economic status was predicted to result in greater levels of communicating difficulties (Table 12).

This regression analysis of the predictor variables on the six activity domains concludes the investigation of the relationship between the demographic characteristics of the respondents and the difficulties experienced in one or more of the domains.

#### 4 Summary

This chapter presented a profile of the respondents and assessed the level of activity limitation of people with and without disability experience when accessing healthcare.

The profile of the respondents highlighted significant differences in the respondents' characteristics between the two study regions, Khomas and Kunene. It established that respondents residing in Kunene region had lower levels of education and socio-economic status than their counterparts in Khomas region. With respect to levels of activity limitations, Kunene region reported higher average scores on the WG6 scale than Khomas region. In addition, Kunene was also the region that experienced more barriers when accessing health care as indicated by higher average barrier scores. Other characteristics discussed were sex, age and urbanity which varied for the two regions, but not significantly. Put in simple terms, respondents of Kunene were less educated, poorer, more limited in their activities and faced more barriers

when accessing healthcare than those of Khomas region.

A comparison of PWD and Non-PWD on the same demographic characteristics revealed that PWD were significantly older, less educated and poorer than Non-PWD and proportionally more PWD lived in rural areas than Non-PWD. PWD also had greater health needs as measured by their activity limitation scale score, while at the same time facing more barriers to access healthcare than Non-PWD.

With the results on activity limitation taken as the first part of the conceptual model and supported by (Bickenbach et al., 1999), it can be said that difficulties with seeing appeared to be the most predominant activity limitation experienced by PWD followed by the domain “walking”. Looking at the core domains in terms of the levels of severity it emerged that problems with walking, self-care and communication were the domains that impeded the performances of certain activities the most.

In terms of the bivariate regression of the relationship between activity limitation (WG6 scale score) and the predictors (demographic/ personal variables), it can be said that all predictors, with the exception of sex, had a significant influence on activity limitation. The effect of the other predictors on activity limitation can be summarised as follows: Activity limitation increased with age, lower levels of education and lower socio-economic status. Respondents residing in Kunene and rural dwellers were more prone to experience activity limitation.

In terms of the relationship between the six activity domains and the same predictors, the bivariate regression analysis established that there was no difference in terms of gender in all six domains. The level of difficulty increased with age for all domains except for “self-care” where age did not play a role. This view is supported by Mactaggart (2016) who states that disability prevalence is likely to

increase exponentially with age irrespective of the of the disability measurement (p. 13).

It was predicted that higher levels of difficulty would be encountered by respondents living in the Kunene region for all domains, except in the domain “seeing” where location (region) did not play a role in the level of seeing difficulties experienced. The level of education emerged as a strong predictor as it had a significant effect on the level of difficulty in all 6 domains where higher levels of education were associated with a decrease in the difficulty encountered. Higher levels of difficulty in the walking, remembering, and self-care and communication domains were predicted for respondents living in rural areas while urbanity had no effect on the levels of difficulty in the seeing and hearing domains. Socio-economic status had a significant effect on all domains, except difficulties with seeing. A decrease in socio-economic status (poverty) predicted a rise in the level of difficulties in hearing, walking, remembering, self-care and communicating.

It should be noted that the results on activity limitation (responses to screening questions) were self-reported as respondents were asked to indicate whether they experienced an activity limitation in the core domains of “function” as per the ICF model (discussed in the literature review). Mactaggart, et al. (2016), note that self-reporting as the only form of measurement of disability might be restrictive because the distinction between “some” and a “lot” is not so clear. In addition to the self-reported findings, clinical observation the dissertation (study) would have been able to identify the more people that might experience some form of activity limitation in the study regions.

Loeb et al. (2008) are also of the opinion that basing disability measurements on a singular approach to disability can become problematic and

restrictive. They advocate for an approach that focuses on functional ability rather than impairment in reporting several prevalence rate that are based on a threshold of performing daily activities of life (Loeb, et al., 2008 p. 39). However, using the domains of activity limitation of the ICF model, the author was in a position to present a profile of those people who experience activity limitation within the two study regions. This is supported by Miller (2010) and Loeb (2013) who argue that this methodology for integrating cognitive testing concepts into a standardised questionnaire will most likely be a suitable measure for disability in terms of international comparisons (Miller, et al., 2010, p. 814) and to describe various scenarios of disability using these domains (Loeb, 2013, p. 318).

Having presented the first part of our conceptual model of activity limitation, the following chapter (5) will present results on the second part of the conceptual model “personal factors” which hampers or facilitate access to healthcare for people with disability.

## CHAPTER 5

### DO I HAVE ACCESS TO HEALTH CARE? PERCEIVED BARRIERS IN ACCESSING HEALTHCARE SERVICES

#### 5.1 Introduction

The previous chapter focused on participants profiling as well as the first part of the conceptual framework. This chapter will continue discussing the results of the dissertation in terms of the second part of the conceptual framework introducing the personal variables in addressing objective 2 of the dissertation *to identify and compare the personal factors (socio-demographic factors) that hamper access to health care for those living with disabilities and those living without disability in the Khomas and Kunene region.*

As argued by Eide et al., (2015) in accessing health care, individuals with disabilities might find it hard because barriers might reduce their access. This is also supported by the World Health Survey (2010) which includes ten different reasons for lack of care in low-income countries. Both Trani et al. (2010) and Van Rooy et al., (2012) found that vulnerable groups find it difficult in accessing healthcare. A number of studies converge on some type of barriers for people with disabilities on accessing healthcare when controlling for other variables such as demographic characteristics and socioeconomic status (Eide, et al., 2015, p. 12). This dissertation therefore highlights the important barriers that play a role in the life of both PWD and Non-PWD when accessing health care in the two study regions.

#### 5.2 Comparing barriers in accessing healthcare services for PWD and Non-PWD

People with disabilities face a host of barriers in their everyday life. These can be either physical obstacles, for instance with access to buildings, or systemic barriers, for example in employment and other social programmes. The most difficult barriers to overcome involve the attitudes of other people to those with disabilities. Whether arising from ignorance, fear, or misunderstanding, such attitudes prevent those who are not disabled from appreciating and experiencing the full potential of a person with a disability. They tend to focus on the person's disability, rather than on his or her ability.

Respondents were asked: "Considering your own experience, tell me whether the following make it difficult for you to get health care". This was followed by a list of potential barriers. Possible answers to each of these barriers was a rating scale that ranged from "No problem (1), Small problem (2), Moderate problem (3), Serious problem (4) and Insurmountable problem". For analysis purposes, the "serious" and "insurmountable" problem categories were merged into the "Yes (is a problem)" category while "no", "small" and "moderate" problems together formed the "No (is not a problem)" category. Only those responses that proportionally indicated "Yes (is a problem)" in accessing healthcare are shown.

Only those responses that proportionally indicated "Yes (is a problem)" in accessing healthcare are shown in Table 13 below, which also lists the potential barriers that the respondents might have encountered when seeking healthcare. These categories were derived from the themes that emerged from the qualitative inquiry's interview protocol, namely, "Question 5: Factors that influence their access to healthcare: how the participants experience these factors".

Table 13

*Comparing barriers in accessing health services by PWD, Non-PWD and by serious and insurmountable barriers.*

	All	Non-PWD	PWD
Lack of transport from home to healthcare facility	17.7	8.5	23.3
No services available	5.1	1.7	7.1
Physical access to facility	2.5	.3	3.8
Because of faith/belief	.4	.6	.3
Negative attitudes among healthcare workers	4.6	1.2	6.6
There is no accommodation at the healthcare facility	4.7	5.0	4.5
Communication with healthcare workers	2.9	1.5	3.8
Standard of the healthcare facility	4.8	2.1	6.5
The journey to the healthcare facility is dangerous	5.0	3.5	5.9
You did not know where to go	.2	.0	.4
Could not afford the cost of the visit	1.6	.6	2.3
Don't have the necessary document (health card/passport)	.1	.0	.2
You thought you were not sick enough	.4	.3	.5
You tried but were denied healthcare	2.9	.6	4.2
The healthcare provider's drugs or equipment were inadequate	8.4	4.7	10.6
Could not take time off work or had other commitments	.5	.3	.7
You were previously badly treated	2.9	.3	4.5
Could not afford the cost of transport	12.3	6.7	15.6

*Figures in table refer to percentages*

Table 13, shows the barriers in accessing healthcare services faced by PWD and Non-PWD. People with disabilities (23.2%) experienced “Lack of transport from home to the healthcare facility” as a major constraint in accessing healthcare, compared to those without any disability (8.5%). The lack of transport was further

aggravated when they “Could not afford the cost of transport” to the facility (15.6%). The essential component of inadequate supply of drugs and equipment from the provider also played a significant role, in that more people with disabilities (10.6%) were affected by it than those with no disability (4.7%). “Negative attitudes among health workers” were experienced by people with disabilities, as 6.6% affirmed that they were subjected to it, while only 1.2% of those without disabilities faced this barrier. The standard of the healthcare facility also played a role; the table shows that 6.5% of PWD reported that the healthcare facility was not up to standard for their needs, while only 2.1% of non-PWD recorded this. Another way of measuring access was the availability of health care services with “No services available” at the healthcare facility indicated as a barrier by 7.1% of PWD compared to only 1.7% of those without disability reported the same difficulty.

Those barriers that seemed to have a minimal impact on the life of both PWD and non-PWD were mostly related to their belief systems. For both PWD and non-PWD, accessing a health facility was not connected with religious belief, as the scores in this were very low (0.3% and 0.6% respectively). With information on the health facility, both groups said they knew where to go in order to access such a facility (0.4% and 0%). Regarding documentation, only 0.2% of the PWD reported that they did not have the necessary documents, which indicates that there was a high level of awareness, given the attitude of the providers, that accessing the facility would not be possible without the required documentation. Work commitment played a minor role, reflected in a very low reporting in the barrier, “Could not take time off work or other commitments” (0.7% for PWD and 0.3% for non-PWD). The barrier “You thought you were not sick enough” seemed not to be dominant for either PWD (0.5%) or non-PWD (0.3%).

It could be argued that a barrier to accessing health services might occur either cumulatively or once only, and this would offer different options to the healthcare seeker in navigating access to healthcare. Negotiating such a barrier would then be an outcome between the individual and the healthcare system he or she tried to access. This implies that the manner in which a barrier is negotiated depends both on the characteristics of the individual and on the structure of the healthcare system itself (Fortney, Jr, Bosworth, Booth, & Kaboli, 2011).

The remainder of this chapter will focus on the six barriers that were reported as having the highest impact on access to health care for PWD. The subsequent analyses will thus focus only on those barriers found to have an impact on the lives of both PWD and Non-PWD.

### 5.3 Comparison of PWD with Non-PWD using selected barriers

This section is a comparison between persons with disability and those without disability with regard to the selected barriers as indicated in Table 14.

Table 14

*Selected barriers in accessing health care that impact the life of PWD and Non-PWD (%).*

Selected barriers in accessing healthcare	Serious and insurmountable problems		
	PWD	Non-PWD	Total
Lack of transport from home to healthcare facility	23.2	8.5	17.7
No services available	7.1	1.7	5.1
Negative attitude among healthcare workers	6.6	1.2	4.6
Standard of the healthcare facility	6.4	2.1	4.8
Inadequate drugs or equipment	10.6	4.7	8.4
Cost of transport	15.6	6.7	12.3

*Note: Differences between PWD and Non-PWD for all barriers are significant on a .01 level or lower*

These selected barriers had a greater impact on access to healthcare for PWD than for Non-PWD as more PWD were significantly faced with these barriers than Non-PWD ( $p < .001$ ). This finding reveals that persons with disability did not access healthcare services in the same way as those without disabilities.

The next section will address the socio-demographic characteristics of PWD and how these might influence their access to healthcare in terms of the selected barriers.

#### **5.4 Selected barriers that impact the life of PWD**

The barriers selected for this discussion were grouped into two categories, structural-environmental barriers and healthcare service delivery process barriers (Van Rooy et al., 2012). Under structural-environmental, the barriers were “lack of transport” and “standard of the healthcare facility”. For healthcare service delivery process the barriers were “no service available at the healthcare facility”, “negative attitude of healthcare workers”, and “the healthcare provider’s drugs or equipment were not enough”. The presentation will look at the impact of these barriers on healthcare seeking behaviour of the PWD by assessing the influence the sample characteristics of region, sex, age, education, socio-economic status as well as activity limitation have on the barriers that hamper access to healthcare for PWD.

Table 15

*Lack of transport to the healthcare facility and No service available at healthcare facility: sample characteristics of PWD only.*

<b>Barrier</b>	<b>Variable</b>	<b>Yes (%)</b>	<b>No (%)</b>	<b>Sig.</b>
<b>Lack of transport to the healthcare facility</b>	<b>Region</b>			$\chi^2$ test, $p < .001$
	Khomas	22.2	77.8	
	Kunene	44.4	55.6	
	<b>Sex</b>			Not significant
	Male	32.0	68.0	
	Female	26.3	73.7	
	<b>Age</b>	44.46 (22.11)	42.61 (20.02)	Not significant
	<b>Education</b>			$\chi^2$ test, $p < .001$
	No formal education	49.3	50.7	
	Less than primary education	25.2	74.8	
	Primary education	22.2	77.5	
	Secondary education	9.8	90.2	
	Tertiary education	12.9	87.1	
<b>Socio-economic status</b>	0.17 (0.12)	0.33 (0.20)	$t$ -test, $p < .001$	
<b>Activity limitation</b>	1.54 (0.39)	1.35 (0.32)	$t$ -test, $p < .001$	
<b>No service available at healthcare facility</b>	<b>Region</b>			$\chi^2$ test, $p < .001$
	Khomas	3.0	97.0	
	Kunene	16.8	83.2	
	<b>Sex</b>			Not significant
	Male	7.0	93.0	
	Female	7.3	92.7	
<b>Age</b>	49.94 (21.48)	42.61 (20.52)	$t$ -test, $p = .048$	

<b>Education</b>			$\chi^2$ test, $p =$ .007
No formal education	11.8	88.2	
Less than primary education	6.5	93.5	
Primary education	5.0	95.0	
Secondary education	0.0	100	
Tertiary education	0.0	100	
<b>Socio-economic status</b>	0.17 (0.15)	0.29 (0.19)	$t$ -test, $p < .001$
<b>Activity limitation</b>	1.52 (0.48)	1.40 (0.34)	Not significant

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*Note: Mean values with standard deviation in brackets (continuous variables only). Percentages apply to categorical variables*

Given the fact that the ability to use services, or attend school or work, is largely dependent on the ability to get from point A to point B, the lack of transport can be a serious barrier for the full integration into society of people with disabilities. In most cases they have to rely on whatever transport is provided, since they are usually not in a position to drive themselves or have the option of being driven in their own transport. Thus, they rely heavily on public transport.

Table 15, gives the results on the barrier “Lack of transport”. About 22% of those from the Khomas region confirmed that they had experienced a lack of transport to the facility, while twice as many (44.4%) reported the same from the Kunene region. This shows that people from Kunene were significantly more prone to suffer problems with securing transport. In an urban area such as Khomas, it is understandable that PWD would have less difficulty in finding transport to the healthcare facility than in more rural Kunene region.

With regard to education, this barrier seemed to have a significant impact. In particular, those with no formal education faced difficulty securing transport while the percentage of those experiencing the barrier decreased with higher levels of education.

It should be noted, that the problem of lack of transport tended to increase for those with a greater level of activity limitation as PWD who reported problems with transport had a significantly higher activity limitation score ( $M = 1.54$ ,  $SD = .39$ ) than those for whom it was not a problem ( $M = 1.35$ ,  $SD = .32$ ).

Concerning socio-economic status, PWD who did not experience lack of transport generally had a higher socio-economic status (mean value on possession scale = 0.33,  $SD = 0.20$ ) than those who had a problem with lack of transport ( $M = 0.17$ ,  $SD = 0.12$ ). This leads to the conclusion that socio-economic status has a significant impact on access to transport.

The WHO (2008) argues that health services for people with disabilities should be a fundamental right, and that freedom of access is an essential part of this right. The satisfaction of PWDs with health services would then be measured in the types of services they were being offered provided these were commensurate with their needs. It should be noted further that if these services were lacking, they might be exposed to some obstacles, which could result in them not accessing the needed services.

In this context, availability could be defined as the degree to which an individual is either helped or hindered in making use of a service at a health facility. It has to do with the number or kind of services that are provided at the facility and how the facility is organised to render these services to its clientele.

Table 15 shows that significantly less PWD (3%) in the Khomas region said that the services they needed were not available compared to 16.8% from the Kunene region. Age also had a significant effect on this barrier with older people being more critical of service delivery than the younger.

Regarding gender, there appeared to be no difference in the observations made by males (7.0%) and females (7.3%). Education, on the other hand, seemed to be a critical factor when it came to the delivery of services. Mostly those who had no form of education (11.8%) felt that the services delivered were not as they expected while those with higher education seemed to have no problem with this barrier. This inverse relationship between the barrier and education was significant.

PWD who reported problems with service delivery had a lower socio-economic status than those who were not experiencing this problem as they had significantly fewer possessions. For activity limitations, however, the results showed that those who reported a higher level of such limitations felt that they did not get the service they expected. With a mean value score of 1.52, the degree of disability clearly had an effect on this barrier, although not a significant one.

Table 16

*Negative attitude of health workers and Standard of the health facility: sample characteristics of PWD only.*

<b>Barrier</b>	<b>Variable</b>	<b>Yes (%)</b>	<b>No (%)</b>	<b>Sig.</b>
<b>Negative attitude of health workers</b>	<b>Region</b>			$\chi^2$ test, $p < .001$
	Khomas	1.2	98.8	
	Kunene	19.4	80.6	
	<b>Sex</b>			Not significant
	Male	6.3	93.8	
	Female	6.9	93.1	
	<b>Age</b>	35.85 (21.91)	43.49 (20.49)	$t$ -test, $p = .036$
	<b>Education</b>			Not significant
	No formal education	8.1	91.9	
	Less than primary education	3.8	96.2	
Primary education	5.0	95.0		
Secondary education	4.9	95.1		
Tertiary education	6.5	93.5		

	<b>Socio-economic status</b>	0.17 (0.15)	0.29 (0.19)	<i>t</i> -test, <i>p</i> = .004
	<b>Activity limitation</b>	1.45 (0.34)	1.40 (0.35)	Not significant
<b>Standard of the health facility</b>	<b>Region</b>			$\chi^2$ test, <i>p</i> < .001
	Khomas	2.0	98.0	
	Kunene	17.9	82.9	
	<b>Sex</b>			Not significant
	Male	5.4	94.6	
	Female	7.3	92.7	
	<b>Age</b>	39.08 (25.38)	43.41 (20.27)	Not significant
	<b>Education</b>			$\chi^2$ test, <i>p</i> = .03
	No formal education	11.8	88.2	
	Less than primary education	3.9	96.1	
Primary education	5.7	94.3		
Secondary education	3.3	96.7		
Tertiary education	3.2	96.8		
	<b>Socio-economic status</b>	0.23 (0.17)	0.29 (0.19)	Not significant
	<b>Activity limitation</b>	1.44 (0.37)	1.40 (0.35)	Not significant

*Note: Mean values with standard deviation in brackets (continuous variables only). Percentages apply to categorical variables*

It is generally accepted that attitudes towards people with disabilities are usually negative. These attitudes are embedded in the structure of society, in that those with disabilities are seen to need special care or treatment which may not be available at a given point in time. The literature review shows that such attitudes come

in three basic forms, cognitive (opinion), affective (emotional), and behavioural (willingness). Attitude in itself can be complex, but the important point is that once we see it in context we will be in a position to understand the reactions towards those with disability.

As argued earlier, one of the greatest hurdles disabled people face when trying to access mainstream programmes is negative attitudes. It is these attitudes that lead to the social exclusion and marginalisation of those with disabilities. Negative attitudes are continually reinforced. Disability is portrayed as a 'problem'. Those with disabilities are viewed as helpless and dependent, as ill and in constant need of care and medical treatment, or as tragic victims. It is also argued that culture plays an important role in the way people relate to those with disabilities. Extant literature shows disability often being linked to concepts of cruelty, ridicule and helplessness. This contributes to the perception of the disabled as different or 'outsiders'. Negative attitude as an attribute is sometimes very difficult to identify. A change of attitude does not happen automatically or spontaneously, but is a complex process which involves moving, in a series of stages, from one set of attitudes to another. With disability, this could mean moving from a position of total ignorance to a preliminary awareness of disability within the community, and from there to an attitude of concern. Such concern, however, may be expressed within a paternalistic and patronising framework (the medical model). The next important transitional stage therefore would be the development of a sense of justice, of seeing people with disabilities as citizens with equal rights (the social model).

The results shown in Table 16, indicate that, while health workers' attitudes to the disabled were generally not that negative, those from the Kunene region experienced some form of negative responses from healthcare workers (19.4%) and

this to a significantly greater extent than their counterparts in the Khomas region. It is also noteworthy that young people were significantly more inclined to encounter negative attitudes at the health facility than old people. However, education had no effect on the barrier as there was no significant difference in educational level and whether negative attitudes of health workers were a problem or not.

Although PWD who did not experience negative attitudes from healthcare workers had a lower mean activity limitation score than those who experienced this barrier, activity limitation did not appear to have a significant effect on negative attitudes experiences. In contrast, socio-economic status played a significant role in that those who, on average, had less possessions might have faced negative attitudes from the healthcare workers to a significantly greater extent than those with a higher economic status (more possessions).

The inclusion of the barrier “Standard of health facility” from the outset implies, that all aspects of a healthcare facility should be easily accessed by its potential users. This includes physical access, equipment, as well as access to information for all PWD without any prejudice based on their disability.

A healthcare facility should be designed in such a way as to provide equal access for everyone. As stated in Article 9 of the UNCRPD, all facilities, inclusive of healthcare facilities, should be accessible to PWD.

When a comparison was made between the regions in terms of the standard of the healthcare facility, results indicated that (17.9%) of PWD in Kunene region said “Yes” that the health facility standard was a problem, while only (2%) in Khomas region affirmed the same. This entails that more PWD from Kunene apparently perceived the health facility not to be up to standard compared with those

from the Khomas region. The difference in opinion is significant. There was no significant difference between male and female, or age with regard to this barrier.

It could be argued that those with some form of education were more likely to see a facility as not reaching their expected standards. However, this argument was not supported by the results as a significantly higher percentage of PWD with no education said that the healthcare facility did not meet their expected standard than those with higher levels of education.

Although PWD who reported that the health facility was up to standard had a higher socio-economic status than those who complained about it, these differences in experiencing the barrier were not significant. The same observation applies to the activity limitation in that the degree of activity limitation did not have a significant effect on the experience of this barrier.

Table 17

*The health care provider's drugs or equipment were not enough and Cost of transport to health facility: sample characteristics of PWD only.*

<b>Barrier</b>	<b>Variable</b>	<b>Yes (%)</b>	<b>No (%)</b>	<b>Sig.</b>
<b>The health care provider's drugs or equipment were not enough</b>	<b>Region</b>			$\chi^2$ test, $p = .001$
	Khomas	7.7	92.3	
	Kunene	17.3	82.7	
	<b>Sex</b>			Not significant
	Male	11.2	88.8	
	Female	9.9	90.1	

	<b>Age</b>	46.75 (20.87)	42.62 (20.56)	Not significant
	<b>Education</b>			$\chi^2$ test, $p = .047$
	No formal education	13.2	86.8	
	Less than primary education	5.1	94.9	
	Primary education	14.4	85.6	
	Secondary education	6.6	93.4	
	Tertiary education	9.7	90.3	
	<b>Socio-economic status</b>	0.20 (0.13)	0.29 (0.20)	$t$ -test, $p < .001$
	<b>Activity limitation</b>	1.42 (0.30)	1.40 (0.36)	Not significant
<b>Cost of transport to health facility</b>	<b>Region</b>			$\chi^2$ test, $p = .021$
	Khomas	9.9	90.1	
	Kunene	21.6	78.4	
	<b>Sex</b>			Not significant
	Male	11.7	88.3	
	Female	12.5	87.5	
	<b>Age</b>	42.49 (22.69)	37.02 (18.75)	$t$ -test, $p = .035$
	<b>Education</b>			$\chi^2$ test, $p = .009$
	No formal education	23.1	76.9	
	Less than primary education	9.9	90.1	
Primary education	12.4	87.6		
Secondary education	5.6	94.4		
Tertiary education	5.7	94.3		
	<b>Socio-economic status</b>	0.19 (0.13)	0.33 (0.20)	$t$ -test, $p < .001$

<b>Activity limitation</b>	1.42 (0.38)	1.23 (0.33)	<i>t</i> -test, <i>p</i> < .001
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*Note: Mean values with standard deviation in brackets (continuous variables only). Percentages apply to categorical variables.*

The right to health is summarised in the concepts of *availability*, *acceptability*, *accessibility* and *quality*. Quality implies that the goods and services should be scientifically and medically appropriate in their delivery. This *inter alia* includes skilled medical personnel, scientifically approved and unexpired drugs and hospital equipment, safe and potable water, and adequate sanitation.

Ensuring accessible medical care for PWD promotes their wellbeing and encourages their active participation in society. However, quality care in most cases remains inaccessible for PWD. They are usually denied access to proper medication, as well as to equipment. At times they are not given the proper examination, because the equipment and/or drugs are not available, potentially putting their lives at risk.

Table 17, reveals that significantly more PWD from the Kunene region (17.3%) than from the Khomas region (7.7%) were not happy with the drugs and/or equipment at the healthcare facilities.

Male PWD (11.2%) also showed a degree of dissatisfaction but this was not significantly different from the opinion of female PWD (9.9%). With regard to age, those complaining about inadequate supplies were older ( $M = 46.8$ ,  $SD = 20.9$ ) than those who did not ( $M = 42.6$ ,  $SD = 20.6$ ) but the overall effect of age on this barrier was insignificant.

The barrier was also felt among those with no formal education (13.2%) and those who had completed primary education (14.4%) and more significantly than for the other levels of education of the PWD.

Concerning activity limitation, it can be said that this did not have an effect on the barrier although PWD who reported that they were subjected to the barrier “The healthcare provider’s drugs and/or equipment were inadequate” had higher average activity limitation scores ( $M = 1.42$ ,  $SD = 0.30$ ), than those who indicated otherwise ( $M = 1.4$ ,  $SD = 0.36$ ). The opposite can be said about the relationship between socio-economic status and this barrier in that PWD, who were not happy with the drugs and/or equipment at the health facilities, had a lower mean score on the possession scale ( $M = 0.20$ ), than those who were satisfied ( $M = 0.29$ ). It can thus be concluded that socio-economic status had a significant effect on this barrier.

Van Rooy (2009), Eide (2015), McColl, Jarzynowska & Short (2010) argue that the greatest deterrent for people with disability to receive or access healthcare is cost. But as indicate in Table 17 above, cost is also a factor in terms of locality as significantly more PWD from the Kunene region (21.9%) had problems paying for transport than those from Khomas (9.9%). Transport costs affected both female (12.5%) and male (11.7%) PWD to the same degree whereas for older PWD, this cost presented a significantly greater barrier than was the case for younger PWD.

Cost of transport was also significantly correlated with education in that more PWD with no formal education (23.1%) appeared to struggle with this barrier than PWD had who obtained higher levels of education.

Both activity limitation and socio-economic status had a significant influence on whether PWD were able to afford the transport costs or not. PWD with

higher levels of activity limitation and lower socio-economic status were more affected by this barrier than their counterparts.

In conclusion it can be said that region or locality appeared to have a profound effect on access to healthcare for PWD as it was significantly related to all six barriers. PWD from Kunene region seemed to experience the barriers to a greater extent than PWD from Khomas region since more PWD in Kunene region had problems in accessing healthcare because of their locality. The same argument applied to the socio-economic status of PWD which was significantly associated with all barriers with the exception of the standard of the healthcare facility. Thus, overall, PWD with fewer possessions (lower socio-economic status) had greater problems in overcoming barriers to healthcare access than better-off PWD.

Education played a role in all barriers to health care access, except for the negative attitude of healthcare providers. PWD with higher levels of education generally experienced less problems. Similarly, the age of PWD was important with respect to three barriers: younger people were more exposed to negative attitude from health workers and older people had greater problems with service availability and cost of transport.

An interesting observation was that activity limitation was only significantly related to “Lack of transport” and “Cost of transport”.

The only characteristic of those discussed that did not have an effect on the barriers to healthcare access, was the sex of PWD meaning that female and male PWD experienced the selected barriers in the same way.

The relationship between the sample characteristics of Non-PWD and the selected barriers on access to health is briefly examined in the following section.

### **5.5. Selected barriers for Non-PWD**

This section will assess the relationship between the sample characteristics of region, sex, age, education, and socio-economic status and the selected barriers that hamper access to health care for Non-PWD. The discussion is based on significance tests (Chi-square tests and independent samples (*t*-tests;  $p < .05$  or lower) performed.

Sample characteristics that were significantly associated with the barriers “Lack of transport” and “The standard of the health facility” included region, education and socio-economic status. “Cost of transport” and region, age and socio-economic status were significantly related as were age and socio-economic status for the barrier “The healthcare provider's drugs or equipment were not enough”. The only sample characteristic that was significantly associated with the barrier “No services available” was socio-economic status while none of the characteristics affected the barrier “Negative attitude of healthcare workers”.

As was the case with PWD, socio-economic status was the sample characteristic that was significantly related to most barriers (except the barrier “negative attitude”). The significant differences established showed that the impact of the barriers on health seeking behaviour of Non-PWD increased by a parallel decrease in socio-economic status.

The next step in the analysis plan is the multivariate logistic regression of the predictors region, sex, age, education, socio-economic status and activity limitation on the selected barriers.

## 5.6 Using the predictors for PWD

The preceding discussion on the characteristics of PWD and their likely influence on barriers that hamper access to healthcare have shown that socio-demographic factors might play a role when PWD accesses a healthcare facility. In addressing this probable effect, the development of an integrated and cohesive understanding of these socio-demographic factors might address issues of access among people with disabilities. The discussion in this section will present a multivariate regression model in highlighting those socio-demographic factors that play a role in accessing healthcare for PWD.

Table 18

*Logistic regression of lack of transport to health facility, no services available and negative attitude among healthcare workers with socio-economic demographic variables of region, sex, education, age, socio-economic status and activity limitation for PWD.*

<b>Barrier</b>	<b>Predictor</b>	<b>Coefficient</b>	<b>Wald <math>\chi^2</math> (df)</b>	<b><i>p</i></b>	<b>Odds ratio</b>	<b>95% CI</b>
<b>Lack of transport</b>	<b>Region</b>					
	Kunene	-0.48	0.30(1)	0.862	0.95	0.57-1.63
	<b>Sex</b>					
	Male	0.24	1.04(1)	0.307	1.27	0.79-2.04
	<b>Age</b>	0.03	0.19(1)	0.657	1.00	0.52-0.90
	<b>Socio-economic status</b>	-4.68	0.94(1)	0.000 <sup>2</sup>	0.09	0.99-1.01
	<b>Activity limitation</b>	1.14	12.44	0.000 <sup>2</sup>	3.13	0.01-0.05
						1.66-5.89
<b>No service available</b>	<b>Region</b>					
	Kunene	1.77	13.65 (1)	0.000 <sup>2</sup>	5.89	2.29-14.96
	<b>Sex</b>					
	Male	-0.56	1.90 (1)	0.168	0.57	0.25-1.27
	<b>Education</b>	-0.17	0.59(1)	0.440	0.84	0.54-1.30
	<b>Age</b>	0.01	2.63 (1)	0.105	1.01	0.99-1.04
	<b>Socio-economic status</b>	-0.07	0.03(1)	0.957	0.92	0.06-13.43
	<b>Activity limitation</b>	-0.03	0.04 (1)	0.950	0.96	0.30-3.01
<b>Negative attitude among</b>	<b>Region</b>					
	Kunene	2.98	24.40 (1)	0.000 <sup>2</sup>	19.75	6.04-64.52

<b>healthcare workers</b>	<b>Sex</b>					
	Male	.006	0.02 (1)	0.867	1.07	0.47-2.40
	<b>Education</b>	0.42	3.70(1)	0.054	1.52	0.99-2.33
	<b>Age</b>	-0.01	1.14 (1)	0.286	0.99	0.97-1.00
	<b>Socio-economic status</b>	-0.63	0.15(1)	0.694	0.53	0.02-12.36
	<b>Activity limitation</b>	0.20	0.12 (1)	0.722	1.23	0.39-3.84

<sup>1</sup>  $p < .01$

<sup>2</sup>  $p < .001$

Table 18, presents the logistic regression of predictors on the barriers of lack of transport, no services available and negative attitude among healthcare workers for PWD.

The predictors of region, sex, and age showed no significant correlation with lack of transport to the healthcare facility, meaning that they did not make a significant contribution in predicting whether the PWD will experience the barrier or not, while education, socio-economic status and activity limitation had a significant effect on lack of transport to the health facility if all other predictors were taken into consideration (Table 18). As the level of education of the PWD increases, he or she is more likely to experience a lack of transport to the healthcare facility. Regarding the possessions scale, which was the proxy for socio-economic status, a significant correlation was shown with lack of transport to the healthcare facility as the model predicted that a decline in socio-economic status (possession score decreases) for the person concerned would increase the likelihood of experiencing lack of transport as a barrier in accessing healthcare. The odds ratio of .009 indicated that, had there been a decrease of one unit in the possession scale, the person concerned would have been 0.009 times less likely to experience lack of transport as a barrier in accessing healthcare if all other predictors were taken into consideration. Activity limitation was

also a significant predictor for the barrier in that PWD were more likely to experience a lack of transport in accessing healthcare with an increase in their activity limitation score. If there had been a one-unit increase in the activity limitation score, then the person would have been 3.13 times more likely to experience a problem with transport to the health facility, controlling for all other factors (predictors) in the model.

Region was the only predictor which showed a strong correlation with “no services available” (Table 26). Using Khomas region as a reference, the odds ratio of 5.89 the regression results indicated that health seekers from Kunene were 5.89 times more likely to have a problem with service delivery than those from Khomas region when seeking healthcare, controlling for all other predictors in the model.

Table 18 above, shows a robust predictor of region on the effect of negative attitude among healthcare workers towards those seeking healthcare. PWD from Kunene, (using Khomas as a reference category), as indicated by the odds ratio of 19.75, were 19.75 times more likely to experience a negative attitude from healthcare service providers when visiting a healthcare facility, if all other factors were considered in the prediction model for this barrier. All the other predictors showed no significant correlation with the barrier.

Table 19

*Logistic regression of the barriers: standard of healthcare facility, healthcare provider's drugs or equipment were inadequate and cost of transport with socio-demographic variables of region sex, age, education, possessions and activity limitation for PWD.*

<b>Barrier</b>	<b>Predictor</b>	<b>Coefficient</b>	<b>Wald <math>\chi^2</math> (df)</b>	<b><i>p</i></b>	<b>Odds ratio</b>	<b>95% CI</b>
<b>Standard of healthcare facility</b>	<b>Region</b>					
	Kunene	2.80	27.11 (1)	0.000 <sup>3</sup>	16.46	5.73-47.23
	<b>Sex</b>					
	Male	-0.44	1.30 (1)	0.254	0.64	0.29-1.37
	<b>Education</b>	-0.16	0.62(1)	0.428	0.84	0.56-1.27
	<b>Age</b>	-0.01	1.86 (1)	0.172	0.98	0.97-1.00
<b>Healthcare provider's drugs or equipment were inadequate</b>	<b>Socio-economic status</b>	2.60	3.68(1)	0.055	13.55	0.94-196-96
	<b>Activity limitation</b>	0.30	0.38 (1)	0.537	1.35	0.51-3.57
	<b>Region</b>					
<b>Cost of transport</b>	Kunene	0.56	2.60 (1)	0.107	1.76	0.88-3.53
	<b>Sex</b>					
	Male	-0.01	0.00 (1)	0.963	0.98	0.53-1.80
	<b>Education</b>	0.37	5.22(1)	0.022 <sup>1</sup>	1.44	1.05-1.98
	<b>Age</b>	0.01	3.17 (1)	0.075	1.01	0.99-1.03
	<b>Socio-economic status</b>	-3.60	9.82(1)	0.002 <sup>2</sup>	0.02	0.00-0.25
<b>Cost of transport</b>	<b>Activity limitation</b>	-.028	0.26 (1)	0.604	0.75	0.26-2.17
	<b>Region</b>					
<b>Cost of transport</b>	Kunene	-0.28	0.82 (1)	0.364	0.75	0.40-1.39
	<b>Sex</b>					
<b>Cost of transport</b>	Male	-0.11	0.18 (1)	0.668	0.89	0.52-1.50

<b>Education</b>	0.14	0.18(1)	0.328	1.15	0.86-1.53
<b>Age</b>	0.01	3.52(1)	0.061	1.02	0.99-1.02
<b>Socio-economic status</b>	-4.84	21.80(1)	0.000 <sup>3</sup>	0.00	0.01-0.06
<b>Activity limitation</b>	0.82	5.99 (1)	0.014 <sup>1</sup>	2.27	1.17-4.39

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<sup>1</sup>  $p < .05$                       <sup>2</sup>  $p < .01$                       <sup>3</sup>  $p < .001$

Table 19, displays the logistic regression of the six predictors on the following barriers to healthcare access: standard of the healthcare facility, healthcare provider’s drugs or equipment were inadequate and the cost of transport for PWD.

According to the prediction model for this barrier, “region” was correlated with the standard of the healthcare facility. With an odds ratio of 16.46, PWD from the Kunene region were 16.46 times more likely to be confronted with the problem of the standard of the healthcare facility being unacceptable as predicted by the model, if the other factors of the model were taken into account (Table 27). All the other predictors showed no significant correlation with the barrier.

With the barrier “healthcare provider’s drugs or equipment were inadequate”, the predictors education and socio-economic status (possessions scale) seemed be correlated with the barrier. The model predicted that an increase in educational level would increase the likelihood for the PWD to face a shortage of drugs and equipment. The odds ratio for socio-economic status was 0.02, which signifies that for every one-unit increase on the possession scale, the PWD was 0.02 less likely to experience this barrier. This means that for every one item more that they possessed they were 0.02 less likely to face this barrier (Table 27). All the other predictors showed no significant correlation with the barrier.

Table 19 above, indicates that socio-economic status is strongly correlated with the barrier “cost of transport”. This implies that a decrease in the possessions score (decline of socio-economic status) would most likely result in the cost of transport to the healthcare facility becoming a major problem for that PWD, as predicted by the model when all the other predictors had been taken care of. Activity limitation was also a significant predictor in the model. The odds ratio of 2.27 indicated that for one unit increase in the activity limitation score, the PWD was 2.27 times more likely to experience problems in paying for the transport to the healthcare facility if all other predictors have been controlled. The logistic regression model for the barrier “Cost of transport” thus predicts that (1) as socio-economic status declines (possession score decreases), and (2) as the activity limitation score increases, PWD are more likely to experience the barrier not having the funds to pay for transport in accessing healthcare, considering all other predictors in the model.

The only significant socio-demographic predictors in the logistic regression models on the six barriers that hamper access to healthcare were region, education, socio-economic status and activity limitation. The predictor “region” was significantly correlated with the barriers “no service available”, “negative attitude of providers” and “standard of health facility”. The model also showed that the demographic variable “education” significantly predicted the barriers “lack of transport” and “the provider’s drugs and equipment were not enough”. Low socio-economic status (poverty) was significant in predicting the barriers “lack of transport”, “cost of transport” and “the provider’s drugs and equipment were not enough”. Activity limitation as a predictor was significantly correlated to the barriers dealing with transport to the healthcare facility, namely, “lack of transport” and “cost of transport”.

Socio-economic status or poverty and region or locality were also the two socio-demographic variables that were significantly related to six and five barriers (respectively) in the preceding section's discussion on the bivariate analysis that dealt with the impact of the barriers on healthcare seeking behaviour of the PWD.

Results as indicated are clearly in line with results from the Tenkorang's (2016) study that stated that Ghanaian men and women are mostly dissatisfied when accessing the healthcare facility with accessibility, conditions of the healthcare facility and availability of the staff ( p 165).

### **5.7**    **Using the predictors for non-PWD**

This discussion focuses on the barriers and predictors for non-PWD using multivariate logistic regression analysis.

Table 20

*Logistic regression of lack of transport to health facility, no services available and negative attitude among healthcare workers with socio-economic demographic variables of region, sex, education, age, socio-economic status and activity limitation for Non-PWD.*

<b>Barrier</b>	<b>Predictor</b>	<b>Coefficient</b>	<b>Wald <math>\chi^2</math> (df)</b>	<b><i>p</i></b>	<b>Odds ratio</b>	<b>95% CI</b>
<b>Lack of transport</b>	<b>Region</b>					
	Kunene	-0.38	0.20 (1)	0.650	0.67	0.12-3.62
	<b>Sex</b>					
	Male	-0.52	1.21 (1)	0.271	0.59	0.23-1.50
	<b>Education</b>	-0.54	3.67(1)	0.271	0.58	0.33-1.01
	<b>Age</b>	0.01	0.41(1)	0.522	1.01	0.97-1.04
	<b>Socio-economic status</b>	-7.71	17.72(1)	0.000 <sup>1</sup>	0.00	0.00-0.01
<b>Activity limitation</b>	-5.41	0.09 (1)	0.926	0.58	0.00-56031.71	
<b>No service available</b>	<b>Region</b>					
	Kunene	-16.76	0.00 (1)	0.999	0.00	0.00
	<b>Sex</b>					
	Male	-0.68	0.27 (1)	0.599	0.50	0.40-6.38
	<b>Education</b>	0.61	0.71(1)	0.397	1.85	0.44-7.714
	<b>Age</b>	0.03	0.61(1)	0.432	1.03	0.94-1.14
	<b>Socio-economic status</b>	-5.50	1.97(1)	0.160	0.00	0.00-8.76
<b>Activity limitation</b>	-94.15	0.00 (1)	0.999	0.00	0.00-	
<b>Negative attitude among healthcare workers</b>	<b>Region</b>					
	Kunene	-15.54	0.00 (1)	0.999	0.00	0.00
	<b>Sex</b>					
Male	-17.23	0.00 (1)	0.996	0.00	0.00	

<b>Education</b>	1.08	1.92(1)	0.165	2.96	0.64-13.69
<b>Age</b>	0.03	0.34(1)	0.560	1.03	0.92-1.16
<b>Socio-economic status</b>	-6.44	2.44(1)	0.118	0.02	0.00-5.16
<b>Activity limitation</b>	-91.52	0.00 (1)	0.999	0.00	0.00-

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<sup>1</sup>  $p < .001$

Table 20, presents the logistic regression of the predictors region, sex, education, age, socio-economic status and activity limitation on the barriers of lack of transport, no services available and negative attitude among healthcare workers for Non-PWD only.

“Possessions” as one of the predictors in the model showed a significant correlation with the barrier “lack of transport”. Non-PWD who were poorer were therefore more likely to face this barrier when accessing healthcare (Table 28).

As shown by the prediction model (Table 20), the predictors did not seem to have an effect on the barriers “no service available” and “negative attitude of providers” for Non-PWD.

Table 21

*Logistic regression of the barriers: standard of healthcare facility, healthcare provider's drugs or equipment were inadequate and cost of transport with socio-demographic variables of region sex, age, education, possessions and activity limitation for Non-PWD.*

<b>Barrier</b>	<b>Predictor</b>	<b>Coefficient</b>	<b>Wald <math>\chi^2</math> (df)</b>	<b><i>p</i></b>	<b>Odds ratio</b>	<b>95% CI</b>
<b>Standard of healthcare facility</b>	<b>Region</b>					
	Kunene	3.01	7.21 (1)	0.007 <sup>2</sup>	20.44	2.26-184.79
	<b>Sex</b>					
	Male	0.21	0.42 (1)	0.839	1.23	0.16-9.31
	<b>Education</b>	-0.78	1.68(1)	0.197	0.45	0.14-1.49
	<b>Age</b>	-0.00	0.09(1)	0.765	0.99	0.93-1.05
	<b>Socio-economic status</b>	-2.36	0.52(1)	0.468	0.09	0.00-56.35
<b>Activity limitation</b>	-92.26	0.00 (1)	0.999	0.00	0.00-	
<b>Healthcare provider's drugs or equipment were inadequate</b>	<b>Region</b>					
	Kunene	-19.80	0.00 (1)	0.998	0.00	0.00
	<b>Sex</b>					
	Male	-0.34	0.36 (1)	0.8548	0.70	0.23-2.18
	<b>Education</b>	-0.04	0.01(1)	0.985	0.95	0.48-1.87
	<b>Age</b>	-0.13	10.07(1)	0.002 <sup>2</sup>	0.87	0.79-0.94
	<b>Socio-economic status</b>	-3.67	4.37(1)	0.037 <sup>1</sup>	0.25	0.00-0.79
<b>Activity limitation</b>	-99.26	0.00 (1)	0.998	0.00	0.00-	
<b>Cost of transport</b>	<b>Region</b>					
	Kunene	1.13	1.56 (1)	0.210	3.11	0.52-18.47
	<b>Sex</b>					
	Male	-0.55	1.07 (1)	0.299	0.57	0.20-1.63

<b>Education</b>	0.13	0.19(1)	0.659	1.14	0.63-2.04
<b>Age</b>	-0.08	7.18(1)	0.007 <sup>2</sup>	0.91	0.01-0.97
<b>Socio-economic status</b>	-3.54	4.78(1)	0.029 <sup>1</sup>	0.02	0.00-0.79
<b>Activity limitation</b>	-98.88	0.00 (1)	0.999	0.00	0.00-

<sup>1</sup>  $p < .05$

<sup>2</sup>  $p < .01$

Table 21, displays the logistic regression results of the six predictors on the following barriers to healthcare access: standard of the healthcare facility, healthcare provider’s drugs or equipment were inadequate and the cost of transport for Non-PWD.

Region shown an influence on “standard of health facility”, while education also have a significant p-value but are having quit a wide confidence interval. All the other socio-demographic predictors do not show an influence on “standard of health facility” for Non-PWD (Table 21).

The predictor age showed the strongest correlation with the barrier “healthcare provider’s drugs or equipment were inadequate”. The odds ratio of 0.87 indicated that younger non-PWD were more likely to have a problem with the barrier of a provider’s insufficient drugs or equipment than older people (Table 28). The correlation of socio-economic status with the barrier was also significant with an odds ratio of 0.25. This result implied that as socio-economic status decreases, the likelihood that a Non-PWD experiences this barrier would increase.

Age and socio-economic status both showed a significant correlation with “Cost of transport”. In the case of the age with an odds ratio of 0.92, the result predicted that younger Non-PWD were more likely to have problems in paying for the transport costs to the facility than older people. Likewise, the model predicted that a decrease in

socio-economic status ( $OR = 0.02$ ) will in all likelihood make it more difficult for Non-PWD to be able to pay for their transport costs (Table 29).

The logistic regression analysis models clearly indicate that for Non-PWD the only predictors that were significantly correlated with one or more of the barriers to healthcare access were age, region and socio-economic status.

## **5.7 Summary**

The null hypothesis states that PWD and Non-PWD access healthcare in the same way (barriers are experienced in the same way). The alternative hypothesis states that PWD have ‘worse’ access (barriers are experienced differently for PWD and Non-PWD in that PWD experience barriers to a greater extent, and thus have greater problems in accessing health care than Non-PWD). What the findings on barriers clearly indicate is that, in comparing these two groups, difference with regard to the barriers occurred. In terms of region for PWD, all barriers significantly have an impact on them. No service available, negative attitude among healthcare workers and cost of transport show significant differences with age. Education, has an impact on the barriers “lack of transport”, “no service available”, “negative attitude” and “cost of transport” on PWD. SES influence almost all the barriers except “standard of the healthcare facility” for PWD. All mostly influenced “lack of transport” and “cost of transport”. In terms of significant testing for both PWD and Non-PWD, who said “yes” on the demographic variables, most of the barriers in terms of region have an influence except “standard of the healthcare facility” and “cost of transport”. Age influences “lack of transport”, “inadequate drugs” and “cost of transport” only. SES has an influence on “inadequate drugs” and “cost of transport”. Findings are further supported by Gallagher, O’Donovan, Doyle and Desmond (2011), Hammel, et al.,

(2015), Randström, Asplund and Svedlund (2012), who aver that environmental barriers, activity limitation and participation restriction play a role in people/s participation and in their community settings.

Furthermore, in comparing PWD with Non-PWD in terms of the influence of the barriers using the predictors, it was primarily to investigate, in terms of equitable access to healthcare, which of these barriers with their predictors, play a major role in accessing healthcare. The subsequent argument for doing this analysis was to conceptualise an integrated model of disability that could potentially address equitable access to health care for vulnerable groups in the Khomas and Kunene regions. The next chapter (6) will therefore introduce the third part of the conceptual model looking at context and system variables of equitable access to health care.

## CHAPTER 6

### CONTEXTUAL FACTORS AND PERCEIVED BARRIERS IN ACCESSING HEALTH CARE

#### 6.1 Introduction

This chapter addresses research objective 3 of the study namely, “*to identify the contextual factors (such as the context that people are living in) in accessing health care by people with and without disabilities*”. The focus will be on the contextual factors by looking at how respondents access healthcare and what can be regarded as their level of satisfaction when seeking healthcare. Respondents were asked “Considering your own expectation, tell me whether the following makes it difficult for you to get healthcare”. Possible answers were (1) yes (2) no. It was against this background, that this dissertation set out to investigate whether or not there was a difference in accessing healthcare between people with disabilities and those who did not have disabilities. Furthermore, the analysis regarding the perception of PWD and Non-PWD with respect to the identified barriers regarding the provision in getting healthcare includes descriptive statistics supported by significance testing of differences between the two groups.

#### 6.1 Differences in obtaining healthcare between PWD and Non-PWD

Crisp (2002), argues that people with disabilities are called upon to negotiate and resolve tensions both between themselves and with the society in which they are living. In most cases, these tensions are a result of competing with and among themselves as individuals, of their social and biomedical perceptions of impairment, or of their disability and/or handicap (p 20). It could be claimed that when seeking healthcare those with a disability ultimately resolve these tensions. This section will

examine the experiences of both PWD and Non PWD in obtaining health care, and how activity limitation impact on this while at the same time taking into consideration the possible confounding variables, region, sex and socio-economic status.

### 6.2.1 Healthcare provision by type of disability

Table 22

*Percentage of respondents with access to health care by disability status.*

<b>Attributes</b>	<b>PWD</b>	<b>Non-PWD</b>	<b>Total</b>
Yes	97.2 (561)	99.1 (40)	97.9 (901)
No	2.8 (16)	0.9 (3)	2.1 (19)
<b>N</b>	<b>577</b>	<b>343</b>	<b>920</b>

*Note: Number in brackets refers to total count*

Respondents were asked to indicate whether “The last time you needed healthcare, did you get healthcare?” Table 22, shows that the majority of respondents from both groups (PWD and non-PWD) received health care when accessing a facility. This clearly indicates, as previously noted, that healthcare was accessible. However, significantly less PWD got health care than Non-PWD (Chi-square test,  $p = .05$ ). Investigating the reason for this difference poses the question whether the socio-demographic characteristics region, sex and socio-economic status of the respondent could account for this difference.

Table 23

*A bivariate analysis of Got Health care among PWD and Non-PWD by region, sex and socio-economic status.*

Demographic variable	PWD		Non-PWD	
	Got healthcare	Did not get healthcare	Got healthcare	Did not get healthcare
	Yes (%)	No (%)	Yes (%)	No (%)
<b>Region</b>				
Khomas	98.0	2.0	99.1	0.9
Kunene	95.4	4.6	100	0.0
$\chi^2=p$	0.096		1.00	
<b>Sex</b>				
Male	96.7	3.3	100.0	0.0
Female	97.6	2.4	98.5	1.5
$\chi^2=p$	0.524		0.266	
<b>Socio-economic status</b>				
$t$ -test $p$ value	0.283 (0.19)	0.295 (0.25)	0.366 (0.19)	0.321 (0.19.6)
$t$ -test $p$ value	0.858		0.687	
<b><math>N</math></b>	<b>579</b>		<b>326</b>	

*Note: Mean values with standard deviation in brackets. Percentages apply to categorical variables only*

According to Table 23, a slightly higher percentage of PWD from Kunene region (4.6%) did not get healthcare as opposed to those from Khomas region (2.0%), while more males (3.3%) than females (2.4%) were not helped when in need of healthcare. However, these differences were not significant according to the results of Fischer's Exact test conducted. Although the mean of the possession scale for PWD who got care was slightly lower (0.283) as opposed to those who did not (0.295), an independent samples  $t$ -test that was performed established that this difference was insignificant, which suggests that socio-economic status did not prevent PWD from getting healthcare.

Comparing the position of non-PWD in getting healthcare, the same results as shown for PWD apply in that no significant differences between the demographic characteristics and getting healthcare were confirmed. Even though all male non-PWD from Kunene region had access to health care as opposed to female Non-PWD from Kunene region, this difference was not significant according to the Fisher's Exact test results. Slight differences in the possession scale means were observed between the two groups, however, the results of the *t*-test for equality of means reported these differences as insignificant. This result shows that socio-economic status did not have an effect on a non-PWD access to healthcare.

However, it should be noted, that amongst all respondents, those who did not get healthcare had a significantly higher barrier score ( $M = 1.69, SD = 0.49$ ) than those who had been assisted well, the last time they needed healthcare ( $M = 1.35, SD = 0.40$ ). This result implies that barriers to healthcare access, and not demographic differences, might be the contextual factors that hinders PWD and Non-PWD ability to get healthcare.

From the above discussion it can be concluded that healthcare was accessible to all since almost all (97.9%) of the respondents got healthcare when needed. Concerning disability status, significantly less PWD had access to health care compared to Non-PWD. In investigating the reason for this differences in terms of socio-demographic characteristics of PWD and Non-PWD revealed that sex, region and socio-economic status did not have an effect on getting health care.

### **6.3 Satisfaction of health care**

As argued by LaVela and Gallan (2014) measurement of a patient's experiences becomes important as it provides an opportunity on how to improve care

and the utilisation of the facility (p 29). In the context of this dissertation, satisfaction is regarded as a system variable because it reports the perception of the respondents as a contribution on receiving equitable/inequitable healthcare. The scale for the rating of satisfaction with provision of healthcare ranged from 1 = 'very satisfied' to 5 = 'very dissatisfied'. For subsequent analysis, the variable was recoded into the following categories. 'Very satisfied' and 'satisfied' were coded as 'satisfied'. 'Neither satisfied nor dissatisfied' 'dissatisfied' and 'very dissatisfied' were coded as 'dissatisfied'. The presentation will first show the empirical results of all the attributes, followed by the results with the recoded variables. The discussion will conclude with some qualitative data showing how environmental barriers contribute to dissatisfaction among PWD.

Table 24, records the satisfaction levels of the respondents. The hypotheses formulated for this section assumed either that there was satisfaction among both PWD and non-PWD with the health care received, or that neither PWD nor non-PWD were satisfied.

Table 24

*Satisfaction with healthcare as expressed by PWD and Non-PWD.*

	<b>PWD</b>		<b>Non-PWD</b>	
	<i>N</i>	%	<i>N</i>	%
<b>Attributes</b>				
Very satisfied	71	12.3	53	15.4
Satisfied	308	53.4	210	61.0
Neither satisfied nor dissatisfied	135	23.4	72	20.9
Dissatisfied	43	7.5	8	2.3
Very dissatisfied	20	3.5	1	0.3
<b><i>N</i></b>	<b>577</b>		<b>344</b>	

Table 24, shows that (53.4%) of PWD were satisfied with healthcare services as delivered to them. A significant number of PWD, on the other hand, were not satisfied with the delivery of healthcare services to them. Non-PWD were mostly satisfied with the delivery of healthcare services to them. To confirm these findings, a Chis-square test was conducted that verified that overall, PWD were less content.

Consequently, it can be concluded that there is a level of dissatisfaction, especially from the side of PWD when visiting a health facility and the need arises to investigate the level of dissatisfaction. The investigation into the level of dissatisfaction with healthcare provision will first look at the level of satisfaction within the context of the six domains of activity limitation. The focus will then shift to the contextual barriers within and outside the healthcare system that could have had an influence on the level of satisfaction of PWD and Non-PWD.

### 6.3.1 Satisfaction of health care by activity limitation

This section will highlight activity limitation as part of the conceptual framework of the study on the basis of satisfaction with healthcare for both PWD and Non-PWD.

Table 25

*Level of satisfaction with the provision of healthcare by activity limitation for PWD (percentage distribution).*

Domain	Level of satisfaction		
	Satisfied	Dissatisfied	$\chi^2 p$ value
Seeing	69.1	30.9	$p = .836$
Hearing	65.3	34.7	$p = .195$
Walking	67.3	32.7	$p = .005$
Remembering	69.2	30.8	$p = .596$

Self-care	70.0	30.0	$p = .951$
Communication	60.8	39.2	$p = .025$

Table 25, shows a general satisfaction with the level of healthcare among PWD in that about two thirds over all activity domains were happy with the services. In the context of activity limitation, the table indicates that there were various levels of satisfaction among PWD. In the domain of seeing, the chi-square results indicate no significant difference between the satisfaction levels of PWD, meaning they were well catered for in this domain when accessing a healthcare facility. The same trend was observed in the domains of hearing, remembering and self-care. Dissatisfaction with accessing healthcare was mostly felt in the domains of walking and communication.

The domain of walking entails being able to move oneself unassisted from point A to point B. Of those PWD who had difficulties in moving unassisted, (32.7%) were dissatisfied with the provider’s healthcare. The results supported the view of Iezzoni, Davis, Soukup and O’day (2002), that dissatisfaction with difficulty of access to a health facility can present a vexing challenge to someone in need of care (p 379). Communication entails that a person should be able to exchange information through the use of a language (Washington Group on Disability Statistics, 2009). Dissatisfaction with healthcare in the domain of communication was 39.2%.

### **6.3.2 Rating of experiences with healthcare provider**

Edwards, Staniszweska, and Crichton (2004) maintain that these responses are based on the unequal relationship between a healthcare worker and a patient. They argue that often patients have questions but feel that they may be judged

and found wanting, and this can inhibit queries or comments (Edwards et al., 2004, p. 169). This means that satisfaction in healthcare cannot be measured exactly.

Table 26

*Relationship between personal factors, barriers and dissatisfaction with healthcare provision among PWD and Non-PWD.*

	<b>PWD</b>	<b>Non-PWD</b>	<b>Total</b>
<b>Region</b>			
Khomas	30.2	23.3	27.1
Kunene	43.9	27.8	42.4
<b>Sex</b>			
Male	35.3	26.4	31.9
Female	34.0	21.9	29.5
<b>Age</b>	42.3(21.2)	27.4 (11.2)	38.0 (20.0)
<b>Education</b>			
No formal education	39.5	29.4	38.5
Less than primary	38.5	28.8	35.6
Completed primary	32.1	20.6	26.4
Secondary education	24.6	19.5	21.7
Tertiary education	16.1	40.9	26.4
<b>Socio-economic status</b>	.27 (.18)	.34 (.16)	.29 (.18)
<b>Barrier scale</b>	1.61 (.048)	1.42 (0.44)	1.55 (0.47)

*Note: Figures in the table refer to percentages for categorical variables and mean values with standard deviation in brackets for continuous variables. Note: Regional ( $p < .01$ ) and educational ( $p = .033$ ) differences between satisfied and dissatisfied PWD were significant. For both PWD and Non-PWD barrier scale differences were significant ( $p < .001$ ) with those dissatisfied experiencing more barriers.*

Table 26, illustrates that, although there was variation, no significant difference in sex, age, socio-economic status (possessions) was established among those PWD satisfied and dissatisfied with healthcare provision in general. PWD from Kunene region were significantly more dissatisfied than those from Khomas region. Dissatisfaction with health provision decreased significantly with a rise in educational level among PWD. The number of barriers experienced had a profound effect on the

satisfaction level with health provision: as the barrier level increased, the level of satisfaction declined, meaning that PWD who experienced more barriers were more dissatisfied with the provision of healthcare services than PWD whose barrier level was lower.

Results for Non-PWD follow a similar trend in that, despite differences in the proportions in region, sex, age, education and socio-economic status (possessions) among those satisfied and dissatisfied with health provision in general, these differences were not significant. The barrier level had a strong relationship with satisfaction with health services, the same trend as among PWD: Non-PWDs who experienced more barriers were more dissatisfied with the provision of healthcare services than Non-PWDs whose barrier level was lower (experienced less barrier).

What the results show is that the main ‘driver’ of satisfaction on a personal level is the number of barriers experienced: the lower the number, the higher the satisfaction. Therefore, for equitable access to healthcare the need arises to improve or remove the barriers and the level of satisfaction might be higher especially for PWD.

Having highlighted the issues of healthcare and satisfaction with healthcare provision, leads to the question of ‘what influence’ do the contextual barriers have on the level of satisfaction for PWD and Non-PWD towards accessing healthcare. This dissertation drew on its empirical findings by discussing the notion of barriers in the context of healthcare service delivery and structural environmental barriers. Under healthcare service delivery barriers, the focus was on respect (being treated respectfully by healthcare providers), confidentiality (being able to talk privately with healthcare providers), communication (how clearly things were explained by the provider) and autonomy (respect for the right to make informed choices). Under structural environmental barriers the focus was on waiting time until

being served, availability of drugs and equipment, well maintained facilities, transportation to the healthcare facility, road infrastructure (condition of road and terrain) and cost of transport to the healthcare facility. Iezzoni et al. (2002) argue that regardless of your functional limitations each of these carries a logistic implication that might have an influence on the level of satisfaction. The mentioned authors used the SAS-callable SUDAAN version to show the relationship between disability and disability conditions. This dissertation continues to highlight the level of satisfaction/dissatisfaction with health care provision using the contextual barriers described.

#### **6.4 Contextual factors affecting satisfaction to health care**

The focus of this section is on the contextual barriers within and outside the health system that could have had an influence on the level of satisfaction of PWD and Non-PWD. Table 27, presents the contextual factors that the respondents perceived as being problematic against their expressed level of satisfaction with healthcare.

Table 27

*Relationship between contextual factors and satisfaction with healthcare provision among PWD (percentage distribution).*

Contextual factors		Satisfaction with healthcare provision		
		Satisfied	Dissatisfied	$\chi^2$ p value
<b>Experience with healthcare providers</b>				
Respect	No problem	76.1	23.9	p <.001
	Problem	38.0	62.0	
Confidentiality	No problem	70.7	29.3	p <.001
	Problem	29.0	71.0	
Communication	No problem	71.7	28.3	p <.001
	Problem	19.4	80.6	
Autonomy	No problem	71.8	28.2	p <.001
	Problem	23.3	76.7	
<b>Service delivery</b>				
Waiting time	No problem	76.0	24.0	p <.001
	Problem	60.2	39.8	
Availability of drugs and equipment	No problem	63.2	36.8	p <.001
	Problem	86.9	13.1	
Well maintained facilities	No problem	74.3	25.7	p <.001
	Problem	47.3	52.7	
<b>Location</b>				
Transportation	No problem	67.4	32.6	Not significant
	Problem	61.7	38.3	
Road infrastructure	No problem	63.4	36.6	Not significant
	Problem	69.2	30.8	
Cost of transport	No problem	65.9	34.1	p <.001
	Problem	57.1	42.9	

As indicated in Table 27, in terms of the experience with healthcare providers, (62.0%) of PWD reported that they were dissatisfied with service delivery because they were not treated with respect at the healthcare facility while (76.1%) were satisfied and were happy with the treatment received. However, (38.0%) of PWD were satisfied even though they were not treated with respect. This observation, that a larger proportion of PWD perceived lack of respect by healthcare providers as a barrier in accessing healthcare services and also expressed their dissatisfaction with healthcare provision in general, leads to the conclusion that this contextual factor might have had a significantly negative influence on the level of satisfaction of the PWD. This finding is supported by Ali et al. (2013) who report that patients with intellectual disability face impolite and unfriendliness towards them when visiting the healthcare facility. They postulate that PWD are exposed to be spoken to in an abrupt manner, staff appearing unwelcoming and using insulting language (p 7).

With regard to confidentiality (71.0%) of PWD were not happy with service delivery because they had not been afforded the opportunity to talk privately with the healthcare providers while a slightly lower proportion (70.7%) indicated that they were satisfied with the services offered at the healthcare facility as they had not experienced any problems with privacy. From this it can be deduced that significantly more PWD were dissatisfied and considered lack of confidentiality as a barrier, which might have influenced their level of dissatisfaction with healthcare services in general.

The same findings as observed for “confidentially” also applies to the contextual factor “communication” in that a significantly greater proportion of PWD (80.6%) reported that communication with healthcare providers was a problem for them while at the same time expressing dissatisfaction with the provision of services; than those who were happy with healthcare provision and said things were clearly

explained to them by the provider (71.7%). This finding infers that significantly more PWD perceived the lack of communication as a problem in access to healthcare which might have negatively affected their level of dissatisfaction with healthcare services in general.

The results for “Autonomy” as a contextual factor that might have played a role in PWD access to the healthcare facility was also significantly associated with the level of satisfaction of PWD with provider’s services. Dissatisfied PWD who felt that their right to make informed choices had not been respected (76.7%) significantly outnumbered those satisfied PWD that had not encountered that problem (71.8%).

The findings on these four contextual factors that are related to the perceived experiences with healthcare providers, lead to the conclusion that lack of respect, confidentiality, communication, and autonomy constitute contextual barriers that need to be addressed in order to raise the level of satisfaction of PWD with healthcare service provision and the utilisation of those services. Ali (2013) in using eight themes identified that there was discrimination and unfair treatment towards people with disability and those who care for them. This is in line with the current findings on health provider’s attitude towards PWD.

The three contextual factors of “service delivery”, namely, waiting time, availability of drugs and equipment and well-maintained facility, also showed significance with respect to the relationship between these factors and the level of satisfaction with healthcare provision of PWD. However, the “direction” of this relationship was reversed for all the three. Here the proportion of PWD (who were both satisfied with the provision of healthcare services and did not consider any of the service delivery factors as being problematic) was significantly larger than the

proportion of PWD (not satisfied and who perceived these contextual factors to be a problem when visiting the health facility). This implies that waiting time, availability of drugs and the standard of the healthcare facility do not seem to influence the PWD level of satisfaction with the provision healthcare services. However, this does not mean that these service delivery factors need not be attended to and improved by the providers as a substantial number of the PWD experience these as barriers when accessing health care.

The same argument applies to the contextual factor related to location that addresses the problem of cost of transport to the healthcare facility which was significantly associated with level of satisfaction of PWD. Even if the number of PWD, who considered both the cost of transport and the provision of healthcare as problematic and unsatisfactory, were in the minority, the author identified cost of transport as a barrier that impacted significantly on the lives of PWD (see Chapter 5).

The other two contextual factors related to location, namely, transportation to the healthcare facility and road infrastructure, did not seem to play a significant role as determinants of satisfaction with service provision.

Table 27, further indicates that PWD experience structural and personal/cultural barriers as indicted by the significant results. This finding is in line with Drainoni et al. (2006) who state that PWD make special types of demands when accessing a healthcare facility due to the fact that their healthcare needs are often more complex than those of the ordinary population (p. 102).

Table 28, indicates whether the contextual factors play a significant role as determinants or drivers of satisfaction for the Non-PWD,

Table 28

*Relationship between contextual factors and satisfaction with healthcare provision among non-PWD (percentage distribution).*

Contextual factors		Satisfaction with healthcare provision		
		Satisfied	Dissatisfied	$\chi^2$ p value
<b>Experience with healthcare providers</b>				
Respect	No problem	80.5	19.5	$p < .001$
	Problem	52.9	47.1	
Confidentiality	No problem	80.3	19.7	$p < .001$
	Problem	41.2	58.8	
Communication	No problem	81.1	18.9	$p < .001$
	Problem	38.9	61.1	
Autonomy	No problem	78.8	21.2	$p < .01$
	Problem	53.1	46.9	
<b>Service delivery</b>				
Waiting time	No problem	81.0	19.0	$p = .047$
	Problem	72.8	27.2	
Availability of drugs and equipment	No problem	75.2	24.8	$p = .012$
	Problem	100.0	.0	
Well maintained facilities	No problem	80.2	19.8	$p < .01$
	Problem	66.7	33.3	
<b>Location</b>				
Transportation	No problem	73.8	26.2	$p = .043$
	Problem	84.8	15.2	
Road infrastructure	No problem	76.7	23.3	Not significant
	Problem	75.2	24.8	
Cost of transport	No problem	76.2	23.8	Not significant
	Problem	100.0	.0	

Significantly more Non-PWD said that the four contextual factors that are related to the perceived experiences with healthcare providers and the level of satisfaction with healthcare provision in general, followed the same trend as was observed for Non-PWD. This also applied to the service delivery contextual factors,

The major difference between the findings of PWD and those for Non-PWD was related to the transportation group of contextual factors. An interesting observation was that cost of transport was not considered as a significant barrier or determinant of satisfaction as was the case with PWD. All Non-PWD who perceived this factor as a problem, were satisfied with healthcare service provision in general. It might be that socio-economic status (possessions) has a confounding effect on the relationship between cost of transport and satisfaction.

Transportation (to the healthcare facility), which PWD reported as having no significant influence on their level of satisfaction, was considered by Non-PWD to be a significant contextual factor. The results for transportation as a contextual factor that might have affected Non-PWD's level of satisfaction with provider's services follow the "inverse" trend. The proportion of Non-PWD who felt that transportation was inadequate and were also not satisfied with healthcare provision (15.2%) was significantly less than those satisfied Non-PWD that had not encountered that problem (73.8%).

In terms of Non-PWD, Table 44 also indicate that the contextual factors such as respect, confidentiality, communication and autonomy were not a problem and were generally satisfied with the services provision and that non-PWD considered it a problem (barrier) and were also dissatisfied with healthcare provision in general. Hjortsberg & Mwikisa (2002), in the context of Zambia and in terms of access, argue that with regard to equality of access, people experience inequalities especially if they

are from a rural area, and have to travel a distance to the facility. Therefore, it can be argued that the same notion of inequalities applies to people that are not having any form of disability but are confronted with the mentioned factors such as respect, confidentiality, communication and autonomy.

## **6.5 Summary**

Overall, the above discussion shows that PWD reported a satisfaction level with healthcare provision in the contextual factors of the ICF model, as presented by the component of 'environmental factors'. A closer look, however, reveal some negative assumptions and stereotypical attitudes towards PWD by the healthcare providers. Such behaviour can lead to sub-optimal treatment, which may in turn create a sense of resentment by PWD towards healthcare providers.

Although Non-PWD considered these contextual factors as barriers (problems), this did not seem to have a significantly negative effect on their level of satisfaction with health care provision in general. This implies that Non-PWD were overall satisfied with healthcare provision in general even though these contextual factors hampered their access to health care to some degree. As such, these contextual factors, where experienced as barriers, need to be remedied to increase effective and satisfactory utilisation of services.

The contextual factor "Transportation" differed from PWD where it did not show an effect on the level of satisfaction.

"Cost of transport" did not significantly affect level of satisfaction (as opposed to PWD); perhaps socio-economic status (possessions) has a confounding effect on the relationship between cost of transport and satisfaction as it was established that Non-PWD are better off in terms of possessions (socio-economic status) the PWD.

Figure 16 explains some of these behaviours of PWD in the form of a three-node structure (idea developed by Duggan, Albright, & Lequerica, 2008). A content analysis was applied using ATLAS Ti to generate some explanations of the respondents' levels of 'dissatisfaction' from the qualitative data.

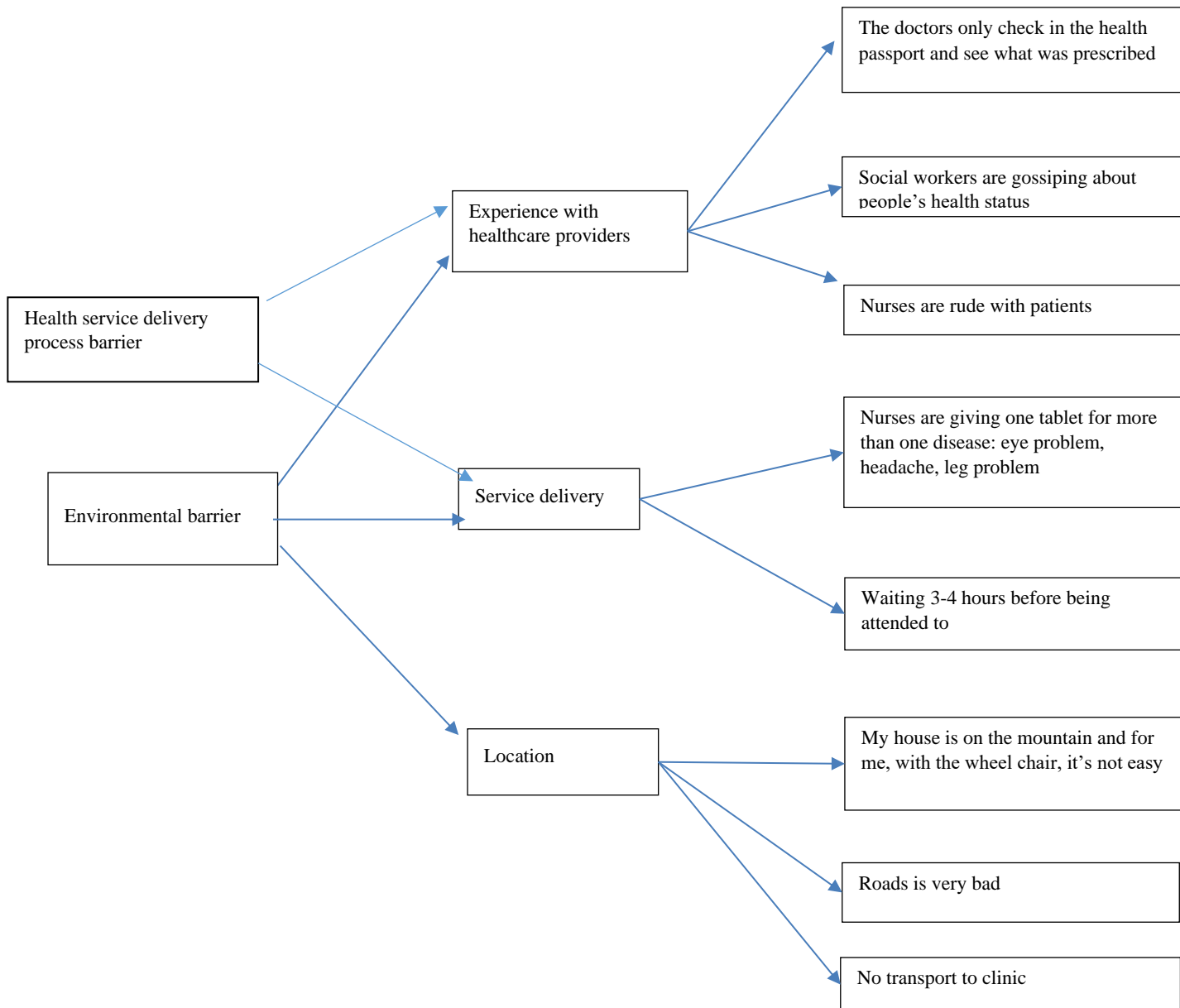


Figure 8: A Three-node structure illustrating the disability narratives of PWD.

Figure 16, shows that PWD were dissatisfied with the environmental factors in healthcare. Firstly, they felt that the healthcare providers had an uncaring attitude. Secondly, they were subjected to a service in which there were no drugs for their particular illnesses. Thirdly, they encountered a harsh environment, which also played a role in their low level of satisfaction with the healthcare provision.

The results of the discussion on the contextual factors clearly show that modifiable interventions are needed, which is in line with the findings of Frimpong (2013), Meade, Mahmoudi and Lee (2014). Having presented a discussion on the contextual factors as part of our theoretical model in answering objective 3 of the dissertation, the next chapter, in support of our analysis, will report on the qualitative findings that clearly spelt out the factors that influence equitable access to healthcare.

## CHAPTER 7

### EQUITABLE ACCESS TO HEALTHCARE: QUALITATIVE ANALYSIS FROM A PEOPLE'S PERSPECTIVE

#### 7.1 Introduction

The chapter will focus on the fourth research objective “*to understand the healthcare seeking behaviour and attitudes towards health and healthcare services by individuals*”. The discussion will be based on the qualitative inquiry that portrayed the perspectives of the participants with respect to their understanding of health and disability; their perceived access to health services and their view of the quality, availability and acceptability of these. The qualitative analysis was grounded in the participants’ perceptions and understandings of these core themes and guided by the EquitAble conceptual model. Moreover, the qualitative findings reported here serve to illustrate the findings of the quantitative study discussed in the previous chapters.

#### **7.1 Responses of qualitative data in support of equitable access to healthcare**

In coding the data in Atlas Ti as discussed earlier, the following themes emerged as shown in Table 29. Under each major theme, codes that emerged from the reading and coding of the transcripts formed the second level of analysis while the sub-codes (in italics), provide a detailed analysis under each code.

Table 29

*Themes and codes from qualitative data.*

Themes	Meanings and understanding	Social context	Access to healthcare	Quality of health services
Codes	<b>Equitable healthcare</b>	<b>Individual</b>	<b>Facilitators &amp; barriers to access</b>	<b>Quality of healthcare</b>
Sub-codes	<i>Equal access/ unequal access</i>	<i>Health and healthcare-seeking behaviour</i>	<i>Transport to and from the facility</i>	
	<i>Equal treatment/ unequal treatment</i>	<i>Household</i>	<i>Physical access at facility</i>	<i>Availability</i>
	<i>Disability</i>	<i>Community factors</i>	<i>Health information</i>	<i>Acceptability</i>
		<i>National</i>	<i>Geography/ environment/distance</i>	
			<i>Language</i>	
			<i>Safety</i>	
			<i>Cultural</i>	
			<i>Attitude at facility</i>	
			<i>Cost</i>	

## 7.2 Meanings and understandings

This theme refers to cognitive views such as knowledge, perceptions, and attitudes. It could also include prejudice and stigma, aetiology (cause or origin of disability/illness/vulnerability). It can also be understood as an opinion that the health of an individual is a construct between society and the environment. How a person accesses healthcare is determined by how the society, in which that person lives, is structured ([www.academia.edu/337281/understanding\\_health](http://www.academia.edu/337281/understanding_health)). Therefore, to understand equitable access it is important to know what interpretations and meanings healthcare users attach to words related to health, such as equitable healthcare,

disability and vulnerability. It is also important to determine what prompts users to actually decide to use healthcare services. When providers are aware of users' views of such care, they will be better able to satisfy their needs. Results reported by respondents will be in line with the vulnerable groups as identified in Table 6, p. 112.

### ***7.2.1 Equitable healthcare***

Equitable care as indicated earlier refers to those health services that are meeting the needs of the people it serves and are measured by the indicators such as availability, acceptability, affordability and quality (Swartz, 2011, p. 20). In all the sites that were visited, accessing healthcare was not considered as a major problem. Only in one site (Kunene region) respondents mentioned some "difficulties to access health care without caretaker".

### ***7.2.2 Equal access/Unequal access***

The majority of the respondents across all the sites said that there were no major factors hindering them from getting healthcare. Some even felt that they had equal access to healthcare facilities. (Female healthcare service user, living away from services, Okangwati): *Yes, I do use it like all the other people in my family or community. Because I know that is where I can come get help.*

Despite this, many others felt that there was no equitable access to healthcare for all in the communities. Those with severe disabilities in particular complained of unequal access. Female healthcare service user living away from services, Etanga: *No, I am not using it that much, because I am staying very far from the clinic. If I am sick then I am staying home for a long time with that sickness, because I am not near to the clinic.* What emerged from the views of the participants is that there were problems in accessing healthcare. The author supports Saurman

(2016) who states that access in all likelihood becomes a problem especially for those that are situated in a rural area, in that they might experience a host of socio-economic disadvantages, being dispersed and having to cope with shortages of workforce (p. 36).

### **7.2.3 Equal treatment/Unequal treatment**

Many participants said that they were receiving equal treatment in healthcare facilities. They reported that the treatment was more or less the same for everybody, regardless of status. A male healthcare service user, with legs disabled through an accident in Katutura had this to say: *Some people are rich and most of us are poor, but I think that the treatment is equal and same here at the clinic.* Only a few complained of unequal treatment at healthcare facilities: A female healthcare service user disabled from polio in Katutura said people were: *Not treated equally as everyone else, no respect, even here at the centre.* With regard to equal/unequal treatment a clear distinction was observed among participants. This might be due to the observation that people with different activity limitations report treatment differently, but, as argued by Mactaggart, et al. (2016), when using a self-reported functional limitation there might arise difference in how treatment is received.

### **7.2.4 Disability**

The results indicated that in most cases respondents viewed disability mainly as something which prevented them from doing certain activities (activity limitation).

Male disabled healthcare user from Khomas region had this to say: *I am ashamed of myself that I cannot do anything for myself; it is very difficult if you cannot perform anything by yourself. But luckily, I have family members that are nearby to help. Life is so difficult, and one needs to survive on your own at times.*

### 7.2.5 Discrimination

Participants' answers revealed that disability for them is merely a case of discrimination and how they are treated as well as negative attitudes of the providers. A female health service user physically disabled with polio from Okuryangava lamented:

*And again, staff also discriminates against disabled people. If you are, for example, pregnant, they ask you how you became pregnant; meaning they do not see you as a person but as an unable person and they do not consider you.*

“Negative attitude among health workers” was also felt among those who reported an activity limitation in answer to all the screening questions. A female respondent from the ethnic minority people in Kunene region said: *Nurses are very rude with people. They take their time to help people. They do not help patients without money. Some people stay very far, and transport is difficult for them.*

A young male respondent from Khomas region had this to say:

*The problem is that the staff is going on lunch while there are sick patients waiting in a queue, which is very wrong; even the pharmacy is closing, and the government should do something about these nurses. They are very rude towards us, especially the ones who come nowadays from school and the language is also an issue now, and here most nurses are Owambos and only want to speak their language. And the receptionist also practices favouritism here. They do not let their family and friends pay, which is unfair. I am telling you I have witnessed it. The government should put in strong regulations here.*

What can be concluded from the above notions of disability can be summarised in the words of a female disabled user who said: *Disability come in different forms, so their needs are different.* This statement clearly expresses the “inverse care law” which states that the availability of good health services tends to vary with the population it serves.

### **7.3 Access to healthcare**

Many factors either facilitated or prevented different groups from gaining access to healthcare services, depending on their needs. These included cost, transport to and from the facility, the way the physical facilities themselves were constructed, access to healthcare information, geography/environment/distance, language, safety, cultural factors, and the attitude of healthcare workers at the facility.

#### ***7.3.1 Transport services to and from the facility***

Both the barriers “journey to health facility” and “transport” played a major role in accessing healthcare, as noted by the participants:

This is put across succinctly by a young female from Khomas region who said:

*The main factor that keeps people away from the health facility is the transportation to get to the facility. Sometimes we use donkey carts and they are very slow, so a person will not get to the clinic on time. Again, like people who work at the farms, the boss may not permit you to go to the clinic and it becomes a problem. Money to pay for transport also matters. There are also people who are afraid of discrimination from the public; these also stay away from the facility.*

Another female respondent from Khomas region who was mentally challenged had this to say;

*I usually use a taxi. No transport is arranged unless referred to the hospital. The taxi fee is N\$16.00, N\$8.00 for coming and N\$8 for going back. To access healthcare, you pay N\$8.00 and N\$16.00 for transport. The total cost is N\$24; it's expensive and not acceptable.*

The above observation clearly supports the findings of Van Rooy, et al. (2015) that transport is a major problem for people with any form of activity limitation to access the healthcare facility. This might also contribute to a higher cost of paying for health services if all expenses are included. These results confirm the argument advanced by Tanahashi (1978) that by conducting a cost/effective analysis prior to service provision would lead to actual effective coverage of the target population. That being the case Perchansky and Thomas (1981) model go beyond effective coverage by arguing that equitable access is achieved when the five A's (accessible, acceptability, affordability, adequacy and availability) is fulfilled. Data of the dissertation also confirms the views of Perchansky and Thomas.

### **7.3.2 Spoken language**

In accessing health care, communication was seen as one of the major obstacles in terms of the language spoken.

A male, disabled respondent from Khomas region had this to say:

*This is because the nurses are communicating to us in English and I do not understand that language; therefore, one has to bring along his/her own translator as they do not have translators at this clinic. There was a problem with communication. Both of us were talking in Otjiherero, but I understood*

*what he was telling me as he was not a Herero and was talking poorly. But the good thing is that he understood me.*

A female respondent with chronic illness from Khomas region lamented:

*The other problem is with the uneducated people and old people because the doctors are only speaking English and there are no translators.*

These participant's experiences were a clear indication that in accessing health care people with some form of activity limitation experience communication problems.

### **7.3.3 Physical access to the health facility**

This code refers to the physical access at the healthcare facility, in other words, how the facility was designed and physically constructed and whether this presented problems for the participants.

A disabled female from Khomas region had this to say:

*At the entrance of the healthcare centre there are two paths which the disabled can use; and those without disability all have their own way. The problem was this door for the disabled, the security was refusing to open it and then they had to use a long way behind the facility where they can access but it is too narrow. This door is usually opened when they see that there are many patients with wheelchairs; if it's only one patient, then they do not open the gate. Unless there are many disabled people, one will be told to use the other way.*

These experiences of the participants are in line with the findings of Castro, Lefèvre, Lefèvre, and Cesarn (2010) who highlight certain inadequate aspects of healthcare services such as waiting rooms with insufficient places and rooms where

persons with disabilities had no access through physical obstacles. This means that a healthcare establishment whose obstacles prevented the entry of persons with disabilities went against their right to come and go (p. 5).

#### ***7.3.4 Geography/environment/ distance***

The geographical environmental barriers participants might have faced when travelling to and from the health facility are illustrated by the following participants' responses.

Female respondent, youth, Kunene region said: *The main problem is rivers when it is in a rainy season.*

Female, disabled, from Khomas region explained: *She stays nearby, almost 500m, but the problem is, by wheelchair she used to take one hour to two hours because of the traffic.*

A female suffering from a chronic illness and who was also an Albino, from Kunene said:

*Long distances to clinic. The distance from my home to the facility is very far, about 180km. It is hard to get to the facility in the rainy season because we have to walk across mountains and rivers. Sometimes it is hard for me to get to the clinic because of the long distance between my home and the clinic. I would like the doctors to come to our nearby clinic; that will make it easier for me to access without difficulty.*

These answers from the participants are clearly in support of the theory of Penchansky and Thomas who say that people with any form of activity limitation will experience accessibility problems when accessing a health facility.

## 7.7 Quality of services

Participants were asked to describe how they experienced the healthcare services they had accessed and received. These perceptions on the quality of services included the participants' accounts with respect to language of healthcare provider; attitudes of providers (non-caring, rudeness), payment of fees, violation of privacy, and discrimination experienced. Figure 17 below, presents the results of the thematic analysis of these different aspects of the healthcare services (nodes) and highlights the fact that although a health facility might be accessible the actual service is affected by biased treatment factors. When a person with disability enter a healthcare facility the provider might already condition himself on how to treat the person in terms of the medicalisation of disability or the socialisation of disability. It also illustrates the nature of the relationship between the links, "cause of" and "part of", with the arrow showing an asymmetric relationship between the source node and the target node<sup>10</sup>.

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<sup>10</sup> Links are usually drawn as lines between the connected nodes in graphical presentations of networks. Furthermore, a link between two nodes may be directed or not. A directed connection is drawn with an arrow. With directed links, source and target nodes must be distinguished. The source node is where the link starts, and the target node is where it ends: the destination to which the arrow points. The terms connection and link are synonymous (ATLAS.ti 7 User Guide and Reference 2013).

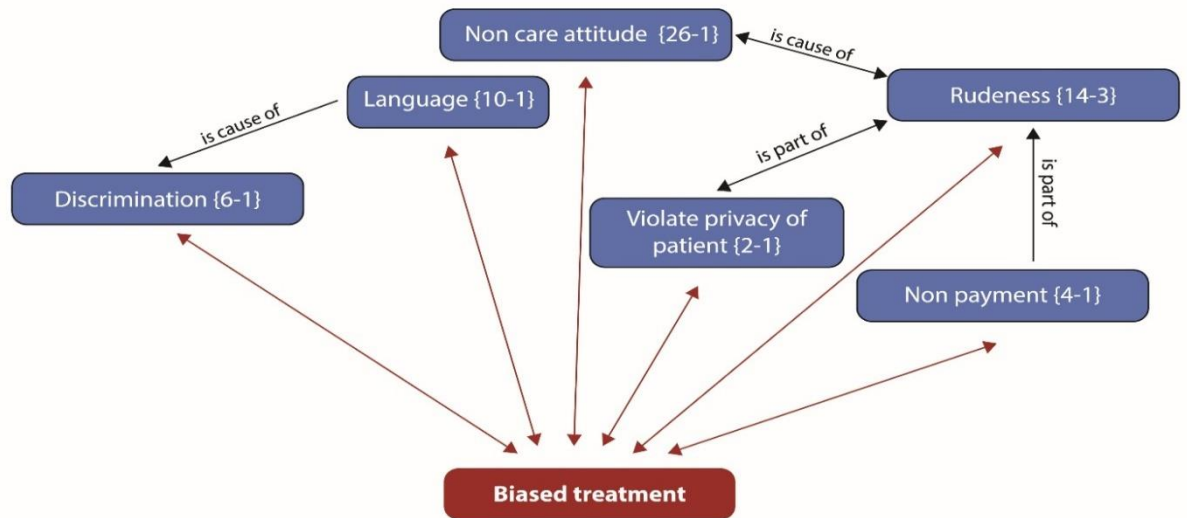


Figure 17. Factors attributable to biased treatment (the figure is derived from the thematic analysis of the qualitative data).

### 7.7.1 Language

Language is one of the factors which can be used as a form of biased treatment in accessing healthcare. It can be used in naming people according to categories, with the ultimate aim of indicating who is holding the power and denying the rights of others (Sofi & Cherian, n.d.). Inappropriate language can disempower and humiliate a person in need of care. The respondents in this study experienced biased treatment in the form of language, as shown in their responses. For example

“A Female, diabetic, disabled, pensioner from Khomas region” – Katutura questioned: *I wonder why there are no Afrikaans doctors; does the government not have money for them? We do not understand each other. ... although a service might be available, and a doctor might be present at the health facility, it does not guarantee that the service might be acceptable.*

A male health service user at Katutura clinic lamented: *This is because the nurses are communicating to us in English and I do not understand that language.*

A male health service user from Katutura said:

*The problem again is, when coming to the health facility, there are no interpreters and now the communication with the doctor will be difficult. Sometimes the doctor will not get what you are saying and may end up not treating you as well as it should be and may even prescribe you wrong medications.*

A Female youth health user from, Katutura clinic said: *Because most nurses at this clinic are Oshiwambo-speaking and they are in most cases communicating to patients in Oshiwambo.*

As indicated in Figure 17, language also plays a role in discrimination against PWD, as can be seen in some respondents' expressions:

A female health service user at Katutura clinic said: *The Damaras, they discriminate too much, they say that you will die if you do not admit and accept your condition.*

### **7.7.2 Rudeness**

To understand how rudeness towards PWD is formulated, we need to look into the question of attitude. According to Sofi et al. (n.d.), attitude is the judgment of a person about another person, based on how he or she evaluates things or him/herself. These authors point out that attitudes can be divided into three categories, namely, those of a moral dimension (good or bad), a potency dimension (strong or weak), and an activity dimension (active or passive). At the healthcare level, any one of these categories can result in responses such as a non-caring attitude, non-payment and violation of privacy of a patient, as shown in Figure 18. According to Jonas, Broemer, and Diehl (2000), attitude is a tendency to impute positive or negative

evaluation to a certain type of behaviour, creating an intention to behave in a certain manner. Their description is supported by Reid and Aiken (2011) and Van Rooy et al. (2014). Participants in the two study regions made the following statements about the health service providers:

A female health service user from Opuwo clinic lamented:

*The nurses have bad attitudes. There are many boxes in which we have to put our medical passports. If we put it in the wrong box, then the nurses yell at us and insult us.*

A female healthcare service user from Opuwo clinic lamented: *Nurses are very rude with patients.*

A male healthcare service user from Katutura clinic also commented: *The attitudes of nurses change every day and every moment. Sometimes they are good and sometimes they are bad.*

A female healthcare service user from Katutura clinic said: *The counsellors here are very rude.*

A female healthcare service user from Okuryangava clinic said: *The clerk (receptionist) that is processing the payments is not having good manners.*

### **7.7.3 Non-caring attitude**

Attitude is a tendency to impute a certain degree of either positive or negative evaluation to a certain type of behaviour (Jonas et al., 2000), and this might correlate with an intention to behave in a certain manner (Reid & Aiken, 2011). About non-caring attitudes, which can be regarded as a cause of rudeness, healthcare service users reported the following:

A female healthcare service user from Opuwo clinic lamented: *Doctors and nurses are not treating the patients well. They do not have time for patients.*

A female healthcare service user from Katutura clinic said:

*The other problem is that here the doctors' only check in health passports and see what was prescribed to you then they just give you the exact same medication*

*without thoroughly testing/examining, which is wrong because each one needs to analyse you, treat you different.*

Apart from not being attended to, staffing also played a role in the non-caring attitude:

A female healthcare service user from Etanga clinic lamented:

*The clinic is having only one nurse. If this nurse is having other commitments or problems then the clinic is being closed, because there is no other person who can be able to assist patients or attend to them in his absence and due to this we just have to wait until he is back.*

*“Nurses don’t help people after five; they say their time is over (Male health service user, Okangwati clinic).*

Male health service user, Katutura clinic:

*There is also an issue of lunch that all the nurses go for lunch and they put the patients on hold until they come back. It will one day be a problem if a critically ill patient comes and nobody is available.*

#### **7.7.4 Non-payment**

Participants had the following to say about their experiences with payments of fees.

Female health service user, Opuwo clinic: *They do not help patients without money.*

Female health service user, Katutura clinic:

*If you did not pay for consultation, then you will not be treated nicely; you will not receive the full attention from the nurse. This is because the nurses are first making sure that you have paid or not, before starting to treat you.*

These incidents show that some participants felt that the kind of treatment they received from the nurses was inferior when they could not pay for the services.

#### **7.7.5 Violating privacy**

Privacy is supposed to be central to the relationship between a patient and a healthcare provider. It implies that all the information about a patient should be kept confidential. With regard to privacy, some participants commented that their privacy had been violated by the nurses:

Male health service user, Dordabis clinic: *Community health counsellor is from the village and discusses patients' health reports with other people, e.g., discussing people's status at shebeens.*

Male health service user, Dordabis clinic: *People with HIV are afraid to go to the clinic because social workers are gossiping about people's health status.*

#### **7.7.6 Discrimination**

Disability is often viewed in the medicalised model as an illness which deviates from social norms and could result in some form of derogatory behaviour (Scullion, 2009). The results of the study showed that participants were exposed to this form of medicalized discrimination in accessing the health services.

Female health service user, Dordabis clinic: *The problem is that there is no preference for disabled people; too much discrimination.*

Female health service user, Katutura clinic: *They do not want to help patients that look too ill.*

Female health service user, Okuryangava clinic: *The staff also discriminate against disabled people.*

Discrimination in the context of the medicalized model also takes the form of invalidation and abuse, which paves the way for institutional disablism and abuse of clients (Scullion, 2009, p. 700):

Female health service user, Katutura Clinic: *Why do we get babies when we are disabled?*

*The Damaras, they discriminate too much; they said that you will die if you do not admit and accept your condition.*

Female health service user, Okangwati clinic: *People are not treated equally, the nurses first help those that they know.*

In terms of quality of health care services, the author, in developing a thematic framework (see Figure 18), demonstrated that quality access to services is clearly rooted in a number of inter-correlated factors. Quality access in this regard should therefore be adequate, it should be appropriate, and it should show respect and quality of care.

## 7.8 Availability

### **7.8.1 Medical**

In seeking quality care, patients often assume that any health system should uphold certain principles and values. Such values define what is good and desirable in the health system. Health users in seeking healthcare want effective services. They want to deal with providers who have the necessary knowledge and are competent, who respect them and serve their interests. Female respondent, physically disabled, Kunene:

*Yes, I am going every month to the clinic because I am having high blood pressure. For my disability needs I am not going to Kunene clinic because they do not*

*have enough equipment for disabled people. It is difficult for me to go to Oshakati where they refer us because I do not have money.*

### **7.8.2 Quantity**

Availability is the degree to which patients are either inhibited or facilitated in gaining entry and receiving care and services from a healthcare facility. It is also concerned with the kinds of services that are provided and with how the facility itself is organized. In this sense it also refers to the adequacy of supplies, such as medicine and availability of specialised treatment.

Female-headed household respondent, Kunene:

*This hospital is not clean, and the nurses are not having good manners. They are not treating the patients well; sometimes they give medication of adults to babies. Sometimes when you get treated, you are told at the end that the medications are not there and that you need to come back and get them the following day. There are also no toilets in the labour wards and the patients have to walk a long distance to access toilets. The treatment was not good at all, because I was given only that one tablet for more than one disease and I waited 3 to 4 hours before being attended to. All these impacted negatively on my health status.*

Male respondent, disabled, Khomas: *The biggest problem I am having with this clinic is that it is always over-crowded.*

Female, ethnic minority, Kunene: *My health is poor, but I don't have a specific healthcare need, because my main problem is high blood pressure and I use herbs most of the time.* (Female respondent, pensioner:

*The consultation fee is N\$4 during the week and N\$20 during the weekend for all Namibians, which they cannot afford and are struggling to pay at all times, as one cannot be treated before this payment is made. These fees are including the money for medication. Sometimes when the health facility that I access is not having the type of services that I need, I just go back home and prefer to die, because I don't have the money to access the better health centre.*

Participants' narratives portrayed their dissatisfaction, and even despair, with the conditions at the health facility and the unavailability of medicine and types of services needed.

## 7.9 Acceptability

### ***7.9.1 patient-provider communication (not language)***

Acceptability refers to the appropriateness of the healthcare. To be acceptable, it should be based on a respect for medical ethics, sensitivity, compliance, and the confidentiality of those who are seeking healthcare.

Female respondent, ethnic minority, Kunene:

*Give nurses in-service training and provide more staff. The government must provide some equipment because our health facility does not have enough; that is why most patients are sent to Oshakati. Our clinic is very dirty and we need more wards.*

Female respondent, pensioner, Kunene:

*I am not happy with coming to the hospital, because in the past it was really helping me a lot in the sense that we were being given enough medicines. But now it is not good any more due to the changes in the way they are working,*

*as well as the bad attitudes of the nurses. I am just coming here because I have no other option. I have experienced that myself (pastor praying).*

Female, pensioner, Kunene:

*My experiences on the above-mentioned factors are: I was once sick and did not have money to access the health facility. Once I managed to get the money, came to the clinic and was very disappointed in the sense that I was not treated well (did not get the treatment that I expected). This negatively affected my health.*

The views as expressed by the some of the participants on the quality of healthcare they received is supported by the thinking of Saurman (2016) who argued that access should be always been defined as the degree of fit between the ones that are using the services and the ones that are providing the service. A poor fit would thus be one in which the expectations of the health user (participants) is not met by the providers of the health services, which is what was seemingly described by the participants.

## **7.10 SOCIAL CONTEXT**

People differ in their vulnerabilities, their exposure to risk, and their health-seeking behaviour, depending on their social group, gender, ethnic or other identity, age and other factors. Disability can also take different forms; people without lower limbs, for example, may find getting to a health centre a near impossible task. The other side of the coin is capacity, the resources available to individuals and households. Someone without lower limbs but with money could hire a car or a bicycle to take him or her to a health centre, whereas for a poor person in a similar situation this would be impossible. Different people have different ways of looking after themselves when it comes to their health issues, beliefs, and ways of finding money to access health services or secure community support.

### **7.10. Health-seeking behaviour**

Female, youth, chronic illness, Khomas:

*The providers do not have time for patients at all; they have their own time. Given dates, sometimes people are working, and employers do not allow you to go. Once when I complained about the dates and my work they said that my health should be the first priority. The clinic is closed at 4. After that, if you come late then they say it is your problem. I live far away in 8ste de Laan.*

#### **7.10.2 Faith/belief**

Female, ethnic minority, Kunene: *We are going to the church for prayers, because I believe that God is the creator as well as the helper.*

#### **7.10.3 Organization of services**

Female, pensioner, Kunene: *If the facility that I am usually accessing cannot perform the services that I need, I will just come, because there is nothing else I can do.*

These perceptions of the participants conform to the findings by McDoom, Koppelman and Drainoni, (2014) who reported that whenever people with disability access health services there are unmet needs. This can be result of what the providers perceive as adequate care for the person with disability who in turn does not perceive it as sufficient.

## **8. Summary**

The thematic analysis of the qualitative responses clearly showed that when PWD are confronted with any barriers in accessing a health facility it might become difficult for them because of their activity limitations. The results further revealed that, while some of the respondents had access to healthcare, the treatment they received, aggravated by their activity limitations, made it difficult for them to

secure access when it was needed. This is confirmed by Eide et al. (2015), who listed a range of barriers which might reduce access to healthcare for those with a disability (p. 2). Their main argument was based on the empirical statement of the World Health Survey that there are at least ten different reasons for the lack of care in low-income countries (p. 2). Of these, cost is the most profound healthcare-related problem for PWD, while others, such as inadequate skills, exclusion, inadequate equipment, and negative attitudes, are barriers which occur more often for PWD than for Non-PWD (p. 2).

The qualitative responses disclosed that a negative attitude among health service providers prevailed in many cases, which indicated that health service providers operate within a system that is embedded in societal structures where a conflict between harmony and disharmony exists in the relationships, especially in the workplace. As argued by Silver (cited in Sofi, et al., n.d.), someone with a disability is often less handicapped by his own disability than by the attitude of society. A person with a disability is more likely to face problems in society in terms of attitude and behaviour of others (Sofi et al., n.d.). Furthermore, the qualitative interviews also appeared to support findings that distances, remoteness and harshness of the environment play a role in accessing proper health care (Van Rooy, et al., 2015). Hammel, et al. (2015) showed that environmental barriers have an influence on the individual, the community and society.

As is evident from the discussion on the perceptions on quality of health care, participants did not have the same experiences when accessing health. This is often a result of not having the same activity limitation and therefore effects might not be the same (Van Rooy, et al., 2012). It can also be argued that the answers given were in conformity with the social model of disability in that the problems encountered by

PWD in accessing health care are mostly an experience of the environment and culture (Barnes, 2009).

Concluding this chapter on the qualitative inquiry into equitable access to health care, a case study of a visually impaired participant is presented. This case summarises most of the obstacles raised by participants with activity limitations in seeking health care.

What happened is that I got sick apparently it was Steven Johnson disease, the doctor said it happened due to some medicine that a person might use or sometimes can be caused by the weather condition, especially the sun, but as far as I remember I did not use any medicine to cause this sickness, I was 21 at that time and now I am 27.

I faced so many challenges after this sickness. For example, I was working before then I have to lose my job due to my incapability. I was furthering my studies as well but now I stopped. I am unemployed, and in the society, my activities are now cut. For example, I used to play soccer, watch movies and other things I used to participate in are now limited so I do not perform them anymore. When going to the clinic it was tough especially the time I came in Windhoek, I did not know the place; so far, I am starting to know it, especially the location of the clinic. The attitude of the nurses is not very good; it is not easy talking to them. They are rude. They do not care about disabled patients at all and they just want them to do things on their own. The person who helps me when at the clinic is my cousin; if he is not there I take myself to the clinic. The biggest problem I experienced is operating the elevator; one can be in it for an hour because he does not have an idea of where to press. Now that I have received some rehabilitation and training from the Disabled and Resource Centre, I am able to prepare my own meals, lay my bed and brail. I was told that there are brail letters at the elevator, I now use those letters and it made it easy for me to get in the elevator. I think accessibility is fine with me, luckily because my cousin is always there to take me and he is forever willing to assist. He helps a lot with the registration processes and everything. Certain nurses are ok but some are very bad. There was a time when a nurse shouted at me while I could not see, I am even an old person, but she didn't show respect at all. The nurse was complaining that the patient was on her way but then the patient did not do it intentionally. It was caused by the fact that he could not see. The doctors are also fine but then before my condition, they were not as bad as now. I was in Swakopmund and the doctor who treated me did not want to refer me to Windhoek. I even came by force, the same doctor refused to give me medicine that the nurses were telling him to give me or to prescribe. The nurses told me that there was a guy with the same condition as mine and after he was given that medicine he got well but I do not know why the doctor refused to give me that, that is why I have a feeling that I could not be in this condition if the doctor could have done his work as he supposed to do. Now I go to the clinic two to three times in a month to get my medicine because it is a very small bottle and gets finished faster. So far, I learn a lot about hygiene from the training I received from the Disability Resource Centre, for example I learn that you should first peel a potato then you wash it after, I also learn how to make my bed and how to be in good shape. I do not use any device to walk, but I still have to buy myself a white walking stick/cane but the challenge is that our instruments are very expensive. I used to pay when going/accessing the facility, but since April 1<sup>st</sup> 2010 I do not pay for the services, but as for transportation, I am very lucky, because my cousin drops me. It is sometimes a challenge if I get a taxi alone, because one day a taxi driver dropped me at a place where I was not going, and I had to struggle to get there. I do not access any other health service besides the clinic. I am thankful for what the healthcare or what they did, but I still think much have to be done, like I told you, I blame the doctor who refused to give me medicine that could have prevented my condition from getting worse, now I feel he was not doing his job as he could have done. When I came in Windhoek, the doctors were complaining that I was supposed to get that medicine, so I could have recovered my eye sight. I am happy with the service I am receiving now, because I am getting my medication but sometimes you go there, and they are out of stock. I know of the meaning of vulnerability, they say are orphans, disability, elderly, but I think they should also look at people with both parents but still living vulnerably, due to the condition they are in. Some people are being abused in one way or other but there are not being considered into that category and get help. I think what can be done to reduce vulnerability is that people should be identified given counselling and be helped. I also think that people who are abusing and using people with disability in such a bad way should be reported and answer to the law, because there are disabled people who do not even know where the police station is and they do not even leave the house yard to go somewhere. I see if it was not for this disability I have now, I could have seen myself far and my quality of life could have been better, but even now I know I can do something just that I am not given a fair chance as other people. I think what should be done in the health sector to improve the relationship is that nurses should improve their attitude and treat their patients well, so people will feel welcomed, they should receive attitude training and have work at heart. I think I said enough, but I want to add that I feel pity for people with hearing impairment, those groups are mostly left alone, because when you go to the doctor without any translator and you cannot express yourself you will end up being given wrong medication and getting incomplete help and treatment. **Case study of a visually impaired person**

The preceding chapters (Chapter 4 to Chapter 6) report on the quantitative results of the study and portray the lived experiences of participants in accessing health care, while chapter 7 report on the qualitative experiences of participants. Chapter 8 will summarise these findings and relate them to the objectives of the study and the conceptual framework that guided the study. The conclusions offered will be compared with previous research and future directions of this research will be proposed.

## CHAPTER 8

### LINKING DISABILITY AND EQUITABLE ACCESS TO HEALTHCARE: A CONCLUDING DISCUSSION

This chapter will reflect on the main findings of this study that investigated the barriers that may impede equitable access to healthcare for people with disabilities in two regions of Namibia. In particular, it looked at the contextual and personal factors that hamper equitable access to health care for people with and without disabilities in the Khomas and Kunene regions. It addressed this question against the background of the conceptual model of activity limitation, looking at contextual factors, personal factors, and taking into account universal and equitable access to healthcare, using the various study objectives. It investigated the structural and physical barriers faced by both PWD and Non-PWD.

The main finding of this dissertation was that, although there is no problem with access to healthcare for people with disabilities, PWD in the Khomas and Kunene regions faced specific structural and physical barriers in accessing health care services.

The following sections will present a detailed discussion of the findings on activity limitation, personal and contextual factors that hamper access to and utilisation of health care by PWD.

#### **8.1 Activity limitation**

This section focuses on the conceptual framework of activity limitation. For the purposes of analysis, the six screening questions of the WG were used to establish activity limitation. This approach is based on the ICF model that proposes a universal model in which disability is seen as a continuous state shared by everyone.

It stresses the point that all of us at some stage have a limitation because of a bodily function, operating at either a personal or a societal level, which could hamper our range of functions (Nations, 2008). Bilbao et al. (2003) argue that activity limitation and participation are components of the ICF model and are the basis for determining the level of disability. Activity limitation in fact involves those factors which decide how a person performs (capacity) or even how he or she learns. When the performance as well as the capacity of PWDs in terms of their functions was appraised, the findings were as follows.

Results of the first part of the conceptual model dealing with activity limitation highlighted the following in terms of the overall findings of activity limitation: “Seeing” appeared to be the most prevalent activity limitation experienced by PWD followed by the domain “walking”. When looking at the core domains in terms of severity, it emerged that the problems with walking, self-care and communication were the domains that impeded the performances of certain activities, the most. Investigating the relationship between the overall level of impairment and the personal factors sex, age, region, education, urbanity and socio-economic status, no gender difference in reported activity limitations were found. With regard to the other personal factors, elderly persons were more likely to be restricted by activity limitations as were those with less education and lower socio-economic status. Location also played a role in that PWD living in the Kunene region and those residing in rural areas seemingly experienced higher levels of impairment.

A more detailed analysis of the relationship between the personal factors and the six core domains reported similar results.

In the domain of “seeing” as a wilful action, age seemed to play a role since the elderly appeared to have more problems with seeing than the younger. Level of education was also important as the results showed that PWD with less education apparently had greater difficulties in this domain.

In the domain of hearing, personal factors that influenced the degree of activity limitation were the person’s age and level of education and socio-economic status as well as the location (region). Elderly PWD or those with lower levels of education or socio-economic status were more likely to experience greater difficulties in this domain as were those living in the Kunene region.

As noted by Van Rooy et al., (2012), most people with a disability could walk to health centres, even though this could be an arduous task. This was confirmed by Trani, Bakhshi, Noor, Lopez, and Mashkoor, (n.d.), (Trani, et al. n.d.), who found that the time a person took in reaching a healthcare facility played a role in the choice of the facility. Van Rooy, Mufune and Amadhila (2015) also found that distance played a role, the difficulty becoming more acute for those who were older (p. 5). In terms of the results on the domain of walking, PWDs from the Kunene region reported more problems with walking than those of Kunene as were PWD that resided in rural areas. This might be due to the greater distances that these PWD had to cover to reach the facility than PWD in the Khomas region. There were some tangible outcomes with walking for those who had little or no education who reported greater walking impairment than with PWD with more education. Similarly, lower socio-economic status was also associated with greater difficulties in this domain. This link between poverty and activity limitations has been reported on extensively in literature as stated by Eide, et al., (2015) who postulate that people face some problems in accessing health care in poor contexts, people with disabilities face additional and

particular barriers, and those with greater disability face more barriers (p. 12). Age in relation to walking also seemed to be a factor in the life of PWDs. The results showed that older PWD experienced greater difficulties with walking. This finding conforms to those of various authors, such as Obederin (2012), Goins, Williams, Carter, Spencer, and Solovieva (2005), and Van Rooy et al., (2012, quoted in Van Rooy et al., 2015), that older people encounter multiple barriers when accessing healthcare (p. 8).

The analysis of the personal factors that had an influence on the domain “remembering” showed the same results as reported for “walking” in that the elderly, less educated and poorer PWD living in rural areas and those residing in Kunene region were more likely to experience difficulties in this domain. “Self-care” caused a degree of difficulty for PWDs from the Kunene region and rural residents, while for education PWDs who reported no formal education experienced more problems in this domain compared to those with higher levels of education. Those who reported lower possessions also experienced difficulty with the domain of self-care. This is echoed by Eide et al., (2015), who found a significant difference in the socio-economic status of the four African countries they studied (SA 0.30, Namibia 0.25, Malawi 0.09, Sudan 0.19) (p 5).

Difficulty with the domain “communication” was mostly felt among PWDs in the Kunene region and by those who stayed in rural areas. Advanced age was associated with greater difficulties in communicating as were lower levels of education. Lower possessions scores was reported among PWDs in this domain, which implies that socio-economic status and “communication” were correlated, in that poorer PWDs were impeded in the domain of communication.

The overall conclusion of this discussion on the association between the personal factors and the level of activity impairment can be stated as follows: Elderly PWD with little education and low socio-economic status who live in rural areas in Kunene region are more likely to experience higher levels of difficulties in the domains hearing (except urbanity), walking, remembering, self-care (except age) and communication. Regarding the core domain “seeing”, elderly PWD with low levels of education are reported to have greater difficulty in performing certain activities due to this health problem.

This conclusion is in line with the claim of Vargus-Adams and Majnemer (2014, p. 1030), that the ICF reinvented our understanding of health and disability and standardised language in order to facilitate communication. They pointed out that the domains as highlighted by **this** dissertation were mostly the result of environmental and personal factors as these related to the conceptual framework (Vargus-Adams & Majnemer, 2014).

The findings on the six activity limitation domains were also consistent with those of Eide et al. (2015), who claimed that “the probability of not receiving necessary health care increases with level of activity limitation. The question formulated was: "The last time you needed health care, did you get health care?" (Yes/no). While the probability of not having received necessary health care was 0.07 for individuals who reported no activity limitation, the probability of not receiving such care was 0.19 for those who had severe activity limitations” (p. 6).

While Gwatkin’s (2007) “inverse care law” holds that the availability of good healthcare tends to vary inversely with the population it serves, the findings showed that PWD had greater health needs when visiting the facilities than Non-PWD

and should therefore receive greater healthcare. The strength of vertical equity lies in the potential for an equal distribution of resources. Even though there might be some resistance, vertical equity might be the only way to reach those vulnerable groups which are resource-constrained and lack the financial means to access healthcare (Sen, 1999). This revised model would ensure fairness, and choices. With vertical equity, vulnerable groups would be able to access the needed services, further ensuring the promotion and maintenance of a healthy recovery.

## **8.2 Barriers in accessing healthcare**

The discussion of this section focuses on the findings of the second part of the conceptual model dealing with the *personal factors (type of disability, level of income, knowledge and education) that hamper access to health care for those living with disabilities and those living without disability in the Khomas and Kunene regions.*

The main finding of the dissertation largely confirmed in the literature (Van Rooy et al., 2012), that there is no problem in theory for people with disabilities in accessing healthcare, as everyone has the right to such access. The biggest problem, as confirmed by the literature, was that PWD faced specific structural and physical barriers. Grut, Mji, Braathen, and Ingstad (2012) argue that 'the complexity of the barriers which unfold throughout a person's life course creates difficult situations and may prevent the person from accessing healthcare services, even when the services are available.' Looking at each factor separately without understanding the connection between them could easily tempt one into seeing some of them as trivial. However, a deeper look reveals that the interplay among the many different elements creates situations with significant obstacles. The combination of these factors creates barriers

to accessing healthcare services that may be too challenging to overcome, even with well-functioning local-based healthcare services in an area' (Grut et al., 2012).

The six barriers to healthcare access that were reported as having the greatest impact on access to health care for PWD and that will be the focus of this section were: lack of transport from home to a healthcare facility; no services available; negative attitude of healthcare workers; standard of the healthcare facility; inadequate supply of drugs or equipment and cost of transport to and from the healthcare facility. The personal factors, whose impact on these barriers is the subject of this section, are region, sex, age, educational level, socio-economic status and level of activity impairment.

The section will begin with a discussion of the association between the personal factors of PWD and each of the selected barriers and then focuses on the Non-PWD. Thereafter, the findings of the logistic regression that highlighted those personal factors that emerged as significant predictors in barriers to access will be discussed.

### **8.2.1 The relationship between the personal factors and selected barriers for PWD and Non-PWD (bivariate analysis)**

Bivariate analysis in terms of the relationship, between the independent variables (personal factors) and the dependent variables (barriers) revealed a shortfall in the way PWD experienced lack of transport as they experienced the detrimental effect of lack of transport to the healthcare facility. This result was consistent with the findings on barriers from Van Rooy et al., (2012) and Vergunst et al., (2015). There is therefore a need to formulate a policy that addresses accessibility of transport to healthcare facilities in a rural setting. This would support Rawl's theory of social justice, in that all inequalities would be seen in the context of advancing those

segments of society which might experience some difficulties in their social background (Rawl, 1971).

In terms of socioeconomic status, the results indicated that an increase in a person's socio-economic status would probably help to minimise the problems of lack and cost of transport, and inadequate supply of drugs and equipment. These findings are consistent with the views of Coppin et al., (2006) that socio-economic inequalities have a larger impact on healthcare outcomes for both older and younger individuals. Venter, 2011 argues that a focus group discussion conducted with disabled people in Accra, Ghana, revealed that high transport cost was a preventive matter in increasing the livelihoods of the participants (p. 125). Demakakos, Nazroo, Breeze, and Marmot (2008), argue that people with a higher socio-economic status live longer, enjoy better health and suffer less disability, compared to those with a lesser socio-economic status, who die younger, suffer a greater burden of disease and disability (p. 331). This was in line with findings of (Obles et al. (2013), that socio-economic disparity in morbidity could be regarded as the most extreme pattern of inequality. The findings of this dissertation thus highlighted the subjective notion of socio-economic status and health. *However, how to address this notion in the rural context remains a question for future research.*

With regard to age, the findings indicated that if there were an increase in age, there was a fair likelihood that the elderly would also experience barriers, especially those related to service availability, negative attitude of health providers and cost of transport (Thorpe, Thorpe, Kennelty, & Pandhi, 2011). Thorpe, et al. (2011) argue that the population of older adults, as a vulnerable group, will double by the year 2030 meaning that efforts to identify and eliminate disparities in access for older adults are therefore among the most pressing healthcare issues for the 21<sup>st</sup> century (p. 2).

Moreover, in advocating further studies of the problems of the aged in getting healthcare, Van Rooy et al., (2015) argue that if the elderly were excluded from health care this would defeat the purpose of equitable access to healthcare. Smith (2008) too maintains that an elderly population with a disability might experience a higher degree of difficulty, compared to the elderly without any disability.

The level of education attained also seemed to have a significant influence on the barriers experienced when accessing healthcare. For all six selected barriers, higher levels of education were associated with a decrease in the barrier. This finding is supported by Eide et al., (2015) who states that education appears to empower PWD.

The negative attitudes of health workers that were experienced by PWD from the Kunene region, as well as the poor standard of the healthcare facility were consistent with the earlier studies of Van Rooy et al., (2012), who found that with regard to healthcare service delivery, PWD in Kunene region were most likely to encounter a problem. Mulumba et al. (2014) also note that the two main barriers they faced when visiting hospitals were not being informed of their condition and not being provided with a diagnosis.

Given the influence of the personal factors on the six selected barriers, the dissertation concluded that in terms of equitable access to health care for PWD, region, age, education, socio-economic status and activity limitation did play an important role in either facilitating or hindering their access to healthcare. Therefore, to minimise the effect of these predictors in the life of PWD, there is a need to address this problem in designing healthcare policies which are specific to the difficulties experienced by PWD.

With regards to Non-PWD and the influence of the personal factors on the barriers to access, the following findings were reported. In terms of lack and cost of transport, and the standard of the health facility, the results showed that Non-PWD from Kunene region experienced these barriers to a greater extent than Non-PWD in Khomas region. Furthermore, younger Non-PWD faced the barriers “no adequate drugs or equipment” and “cost of transport” in both regions.

With regard to education, the results indicated that if there were an increase in education for Non-PWD the likelihood would increase that they might not experience the barrier of “lack of transport”. As was observed for the PWD, socio-economic status played a significant role in access in that the higher the status the lesser the influence of most barriers (except negative attitude) on Non-PWD.

The purpose of the logistic regression analysis, which was performed on the same independent and dependent variables, was to identify those predictors (personal factors) that were significantly correlated with the six barriers to healthcare access. The findings indicated that locality (region), socio-economic status and activity limitation significantly influenced access to healthcare for PWD. Thus, PWD from Kunene region were more likely to experience barriers when seeking healthcare and an increase in activity limitations was predicted to result in an increase in barriers. Socio-economic status also emerged as a strong predictor for problems in access for PWD, which might suggest that differences in access to healthcare are not so much a result of activity limitations, but of differences in socio-economic status.

These findings were in line with those from Vergunst et al., (2015), who maintains that, even though these barriers were listed, they showed the complex interaction of the difficulties faced by PWD when accessing healthcare, compared to Non-PWD. The study findings also chimed with those of Haverkamp, Scandlin, and

Roth (2004), who found that PWD were significantly more likely to describe their health needs as fair to poor, as compared to Non-PWD. Adults with developmental disabilities also met a range of disparities in the quality of medical care, compared to those without any disabilities. This finding also confirmed the results of Vergunst (2015 p. 135) who states that daily life for disabled people in Madwaleni was more difficult than for those without any disability.

### **8.3 Satisfaction with healthcare**

This discussion addresses the third part of the conceptual model, namely, *“to identify and compare the contextual factors (such as the context that people are living in,) that impede access to healthcare by people with disabilities”*, shows the level of satisfaction of both PWD and Non-PWD with the provision of healthcare in general. In the ecological perspective there is a metaphor that describes the reciprocity between the environment and the individual, which implies a good fit between an individual and the place where he lives (Coate, 2014, p. 24). This argument in the context of health was further strengthened by McLaren and Hawe (2005), who said that *“an ecological perspective on health emphasises both individual and contextual systems and the interdependent relations between the two”* (p. 6). From this perspective, and as indicated by the results, PWD are confronted with contextual barriers, and these will ultimately have an impact on how they engage in seeking healthcare. It should be noted that the ecological perspective shapes the type of actions PWD will take in seeking healthcare.

Satisfaction with healthcare was recorded as a self-reported perception by both PWD and Non-PWD on how they experienced the provision of healthcare. As argued by Click, quoted in Trani et al., (2010), satisfaction in accessing healthcare as

reported by vulnerable groups could be subject to bias, in that there may be some subjectivity in the satisfaction ratings. In addition, this crude measurement suggests that there may be no variations in the way the questions were interpreted (Goddard & Smith, 2001). In this dissertation however, self-reporting provided the basis for both PWD and Non-PWD to record their levels of satisfaction with healthcare.

The reported level of satisfaction with health provision was higher among Non-PWD than it was for PWD. Comparing the level of satisfaction with healthcare provision with the mean score of the barriers to access showed that dissatisfaction was correlated with high access barrier scores for both PWD and Non-PWD. Thus, health seekers who were confronted with multiple contextual barriers when accessing the service also reported greater dissatisfaction with the outcome of the services received and this will have an impact on how they will engage in seeking health care in the future.

As noted earlier, attitude could be described as a tendency to impute a positive and/or negative evaluation to a certain type of behaviour (Jonas, et al. 2000) and might result in the intention to behave in a certain manner (Reid & Aiken, 2001). Health care workers operate in a certain environment and their behaviour is usually conditioned by this environment. They should be given the knowledge and skills needed to change their professional behaviour. As argued by Bandura (1971), 'behaviour is learned observationally through modelling; from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action' (p. 22). Thus, healthcare systems need to create an atmosphere in which healthcare providers can learn to uphold professional standards of behaviour, ensuring that these are enforced in the environment in which they are operating.

In the context of this dissertation, the seekers rated their experiences with healthcare providers with regard to respectful treatment, assured confidentiality, clear communication, and autonomy in decision-making, the point of departure being whether they were in need of horizontal or vertical care. In his study of Afghanistan, Trani (2010) noted that the focus was on providing a cost-effective service; through this, equitable access would be possible in that healthcare would be given to those in greater need (p. 1746).

Findings indicated that with regard to respect, confidentiality, communication, and autonomy, proportionally more PWD reported that they considered these experiences with healthcare providers as a problem and were also dissatisfied with the healthcare service provision in general. Scheer (2003) maintained that, in providing quality care to someone with a disability, the provider should know how to treat the person and not look at the disability *per se* (p. 227). Other contextual factors that were considered in relation to satisfaction were structural-environmental barriers, namely, healthcare service delivery factors (waiting time, cleanliness of healthcare facility and availability of drugs and equipment) and location (accessibility and cost of transport; terrain and road conditions on the journey to a healthcare facility). The findings discussed show that satisfaction with (and by extension, utilisation) of healthcare services in general appeared to be affected by several contextual factors, of which those pertaining to “Experiences with healthcare providers” (respect, confidentiality, communication and autonomy) had the greatest influence on the level of satisfaction.

As PWD were mostly confronted with environmental barriers, such as experience of healthcare providers, service delivery, and location, which include multiple layers of interrelated factors, and it is these layers that should be modified.

The argument is that there is a need to design or investigate the social structure that PWD experience in securing health care in order to determine whether they might face health inequities. In the final analysis, it is important to develop a framework based primarily on their needs in order to reduce the inequities of healthcare for PWD.

#### **8.4 Barriers in accessing healthcare by activity limitation**

The last part of our conceptual model addressing research objective four *‘to explore healthcare seeking behaviour for the vulnerable groups in accessing healthcare’* offered insights into a range of barriers faced by PWD based on qualitative data. This was done through a thematic analysis in showing how PWD experienced activity limitation and access to healthcare services. The analysis also supported the ICF component of the dissertation. As noted earlier, the ICF consisted of impairment (I), activity limitation (A), and participation restriction (P). Using the ICF, the author was able to identify those parts (A) that were more likely to be differentiated in terms of the barriers, showing the various conditions that prevailed with PWD. These findings were mostly in line with those of Pollard, Johnston, and Dieppe (2011), who used a Structural Equation Model (SEM) to explore the basic paths of the ICF model for patients with Osteoarthritis (OA) prior to joint replacement. They found significant paths between I and A, and A and P, with activity limitations mediating the relationship between I and P. This was also in line with the claim of Vargus-Adams and Majnemer (2014, p. 1030), that the ICF reinvented our understanding of healthcare and disability and standardised language in order to facilitate communication. They pointed out that the domains as highlighted by the dissertation were mostly a result of environmental and personal factors as these related to the conceptual framework (Vargus-Adams & Majnemer, 2014).

Biased treatment (uncaring attitude of healthcare providers towards people with disabilities) in the healthcare sector lies within the domain of the medicalised version of disability (Scullion, 2010). Scullion, (2010, p. 699), argues that healthcare providers viewed disability as a medical concept and related to it accordingly. They operated within the medical care model in which disability is viewed as a medical condition and impairments are akin to illness. Galvin (cited in Scullion, 2010, p. 700) offers the individualistic view that disability is the result of a personal problem. In the broader context, institutionally biased treatment might be a form of disablism and abuse (Scullion, 2010, p. 700). A non-caring attitude in effect is a form of maltreatment. As recorded by PWD, an uncaring attitude was particularly evident in situations where there was only one service provider at the healthcare centre. With no one to answer to, such an individual could decide to close the facility at any time and could be away for some time, showing no concern for the healthcare seekers. Others were confronted with the barrier of non-compliance, as a result of which they spent time visiting the healthcare facility but without receiving the care they needed.

Scullion (2010) argues that the principle of equality only emerged during the 20<sup>th</sup> century. As a result, people became aware of their rights and began demanding them. Thus, a body of legislation was promulgated to deal with PWD. However, even though progressive legislation was introduced, PWD still face biased treatment since the healthcare providers are still stuck in the medical model. They see their role as that of relieving pain and giving medical care, not as drivers of change. To move them away from the biased treatment of PWD requires a paradigm shift from the medical notion of providing care to that of a social model. Disability was therefore taken out of the private medical care arena and moved into the public sphere, where its treatment could incorporate the principles of human rights and equality (Scullion, 2010, p. 701).

## **8.5 Access, Barriers and Satisfaction (ABS) model**

Having presented the EquitAble model in Chapter 1 of the dissertation, this model can now be modified, taking into account the different factors that were presented for analysis. This dissertation offers an access, barriers and satisfaction conceptual model, measured by some indicators that are based on the analysis results, and framed by the concept of equitable access to healthcare and composed as follows.

For the personal factors, the study highlighted equitable access to healthcare, and reported on the socio-economic status, education, age, region and urbanity that PWD faced when accessing healthcare. With regard to healthcare service delivery process barriers, the reference was healthcare service providers, healthcare service delivery and location. For the structural environmental barriers, the reference here was, level of satisfaction with contextual factors, to healthcare service providers, healthcare service delivery and location. Thus, by MODIFYING the EquitAble model we are now in a position to focus on those areas which delay equitable access to healthcare for PWD (Figure 18).

Priester (1992) argues that every person should have access to an adequate level of healthcare. This means minimising the financial, geographical, and cultural barriers to care, distributing resources impartially, and treating similar healthcare needs similarly, without regard to the patient's membership of a particular group or class. Ensuring access to healthcare, regardless of cause or source of need, is society's collective responsibility. While everyone should have access to healthcare, this does not necessarily imply universal access to any potentially beneficial care.

The government has reduced payment of fees for some vulnerable groups. It has instructed healthcare facilities not to refuse their services to those without money and has reduced the consultation fee paid at healthcare facilities to N\$4. Despite these

efforts, different groups continue to face significant barriers on the basis of cost. Other problems include unavailability of specialists at clinics, lack of consultation rooms for pregnant women, and unavailability of ambulances at clinics. Although there were some reports of physical problems with access for people in wheel chairs, the majority of barriers for these PWD were related to long distances to the healthcare facilities, unavailability of transport to and from facilities, and other aspects of the delivery system.

Hwang et al. (2008) and Kroll, Jones, Kehn, and Neri (2006) identified two barriers to effective healthcare: structural-environmental and process barriers. “Structural-environmental” refers to the conditions in which healthcare services are delivered. Problems with these could include a lack of ramps and parking spaces, inaccessible examination rooms, a lack of essential equipment (tables adjustable for height, scales that accommodate wheel chairs, accessible wash rooms), and the lack of transportation to medical appointments. Process barriers are the difficulties that people experience in the course of service delivery. The most commonly cited process barriers were related to convenience of care and aspects of communication between providers and consumers.

Prominent structural barriers included difficulty in obtaining reliable transport, flooded paths to hospital, and wildlife attacks on humans. Reports of physical problems with facilities focused less on equipment for special procedures or tests and more on access to buildings. According to Kroll et al. (2006), it is of the utmost importance that facilities at healthcare centres be user-friendly. They should not make it difficult for patients to receive the treatment they are seeking. Those in wheel chairs should be accommodated with the provision of ramps and toilets. Shelf heights should be convenient for users, either when standing or seated. Based on an

observation, sign language posters are available at various health facilities and accessible, but these are not readily visible in the consultation rooms of either the doctors or the nurses so that they can use them as reference when consulting with a patient who is deaf (process barriers).

Failing to introduce these changes and innovations, equality in accessing healthcare would remain an impossible mission for Namibia. This can be seen in Figure(s) 12-13 (p. 105-106), showing the Kunene region and the healthcare facilities visited by the researcher. This clearly shows the difficulty of the terrain those with disabilities had to navigate to access healthcare. It also backs up the findings of Neille and Penn (2015), that the difficulties for those with disabilities in rural areas are far more than physical obstacles and include a variety of sociocultural and socio-political barriers.

Financial barriers are centred mainly on the problem of having enough cash to pay both for transport to the healthcare facility and for treatment. Many reported that due to cost, they had been unable to receive healthcare services. Instead, those respondents who could not afford to pay for medications often opted for over-the-counter medication.

These results offer important insights into the medical, functional, financial and emotional problems attendant upon seeking access to healthcare. They also include insights into how people interpret the concepts of healthcare, disability, equitable healthcare, barriers to seeking healthcare, and the quality of healthcare services. They shed light on factors bearing upon the social contexts in which healthcare is sought. Respondents described instances of going back home without the healthcare they needed, and in some cases failing to obtain appropriate treatment or

services in a timely fashion. These appeared to adversely affect their health, functional status, and even survival.

While some were forced to go without care because of the various barriers, many eventually obtained the essential medical services they needed through sheer persistence. Many expressed feelings of anger and frustration because of the insensitivity, disrespect and a lack of understanding on the part of some healthcare providers. For some, such negative experiences created a sense of mistrust in the healthcare system. This led them to avoid seeking medical care, relying instead on self-treatment, as described by Drainoni, Lee-Hood, Tobias, Bachman, Andrew, and Maisels (2006).

The results of the dissertation also amplified those of Bachman et al. (2006), who found that individuals with disability could experience a broad range of functional and cognitive limitations (p. 130). Limited access could be a result of physical barriers but might also be a result of specific impediments such as communication problems or attitudinal barriers (p. 130).

Further aspects related to the barriers faced by PWD were highlighted by Grut, Sanudi, Braathen, Jürgens, & Eide (2015), who researched the difficulties experienced by people with disability who suffered from TB. They noted that:

People with disabilities face a spectre of different barriers, both general and impairment-specific, that affect their daily life activities in general and accessing health services in particular. They thus require more and often a variety of support from families, local communities and public health and social services. Lack of disability specific strategies in the local health services may be part of the reason why individuals with disability do not access TB services (p. 8).

This dissertation findings also echoed the view of Zvavamwe and Ehlers (2009), that a TB patient, if not in a community-based treatment programme, is 1.8 times more likely to default when on a clinic- or self-administered programme.

With the barriers in terms of context, system, community and personal factors, the dissertation found that contextual variables such as service delivery, transport, inadequate drugs, negative attitude and standard of healthcare facility had a greater influence on the failure of the supply to meet the demands of PWDs. The results also showed that 'region' as a contextual variable had a significant influence on the identified barriers. The effects of "region" were mostly felt among PWD from the Kunene region, compared to those from Khomas region. The effects of the personal/community variables such as sex, age, possessions, SES and activity limitation on the six identified barriers were mostly mixed. While sex did not show an influence, age showed an influence in the negative attitude among younger PWD, and 'no service available' showed an influence in the negative attitudes among older PWD. The variable 'possessions' SES was important for all PWD but was not felt on 'standard of healthcare facility'. Activity limitation had a greater influence on 'transport', as those with additional activity limitations were more vulnerable to the lack of transport.

It should be noted that, while both PWD and Non-PWD had equitable access to healthcare, PWD were confronted with the six barriers in accessing healthcare. The modified conceptual model, shown in Figure 18, is about equitable access as PWD have greater healthcare needs, therefore they need more healthcare services. The modified conceptual model is based on the findings of this dissertation research.

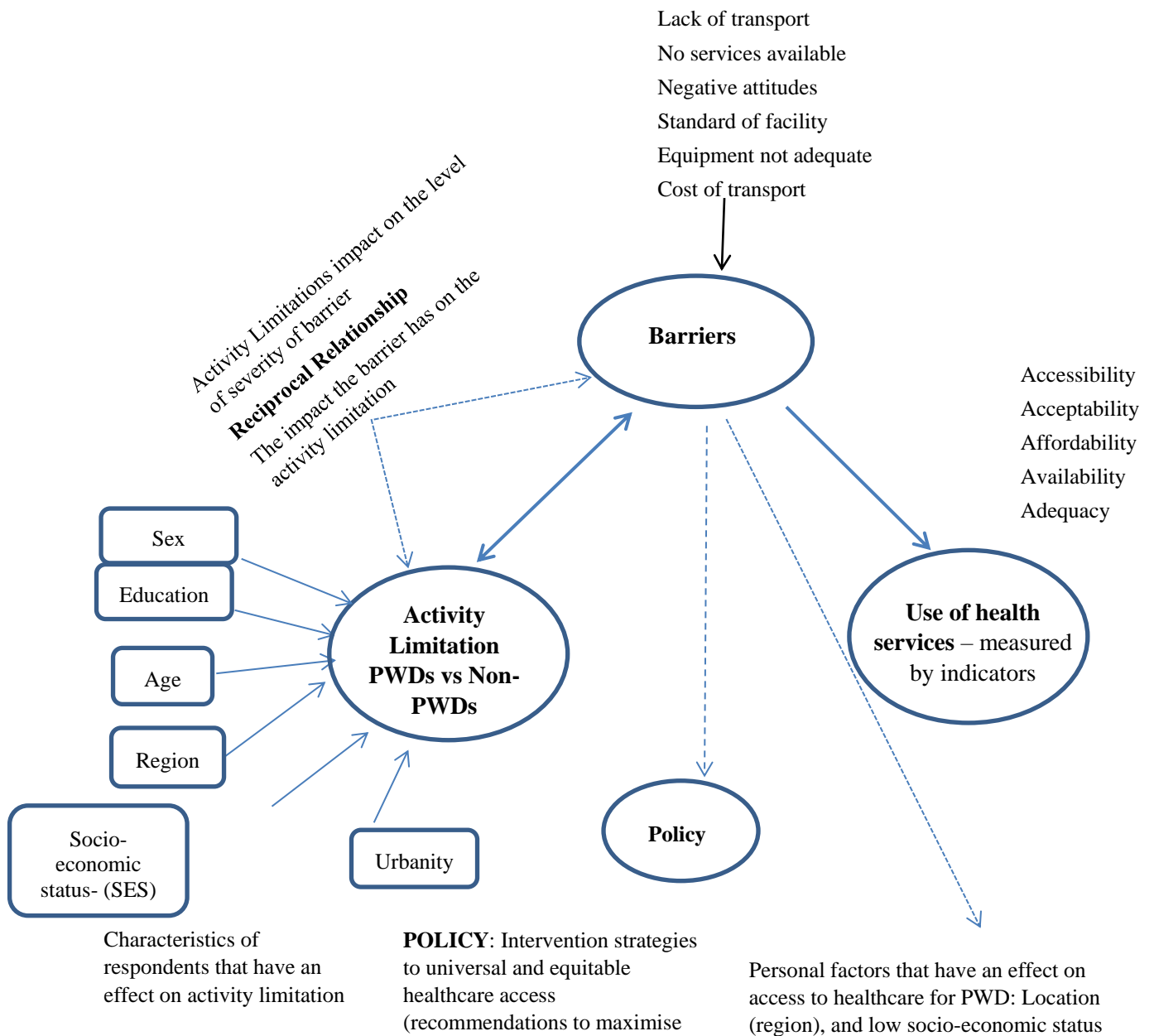


Figure 10. Modified model of equitable access to healthcare (the model was modified from the EquiAble model, 2017).

The model is a result of the personal and contextual factors in showing the severity of activity limitation on the barriers. The ABS model thus advocates for changes in the six barriers. Some of the barriers could be addressed through policies, while others call for personal or attitudinal changes. Some barriers, such as a person's sex, cannot be changed.

In particular, the modified model strongly emphasises *vertical equity*, since the needs of PWD are greater than those of Non-PWD.

In support of the modified model for access to healthcare and in reaching the goal of using healthcare services indicators, the Perchansky and Thomas model was adopted. The author ascertains that effective coverage and identification of the barriers could be the facilitators for equitable access to healthcare in the context of Namibia. In the Perchansky and Thomas model the focus is mainly on five A's (availability, accessibility, acceptability, affordability and adequacy), defined as follows.

### **Availability**

The ratio between availability of resources and the size of the target population gives the measurement of availability coverage.

### **Accessibility**

Even when a service is available, it must be located within reasonable reach. Coverage of accessibility will be measured in the capacity of the number of people to reach a facility. The main dimensions are physical access and affordability.

### **Acceptability**

Acceptability refers to coverage that is appealing and sought after by people. The rationale is that, even if resources are available and accessible, they must also be acceptable to the people they serve (World Health Organization, 2012 p 6-7).

The findings of this dissertation support what the Perchansky and Thomas model tells us, that equity is largely dependent on how accountable healthcare service

delivery is in terms of stewardship, finance and resource generation. This model could help policy makers in the Ministry of Health and Social Services to assess the impact of their services on PWD and to design effective strategies for intervention (World Health Organisation, 2012, p. 7).

### **Affordability**

Affordable services for the consumer. The MoHSS has a directive that exempt PWD from paying for healthcare, but this policy is implemented selectively by the healthcare providers on the ground. Currently there is no mechanism in place to see that the implementation of the policy's directive is adhere to.

### **Adequacy**

In terms of adequacy the reference is towards a holistic service of care that is acceptable to PWD. Currently most of the PWD experience problems especially with referrals in a rural setting. In most cases healthcare facility also lacks the necessary access especially for a wheelchair user.

The findings of the dissertation support what the Tanahashi model tells us, that equity is largely dependent on how accountable health service delivery is in terms of stewardship, finance and resource generation.

Having presented the modified conceptual Access-Barriers-Service model within which the findings of this study is grounded, the conclusions and recommendations that are based on the discussion of the findings are the focus of the next chapter.

## CHAPTER 9

### RECOMMENDATIONS AND CONCLUSION

This dissertation set out to address the following question; “Equitable access to healthcare services for people with disability in the regions of Khomas and Kunene.

The findings of this dissertation were based on two regions namely, Khomas and Kunene respectively. It highlights important aspects of access to healthcare for PWD and for Non-PWD. The dissertation established that PWD faced several barriers in accessing healthcare, confirming our H<sub>0</sub> that in these regions, in most cases, they would encounter such barriers. In order to provide effective care for PWD, the researcher recommend the introduction of equitable access to healthcare services based on the following recommendations as per the main research question

#### **9.1 Activity limitation**

From the overall findings on activity limitations, this dissertation concluded that PWDs from Kunene in most aspects, experienced such limitations in the listed domains. However, successful measurement of disability in Namibia would require a paradigm shift towards using the ICF model because currently the definition as used by the Census Office is based on the medical model of disability. Activity limitation measure using the ICF model will ensure equalisation of opportunities, while the Washington Group on disability Statistics (WG) would be the ideal measure for this paradigm shift. It would help the nation if there was an establishment of a disability occurrence rate since most people at some stage in their lives experience some form of activity limitation and activity participation.

The question of the paradigm shift as suggested should use the six screening questions of the WG, as adopted from the ICF model. This would enhance the equalisation of opportunities for PWD, as the six screening questions showed that the greatest difficulty they faced with activity limitation was in the performance of their daily tasks. The strength of this measurement is that it conformed to international references on disability as argued by Mont (2017) the Expert Group on Sustainable Development Goal (SDG) Indicators strongly supporting the Washington Group on Disability Statistics' Short Set of Questions (WGSS) as the preferred method to use with the SDGs to number the world's population of people with a disability. The UN Statistical Commission and the UN's Economic Commission for Europe's Council of European Statistics also recommended the WGSS for collection of disability information for the upcoming 2020 round of censuses, and the UK Department for International Development is promoting the method for use in its international development activities. These recommendations are the latest in a growing body of endorsements for a method that can be quickly and inexpensively added to censuses, surveys, and research efforts to generate disaggregated, internationally comparable data that provides new insights into how people with disabilities fare in global health and development efforts (p. e649).

## **9.2 Proposed changes for context and system barriers**

### **Health service providers**

#### Respect

The principle of social justice should be employed “treat those who are unequal, unequally but for people with disability the concept of equity should apply

#### Confidentiality

Providers should be trained to ensure patient-providers' confidentiality.

#### Communication

Training in communication skills especially when dealing with those who are suffering from hearing and vision impairments.

#### Autonomy

Providers should recognise that autonomy is more central to the quality of life than physical independence (Sibley, et al., 2006 p.800).

Most of the following proposed changes to service delivery could be addressed through policies.

#### **Waiting time**

This refers to protracted waiting times for consultation and treatment. In most cases PWD had to spend up to two hours before receiving attention. Government could employ more health personnel to minimise the effects of these delays. As pointed out by the respondents, healthcare providers often did not adhere to opening times, and no registrations were done between 12h00 and 14h00. Nurses as well as doctors often had an extended lunch period, especially in the rural areas, during which they abandoned their patients. These abuses could be addressed both by actively promoting changes of attitude in healthcare workers and by enforcing their code of conduct as healthcare professionals.

#### **Cleanliness of the healthcare facility**

More effort should be employed to make sure that the facility is always clean and presentable to the users.

### **No adequate drugs and/or equipment**

The findings showed that in most cases the drugs and rehabilitation equipment they needed were not available for the PWD. To address these deficiencies in the system, those responsible for stocking the facilities should be reminded of their responsibility. More funds should be made available to the facilities for the procurement of the various kinds of rehabilitation equipment, to enable the PWD to live normal lives and engage in different life activities.

### **Negative attitude**

In February 2010, the Ministry of Health and Social Services published a directive entitled 'Disability Etiquette/Courtesies'. This addressed the attitude of healthcare personnel when dealing with PWD. The findings confirmed a general negative perception of PWD in various aspects when they visited health facilities. The Ministry should reinforce this 'etiquette' statement, ensuring that healthcare personnel avoid any form of negative attitude when dealing with PWD.

### **Standard of health facility**

The findings showed that in general PWD were not happy with the standards of the health facilities. In most cases the facilities were not accessible to them, lacked the required number of rooms for consultation, and were not hygienic. In November 2010, the Ministry of Health published a set of architectural standards to accommodate people with disability, but it appears that these standards have not been implemented. To ensure access for the physically disabled, the Ministry should enforce

the standards when buildings are constructed. The problem of hygiene could be solved by changes in the attitudes of the personnel at the facilities.

### **9.3 Proposed changes for personal and community barriers**

In terms of the personal and community variables as per research objective 2, the proposed recommendation could be addressed through governmental intervention, while others are more related to questions of personal preferences and might call for a change in the mind-set of the users.

#### **Sex**

As the findings show, sex as an exogenous variable did not have an effect on the barriers.

#### **Age**

Age showed an effect on the barrier 'negative attitude' among younger PWD, indicating that this group was more knowledgeable about how services should be rendered to them.

#### **Possessions (socio-economic status)**

The results indicated that the socio-economic status of PWDs mostly influenced the barrier 'standard of healthcare facility'. The Government could address this barrier by creating an economic environment in which PWD could enjoy opportunities through greater access to education and greater economic opportunities. This would improve their socio-economic status and lead to an improved access to healthcare.

#### **Activity limitation**

The barrier 'lack and cost of transport' was mostly felt among those PWD who had more than one activity limitation. This means that Government needs to ensure the provision of transport to PWD which takes into account their activity limitations when accessing the healthcare facilities.

In the end, this dissertation, in terms of equitable access to health care promote the "inverse care law"

Gwatkin's (2007), argued that the 'inverse care law' holds that the availability of good health care tends to vary inversely with the population it serves, the adjusted model for this study reinforced the concept of vertical equity for PWD. The findings showed that PWD had greater health needs when visiting the facilities than Non-PWD and should therefore receive greater healthcare. The strength of vertical equity lies in the potential for an equal distribution of resources. Even though there might be some resistance, vertical equity might be the only way to reach those vulnerable groups which are resource-constrained and lack the financial means to access healthcare (Sen, 1999). This modified model would ensure fairness, and the possibility of choosing. With vertical equity, vulnerable groups would be able to access the needed services, further ensuring the promotion and maintenance of a healthy recovery.

#### **9. 4 Study limitations**

This study has some limitations. First, as it was focusing on Khomas and Kunene only, it may not reflect the real and intrinsic nature of access to healthcare for all PWD in Namibia. Even though it highlights the structural and physical barriers they faced, especially in the rural area of Kunene region, where some of the facilities visited

were very remote, the researcher could not visit all of them and explore them to their fullest, due to the remote and difficult terrain, as shown by the maps above.

Secondly, the low number of Non-PWD was a result of data collection glitches. For every questionnaire collected, both individual and control, there had to be a household questionnaire. This was an important factor in calculating socio-economic status. However, in constructing the data file, those cases which did not have a household questionnaire were not recorded, meaning that for Kunene region at least 53 cases of Non-PWD were not recorded during the process of data cleaning.

Thirdly, PWD were in most cases a heterogeneous group, as noted by Iezzoni (2011), Mulumba et al. (2014) and Krahn et al. (2015), and experienced different ways of accessing healthcare. With activity limitation, the dissertation highlighted the most important limitations as defined by the Washington Group of Statistics but did not address their impact on access to healthcare for PWD adequately. The study makes some general points on activity limitation, recording that 39% had a problem with seeing, 23% with walking and 13% with hearing.

Fourthly, using the logistic regression analysis the dissertation identified those barriers with their confounding variables which had an impact on people with disabilities. However, as suggested by Miller, Kirk, Kaiser & Glos, (2014), the dissertation did not investigate the origin or the duration of the disability, which would have been helpful in recommending interventions.

Fifthly, in establishing satisfaction with healthcare, as well as in the determination of difficulties, it uses self-reported measures. By default, the responses could be perceived as being socially desirable (Vergunst, 2015). Even though the interviews were face-to-face, there was no independent verification on what

respondents were reporting. On the issue of the rating of activity limitation, Brower et al. (2005) point out that a clinical observation might present a different scenario as compared to a self-reported difficulty. This means that during the process of self-reporting the dissertation could have lost some cases of people who might not have identified themselves as having an activity limitation, Casey (2015). As activity limitation was based on self-reporting, a person who might have had some disfigurement or who might have experienced disability (Vergunst, 2015) by default might not have been included in the study. Such cases would be the missing links in our study.

Sixthly, the results reported of the dissertation was cross-sectional, so it did not establish whether the problem of access to healthcare was a result of a disability or of the way the patient received the healthcare (Horner-Johnson et al., 2014).

Finally, in carrying out our comparison of PWD and Non-PWD in the context of a rural and urban divide. This in itself might have made generalising the findings of the study somewhat problematic. But the point is that access to healthcare for both urban and rural dwellers is not horizontal (Zere et al., 2007). Whether you are a rural or urban dweller access to healthcare can be problematic and will need some intervention (Neille & Penn, 2015). Thus the point to stress with the dissertation limitations as highlighted is that it should be critically evaluated in terms of the theoretical framework it used for the purposes of analysis, as it was argued that people with disabilities are a heterogeneous group people with disability might also be extremely diverse (Moodley, 2015). But the analysis offers some insight into the lives of PWD and Non-PWD in accessing healthcare, and therefore cannot be generalised to represent the whole population of PWD and Non-PWD of the country.

## 9.5 Future research topics

This dissertation established factors that hamper equitable access to healthcare for vulnerable groups using only two distinct regions for comparison. Findings suggested that everybody does have access to healthcare. However, the biggest obstacle both PWD and Non-PWD are facing is the issue of barriers in accessing healthcare. Therefore, the following are proposed future research areas for realising the goal of equitable access to healthcare specifically for vulnerable groups:

- Type of activity limitation by access to healthcare conducting a structural equation model (SEM) to investigate those predictors that are having an influence on both PWD and Non-PWD in accessing healthcare.
- Investigate the impact of the fee payable by health users to access healthcare: exemption from healthcare fees for PWD and other vulnerable groups was evidently not applied equally. Does this have an impact on PWD ability in accessing healthcare?
- Rural healthcare: lack of transport is a major barrier. A policy is needed on how to address it, either by bringing healthcare closer to the people or making more transport available. The research should investigate which one is the best option.
- More research is needed on the two contextual factors, personal and community, which represent the social and societal fabric of disablement.
- Research on the different types of disabilities that can direct policy interventions.
- As the dissertation presents results of only two regions, it would be beneficial to repeat it in other regions to provide a disaggregated picture of disability

occurrences, patterns of accessibility and barriers to accessibility in the country.

- In the broader understanding of disability research, there is a need to term the coin “Afrocentricity” (Owusu-Ansah, & Mji (2013) to compliment the qualitative methodology of disability research in an African context as it would be consistent with the African worldview (p. 2).
- This dissertation did not investigate digital health and how it could support PWD. Therefore, a future research topic in terms of digital health as argued by Lupton (2013) that the discourses of the digitally engaged patient suggest that ‘empowerment’ may be achieved by using sophisticated digital technologies for self-monitoring and self-care. People are expected and encouraged to develop routines to regularly assess physiological markers and become expertise in monitoring their own bodies that was once the preserve of healthcare providers (p. 260).

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## APPENDIX A: Washington Group Screening questions

	No	Some	A lot	Unable
Do you have difficulty seeing, even if wearing glasses?	1	2	3	4
Do you have difficulty hearing, even if using a hearing aid?	1	2	3	4
Do you have difficulty walking or climbing steps?	1	2	3	4
Do you have difficulty remembering or concentrating?	1	2	3	4
Do you have difficulty with self-care such as washing all over or dressing?	1	2	3	4
Using your usual (customary) language, do you have difficulty communicating for example understanding or being understood?	1	2	3	4

**APPENDIX B: Letter of Approval from MoHSS for the study**

9 - 0.0001



**REPUBLIC OF NAMIBIA**

**Ministry of Health and Social Services**

Private Bag 13198      Ministerial Building      Tel: (061) 2032562  
Windhoek      Harvey Street      Fax: (061) 272286  
Namibia      Windhoek      E-mail: hilmnanangombe@yahoo.com  
Enquiries: Ms. H. Nangombe Ref: 17/3/AP      Date: 11 March 2010  
**OFFICE OF THE PERMANENT SECRETARY**

Dr. Hina Mu Ashekele  
Director of the MRC  
University of Namibia  
Private Bag 13301  
Windhoek  
Namibia

Dear Dr. Mu Ashekele,

**Re: Enabling Universal and Equitable Applies for Vulnerable People in Resource Poor Setting in Africa**

1. Reference is made to your application to conduct the above-mentioned study.
2. The proposal has been evaluated and found to have merit.
3. Kindly be informed that approval has been granted under the following conditions:
  - 3.1 The data collected is only to be used for academic purpose;
  - 3.2 A quarterly progress report is to be submitted to the Ministry's Research Unit;
  - 3.3 Preliminary findings are to be submitted to the Ministry before the final report;
  - 3.4 Final report to be submitted upon completion of the study;
  - 3.5 Separate permission to be sought from the Ministry for the publication of the findings.

Yours sincerely,

  
**MR. K. KAHURE**  
PERMANENT SECRETARY



*"Health for All"*



<p><b>SUPERVISOR</b></p> <p>Name : _____ <input type="text"/> <input type="text"/></p> <p>Signature _____</p>	<p><b>INTERVIEW STATUS</b></p> <p>Complete <input type="checkbox"/>      Incomplete <input type="checkbox"/></p>	<p>Enumerator has to return to the household</p> <p>Yes <input type="checkbox"/>      No <input type="checkbox"/></p>	<p><b>CHECKED by the Supervisor</b></p> <p><input type="checkbox"/></p>
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<p><b>GPS INFORMATION</b></p>			
<p>Accuracy <input type="text"/> <input type="text"/> feet</p>			
<p>Latitude <input type="text"/> N/S</p>	<p>Degrees <input type="text"/> <input type="text"/> °</p>	<p>Minutes <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> ,</p>	
<p>Longitude <input type="text"/> E/W</p>	<p>Degrees <input type="text"/> <input type="text"/> °</p>	<p>Minutes <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> ,</p>	
<p><b>*Codes for REGION, CONSTITUENCY AND LOCALITY see separate sheet</b></p>			

**SECTION A: HOUSEHOLD COMPOSITION: FOR ALL PERSONS**

LINE NO	WHO ARE PERMANENT MEMBERS OF THIS HOUSEHOLD?	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	AGE	MARITAL STATUS	ILLNESS/INJURY
	List the first names and first letter of the surname of all persons in this household, starting with the head of the household	What is the relationship of (NAME) to the head of the household? *	Is (NAME) male or female? 1=Male 2=Female	How old was (NAME) at his/her last birthday? <b>Enter age in completed years</b> 98=Don't know	What is (NAME'S) marital status? * <b>Only 12 yrs and above</b>	Has (NAME) been seriously ill or injured during the past 6 months? If YES, what was the main illness or injury? *** <b>Enter "00" if NO</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
01		<input type="text" value="0"/> <input type="text" value="1"/>	M F 1 2	IN YEAR <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
02		<input type="text"/> <input type="text"/>	1 2	<input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
03		<input type="text"/> <input type="text"/>	1 2	<input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
04		<input type="text"/> <input type="text"/>	1 2	<input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
05		<input type="text"/> <input type="text"/>	1 2	<input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
06		<input type="text"/> <input type="text"/>	1 2	<input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
07		<input type="text"/> <input type="text"/>	1 2	<input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>
08		<input type="text"/> <input type="text"/>	1 2	<input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>

09			1	2			
10			1	2			

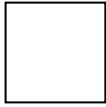
<b>*CODES FOR Q.3</b>	<b>**CODES FOR Q.6</b>	<b>***CODES FOR Q.7 MAIN ILLNESS or injury</b>
01 = Head 02 = Spouse/living in partner 03 = Son/Daughter (also step-) 04 = Son/Daughter-in-law 05 = Grandchild of head/spouse 06 = Parent/Parent-in-law 07 = Brother/Sister of head/spouse 08 = Co-wife 09 = Other relatives 10 = Domestic worker/ 11 = Other non-relatives 98 = Don't know	1 = Never married (and not cohabiting) 2 = Currently married 3 = Consensual union/Cohabiting 4 = Divorced/separated 5 = Widowed 8 = Don't know/refuse	01 = Cancer 02 = Malaria 03 = TB 04 = Bronchitis 05 = Cholera 06 = Severe diarrhoea 07 = Measles 08 = Pneumonia 09 = Heart disease 10 = High blood pressure 11 = Diabetes 12 = HIV/AIDS 13 = Malnutrition 14 = Mental illness 15 = High fever/meningitis 16 = Epilepsy 17 = Physical injury 18 = Asthma 19 = Other disease or injury (specify :) _____ - 98 = Don't know

**SECTION A: HOUSEHOLD COMPOSITION: FOR ALL PERSONS – cont.**  
**for household member 11 -20**

<b>LIN E NO.</b>	<b>WHO ARE PERMANENT MEMBERS OF THIS HOUSEHOLD?</b>	<b>RELATION SHIP TO HEAD OF HOUSEHOLD</b>	<b>SEX</b>	<b>AGE</b>	<b>MARITAL STATUS</b>	<b>ILLNESS/ INJURY</b>

	List the first names and first letter of the surname of all persons in this household, starting with the head of the household.	What is the relationship of (NAME) to the head of the household? *	Is (NAME) male or female? 1=Male 2=Female	How old was (NAME) at his/her last birthday?  <b>Enter age in completed years</b> 98=Don't know	What is (NAME'S) marital status? *  <b>Only 12 yrs and above</b>	Has (NAME) been seriously ill or injured during the past 6 months? If YES, what was the main illness or injury? ***  <b>Enter "00" if NO</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			M F	IN YEARS		
11		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
12		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
13		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
14		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
15		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
16		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
17		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
18		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
19		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
20		<input type="text"/>	1 2	<input type="text"/>	<input type="text"/>	<input type="text"/>

IF THERE ARE MORE THAN 20 PERSONS IN THE HOUSEHOLD, PLEASE USE A CONTINUATION SHEET AND TICK THE FOLLOWING





07										1	2
08										1	2
09										1	2
10										1	2

**SECTION B: DISABILITY SCREENING: FOR ALL PERSONS – cont. for household member 11 -20**

LINE NO.	Because of a HEALTH PROBLEM...								Mark X person w. an activity	Is (NAME) 5 yrs old or above?	
	Does (NAME) have difficulty seeing, even if wearing glasses?	Does (NAME) have difficulty hearing, even if using a hearing aid?	Does (NAME) have difficulty walking or climbing steps?	Does (NAME) have any difficulty remembering or concentrating?	Does (NAME) have difficulty with self-care such as washing all over or dressing?	Using the usual language, does (NAME) have difficulty communicating for example understanding or being understood?	Does (NAME) have a problem with nerves, sadness of depression?	Does (NAME) have problem performing tasks that are expected of people of their age?		YES → Q.15	NO → STOP
(1)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16A)	(16B)	
	1: NO 2: SOME 3: A LOT 4: UNABLE	1: NO 2: SOME 3: A LOT 4: UNABLE	1: NO 2: SOME 3: A LOT 4: UNABLE	1: NO 2: SOME 3: A LOT 4: UNABLE	1: NO 2: SOME 3: A LOT 4: UNABLE	1: NO 2: SOME 3: A LOT 4: UNABLE	1: NO 2: SOME 3: A LOT 4: UNABLE	1: NO 2: SOME 3: A LOT 4: UNABLE		YES	NO
11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2
12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2
13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2
14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2
15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16									1	2
17									1	2
18									1	2
19									1	2
20									1	2

**SECTION C: LEVEL OF EDUCATION AND EMPLOYMENT – AGED 5 YEARS OR ABOVE**

<b>LINE NO.</b>	<b>HIGHEST LEVEL COMPLETED*</b>	<b>LITERACY</b>	<b>WORK STATUS**</b>
Transfer the <b>LINE NO.</b> of persons as listed in Sect. A who are 5 yrs old or above	What is the highest standard form or level of education [NAME] completed?*	Can (NAME) read and write in any language?  1 = YES, I CAN READ AND WRITE 2 = YES, I CAN READ BUT NOT WRITE 3 = NO 8 = DON'T KNOW	What is the work status of (NAME)?**
<b>(1)</b>	<b>(15)</b>	<b>(16)</b>	<b>(17)</b>
0 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


<b>*CODES FOR Q.15 HIGHEST LEVEL OF EDUCATION COMPLETED</b>	<b>**CODE FOR Q.17 WORK STATUS</b>
0 = No formal education 1 = Less than primary school 2 = Primary school 3 = Secondary school/ High school (or equivalent) 4 = Tertiary level education 5 = Other, specify ..... 8 = Don't know	01 = Paid work 02 = Self-employed, such as own business or farming 03 = Non-paid work such as volunteer or charity 04 = Student/learner 05 = Keeping house/homemaker (unpaid) 06 = Retired 07 = Unemployed (health reasons) 08 = Unemployed (disability reason) 09 = Unemployed (other reasons) 10 = Others 98 = Don't know/Refuse

<b>LINE NO.</b>	<b>HIGHEST GRADE COMPLETED*</b>	<b>LITERACY</b>	<b>WORK STATUS**</b>
Transfer the <b>LINE NO.</b> of persons as listed in Sect. A who are 5 yrs old or above	What is the highest standard form or level of education [NAME] completed? *	Can (NAME) read and write in any language?  1 = YES 2 = NO 8 = DON'T KNOW	What is the work status of (NAME)?**
<b>(1)</b>	<b>(15)</b>	<b>(16)</b>	<b>(17)</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**SECTION C: LEVEL OF EDUCATION AND EMPLOYMENT – AGED 5 YEARS OR ABOVE – cont. 11 to 20**

<b>*CODES FOR Q.15 HIGHEST GRADE COMPLETED</b>	<b>*CODE FOR Q.17 WORK STATUS</b>
0 = No formal education 1 = Less than primary school	01 = Paid work 02 = Self-employed, such as own business or farming

2 = Primary school	03 = Non-paid work such as volunteer or charity
3 = Secondary school/ High school (or equivalent)	04 = Student/learner
4 = Tertiary level education	05 = Keeping house/homemaker (unpaid)
5 = Other	06 = Retired
8 = Don't know	07 = Unemployed (health reasons)
	08 = Unemployed (disability reason)
	09 = Unemployed (other reasons)
	10 = Others
	98 = Don't know/Refuse

**NOTE:** The following questions should be completed by the PRIMARY RESPONDENT/HEAD OF

**SECTION D: INCOME AND EXPENSES**

**Question (18):**

What is the PRIMARY source and SECONDARY source (if any) of income in your household?

<b>Income Category</b>	<b>Primary source [Circle one only]</b>	<b>Secondary source [Circle one only]</b>
a. Wage/Salary work	01	01
b. Remittances received	02	02
c. Cash cropping	03	03
d. Livestock sales	04	04
e. Subsistence farming/fishing	05	05
<b>f. Social cash transfer</b>	<b>06</b>	<b>06</b>
i) Poverty cash transfer	07	07
ii) Disability grant	08	08
iii) Child support grant	09	09
iv) Old age pension	10	10
v) Foster care grant	11	11
vi) Other (specify)	12	12
g. Formal business (registered)	13	13
h. Informal business (non-registered - see below*)	14	14
i. Private insurance/pension	15	15
j. Workman's Compensation	16	16
<b>k. Rent</b>	<b>17</b>	<b>17</b>
l. Other (specify)	18	18
m. No income from any source	19	
n. Not stated/Refused	20	

\*This includes payments received for handicrafts, knitting, sewing, repairing shoes, repairing punctures, for providing services (e.g. making thatch roofs for huts, cutting reeds etc.). Also includes income from selling e.g. charcoal, local gin, local beer etc.

**Question (19):**

Are the primary sources of income stable and regular?

Yes	No
1	2



### SECTION E: OWNERSHIP

**Question (20):**

Do you or anyone in your household own any of the following (in working condition)?

	Yes	No
a. Radio	1	2
b. Hi-fi/music stereo	1	2
c. Internet access in the home	1	2
d. DVD/VHS player	1	2
e. Cell phone/mobile	1	2
f. Telephone in the house	1	2
g. Iron	1	2
h. Fan	1	2
i. Heater	1	2
j. Air conditioner	1	2
k. Stove with gas/electric	1	2
l. Stove with paraffin	1	2
m. Sofa	1	2
n. Television	1	2

	Yes	No
o. Refrigerator	1	2
p. Microwave	1	2
q. Electricity	1	2
r. Solar energy system	1	2
s. Electrical generator	1	2
t. Personal computer	1	2
u. Bicycle	1	2
v. Motorcycle/quad bike	1	2
w. Dishwasher	1	2
x. Bed(s)	1	2
y. Livestock (cattle etc.)	1	2
z. Washing machine	1	2
aa. Satellite dish	1	2
bb. Car	1	2

### SECTION F: POPULATION DISPLACEMENT

**Question (21):**

Have you and your family ever been forced or obliged to leave your home or place of habitual residence?

Yes	No
1	2

→ If the answer is NO, skip to Question 23

**Question (22):**

Could you tell me the main reason that you have moved from your home? [Circle one only]

Main reason	Code
Armed conflict	1
General violence	2

Violations of human rights (political persecution)	3
Natural or human-made disasters	4
Economic reasons (unemployment, services, education, health care, etc.)	5
Farm eviction	6
Other, specify _____	7

**Question (23):**

What language do you speak most often at home? [*Circle one only*]

Language group	Code
Afrikaans	1
Damara>Nama	2
English	3
Oshiwambo	4
Otjiherero	5
Rukwangali	6
San languages	7
Setswana	8
Silozi	9
Other, specify _____	10

**Question (24):**

Do you feel that your language group is a minority?

Yes	No
1	2

**SECTION G: USE OF HEALTH FACILITY**

**Question (25):**

Do members of your household generally use the .....(NAME OF FACILITY):

Frequency	Code
Yes, always	1
Yes, sometimes	2
Use both health care facility plus others	3

→ *If the answer is 'YES, always', end the interview.*

No, but use other health care facilities	4
Never use any health care facilities	5

**Question (26):**

What are the main reasons why you *never* use this facility, or only use it *sometimes*, or why you use *other* facilities?

Main reasons	Code	Main reasons	Code
a. Cost	01	l. There are no services	12
b. No transport	02	m. Language barrier	13
c. Discrimination by health providers	03	n. Distance from home to clinic	14
d. Attitudes of health care providers	04	o. Physical accessibility of the facility	15
e. Had a bad incident and so don't go anymore	05	p. Not satisfied with outcomes of previous experience	16
f. The gender of health care provider	06	q. Opening times are not suitable	17
g. The type (professional category) of health care provider	07	r. Not sick enough or not sick (do not need)	18
h. Old age	08	s. Waiting times too long	19
i. Disability	09	t. Religious belief	20
j. Crime, danger	10	u. No knowledge about the health facility	21
k. Lack of time due to domestic or other responsibilities	11	v. Other, specify .....	22

**THANK YOU VERY MUCH FOR YOUR TIME!**

IDENTIFICATION OF INDIVIDUAL	CODE
NAME AND CODE OF REGION* _____ NAME OF CONSTITUENCY* _____ NAME OF LOCALITY* _____ _____ ENUMERATION AREA NUMBER ..... ..... LOCATION      1 = urban    2 = rural HOUSEHOLD NUMBER/ID ..... ..... NAME OF HOUSEHOLD HEAD _____	<div style="display: flex; justify-content: flex-end; gap: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="display: flex; justify-content: flex-end; gap: 5px; margin-top: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="display: flex; justify-content: flex-end; gap: 5px; margin-top: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="display: flex; justify-content: flex-end; gap: 5px; margin-top: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="display: flex; justify-content: flex-end; gap: 5px; margin-top: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div>
<b>DETAIL OF INDIVIDUAL</b> NAME _____ DISAB <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> STATUS FROM <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> AGE _____ LINE NUMBER IN HOUSEHOLD LISTING _____ <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> THE HOUSEHOLD <span style="float: right;"><input style="width: 20px; height: 20px;" type="text"/> Y <input style="width: 20px; height: 20px;" type="text"/> N</span> QUESTIONNAIRE	

<b>IS THIS A FACE-TO-FACE INTERVIEW WITH THE PERSON?</b> [Do not read out. Code by observation]  1 = YES (i.e. interview directly with the person) 2 = NO (i.e. someone else is reporting on behalf of the person) 3 = BOTH (i.e. someone else is reporting or interpreting together with the person)  If NO or BOTH, who is the person reporting?  Line number of person as proxy	<div style="display: flex; justify-content: flex-end; gap: 5px; margin-top: 20px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="display: flex; justify-content: flex-end; gap: 5px; margin-top: 20px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div>
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<b>TO BE COMPLETED BY THE INTERVIEWER</b>	<b>Date of interview</b>
Time interview start <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Day <input type="text"/> <input type="text"/>
Name of interviewer: _____ <input type="text"/> <input type="text"/>	Month <input type="text"/> <input type="text"/>
Comments: _____	Year <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Signature _____	

<b>SUPERVISOR</b>	<b>INTERVIEW STATUS</b>	<b>Enumerator has to return to the household</b>	<b>CHECKED by the Supervisor</b>
Name : _____ <input type="text"/> <input type="text"/>	Complete <input type="checkbox"/>	Yes <input type="checkbox"/>	<input type="checkbox"/>
Signature _____	Incomplete <input type="checkbox"/>	No <input type="checkbox"/>	
<b>*Codes for REGION, CONSTITUENCY AND LOCALITY see separate sheet</b>			

**SECTION A: DIFFICULTIES AS A RESULT OF RESULT OF A HEALTH PROBLEM OR IMPAIRMENT**

**Question (1):**  
 The next questions ask about difficulties you may have doing certain activities BECAUSE OF A HEALTH PROBLEM OR IMPAIRMENT: [Circle only *one* per row]

	No	Some	A lot	Unable
a) Do you have difficulty seeing, even if wearing glasses?	1	2	3	4
b) Do you have difficulty hearing, even if using a hearing aid?	1	2	3	4
c) Do you have difficulty walking or climbing steps?	1	2	3	4
d) Do you have difficulty remembering or concentrating?	1	2	3	4

e)	Do you have difficulty with self-care such as washing all over or dressing?	1	2	3	4
f)	Using your usual (customary) language, do you have difficulty communicating for example understanding or being understood?	1	2	3	4
g)	Do you have a problem with nerves, sadness or depression?	1	2	3	4
h)	Do you have a problem performing tasks that are expected of people of your age?	1	2	3	4

**Question (2):**

In the last 30 days, how much difficulty did you have doing the following activities BECAUSE OF A HEALTH PROBLEM OR IMPAIRMENT? [*Circle only one per row*]

	None	Mild	Moderate	Severe	Extreme or cannot do
a) Standing for long periods such as 30 minutes?	1	2	3	4	5
b) Taking care of your household responsibilities?	1	2	3	4	5
c) Learning a new task, for example, learning how to get to a new place?	1	2	3	4	5
d) Joining in community activities (for example, festivities, religious or other activities) in the same way as anyone else can?	1	2	3	4	5

***If all of Questions 2a – 2d scored “1” (none) skip Question 3 and go straight to Section B***

**Question (3):**

In the last 30 days, how much difficulty did you have doing the following activities BECAUSE OF A HEALTH PROBLEM OR IMPAIRMENT? [Circle only *one* per row]

	None	Mild	Moderate	Severe	Extreme or cannot do
a) Concentrating on doing something for ten minutes?	1	2	3	4	5
b) Walking a long distance such as a kilometer [or equivalent]?	1	2	3	4	5
c) Washing your body?	1	2	3	4	5
d) Getting dressed?	1	2	3	4	5
e) Dealing with people you do not know?	1	2	3	4	5
f) Maintaining a friendship?	1	2	3	4	5
g) Your day to day work?	1	2	3	4	5
h) Concentrating on doing something for ten minutes?	1	2	3	4	5

<b>SECTION B: PAIN</b>
------------------------

**Question (4):** Do you have frequent pain?

Yes	1
No	2

**Question (5):**

In the past 3 months how often did you have pain? [Circle *one* only]

Never	1	<i>Skip → Go to Q: 17</i>
Sometimes	2	
Most days	3	
Every day	4	

**Question (6):**

Thinking about the last time you had pain, how much pain did you have? [Circle *one* only]

A little	1
A lot	2
Somewhere in between a little and a lot	3



**QUESTIONS FOR INDIVIDUALS WITH LIMB AMPUTATIONS ONLY**

**Question (7):**

Do you experience **residual limb (stump) pain** (pain in the remaining part of your amputated limb)?

No	1	<i>Skip → Go to Q: 12</i>
Yes	2	

**Question (8):**

During the last week, how many times have you experienced stump pain?

**Question (9):**

How long, on average, did each episode of pain last?

**Question (10):**

Please indicate the level of stump pain experienced during the last week on the scale below: [*Circle one only*]

Excruciating	1
Horrible	2
Distressing	3
Discomforting	4
Mild	5

**Question (11):**

How much did stump pain interfere with your normal lifestyle (e.g. work, social and family activities?)

during the last week? [*Circle one only*]

A lot	1
Quite a bit	2
Moderately	3
A little bit	4
Not at all	5

**Question (12):**

Do you experience **phantom limb pain** (pain in the part of the limb which was amputated)?

No	1
Yes	2

*Skip → Go to Q:  
17*

**Question (13):**

During the last week, how many times have you experienced phantom limb pain?

**Question (14):**

How long, on average, did each episode of pain last?  (minutes)

*[If zero, go to Q 17]*

**Question (15):**

Please indicate the level of phantom limb pain experienced during the last week on the scale below:

[Circle **one** only]

Excruciating	1
Horrible	2
Distressing	3
Discomforting	4
Mild	5

**Question (16):**

How much did phantom limb pain interfere with your normal lifestyle (e.g. work, social and family activities?)

during the last week? [Circle **one** only]

A lot	1
Quite a bit	2
Moderately	3
A little bit	4
Not at all	5

**SECTION C: FATIGUE**

**Question (17):**

In the past 3 months, how often did you feel very tired or exhausted? [Circle **one** only]

Never	1
Some days	2
Most days	3
Every day	4

*Skip → Go to Q: 20*

**Question (18):**

Thinking about the last time you felt tired or exhausted, how long did it last?

[Circle **one** only]

Some hours	1
Some days	2
Most days	3
Every day	4

**Question (19):**

Thinking about the last time you felt very tired or exhausted, how would you describe the level of tiredness?

A little	1
A lot	2
Somewhere in between a little and a lot	3

**SECTION D: HEALTH CONDITIONS**

**Question (20):**

Tell me the health conditions that you have.

*[Show card, read out if the respondent is not able to read. In case of other illnesses, write at "Other"].*

*[Circle one for each row]*

Condition/impairment	Yes	No
a) Heart problems	1	2
b) Lung problems	1	2
c) Mental health problems	1	2
d) Joint problems	1	2
e) Malaria	1	2
f) Diabetes / Sugar disease	1	2
g) Blood pressure	1	2
h) Cancer	1	2
i) Albinism or disfigurement	1	2
j) Intellectual disability	1	2
k) Epilepsy / Fits / Seizures	1	2
l) HIV / AIDS	1	2
m) Measles	1	2
n) Diarrhoea / cholera	1	2

Condition/impairment	Yes	No
o) Foetal alcohol syndrome	1	2
p) Drug related problems	1	2
q) Alcoholism, drug abuse	1	2
r) Malnutrition	1	2
s) Stroke	1	2
t) Pregnancy problems	1	2
u) Birth problems	1	2
v) None	1	2
	1	2
w) Other 1 _____	1	2
x) Other 2 _____	1	2
y) Other 3 _____	1	2
z) Other 4 _____	1	2

**Question (20b)**

I would like to ask you how your health has been in general.

*[Circle one for each row]*

	Yes	No
a) Able to concentrate?	1	2
b) Have been worried?	1	2
c) Feeling useful?	1	2

	Yes	No
g) Enjoy normal activities?	1	2
h) Able to face problems?	1	2
i) Felt unhappy or depressed?	1	2

<b>d)</b> Able to make decisions?	1	2
<b>e)</b> Felt under strain?	1	2
<b>f)</b> Able to overcome difficulties?	1	2

<b>j)</b> Losing confidence?	1	2
<b>k)</b> Thinking of yourself as a worthless person?	1	2
<b>l)</b> Feeling happy?	1	2

Participation restriction items	Score
<b>a)</b> shopping (getting goods and services)	
<b>b)</b> preparing meals (cooking)	
<b>c)</b> doing housework (washing/cleaning)	
<b>d)</b> taking care of personal objects (mending/ repairing)	
<b>e)</b> taking care of others	
<b>f)</b> making friends and maintaining friendships	
<b>g)</b> interacting with persons in authority (officials, village chiefs)	
<b>h)</b> interacting with strangers	
<b>i)</b> creating and maintaining family relationships	

Participation restriction items	Score
<b>j)</b> making and maintaining intimate relationships	
<b>k)</b> going to school and studying (education)	
<b>l)</b> getting and keeping a job (work & employment)	
<b>m)</b> handling income and payments (economic life)	
<b>n)</b> taking part in clubs/organisations (community life)	
<b>o)</b> taking part in recreation/leisure (sports/play/crafts/hobbies/arts/culture)	
<b>p)</b> taking part in religious/spiritual activities	
<b>q)</b> taking part in political life and citizenship	

## SECTION E: PARTICIPATION RESTRICTION

For the following questions, think about the environment in which you live, including the use of assistive devices or personal support:

**Question (21):**

Do you have any difficulty doing the following? *[Read out the options and code using the codes below]*

<b>Coding</b>
0 = No problem
1 = Mild problem
2 = Moderate problem
3 = Severe problem
4 = Complete problem (unable to perform)
8 = Not specified/not applicable

**SECTION F: ASSISTIVE DEVICES**

*Ask either direct or proxy respondents: please remember the information must be about the person with disability.*

**Question (22):**

Do you use an assistive device? [*For examples, see 23 below*]

Yes	1	<b>Go to Q: 23</b>
No	2	<b>Go to Q: 33</b>

**Question (23):**

Please specify which assistive devices you usually use [*Read out; circle one answer for each row*].

Device	Device category	Examples:	Yes	No	Not applicable (don't need it)
1	<b>Information</b>	Hearing aids	1	2	3
2	<b>Visual aid</b>	Eye glasses, magnifying glass, telescopic lenses/glasses, enlarge print, Braille	1	2	3
3	<b>Communication</b>	Sign language interpreter, fax, portable writer, computer, picture boards, cards	1	2	3
4	<b>Personal mobility</b>	Crutches, walking sticks, white cane, guide, standing frame	1	2	3
	<b>Wheeled mobility</b>	Wheelchairs	1	2	3
	<b>Orthoses and prostheses</b>	Orthoses and prostheses	1	2	3
5	<b>Household items</b>	Flashing light on doorbell, amplified telephone, vibrating alarm clock	1	2	3
6	<b>Personal care &amp; protection</b>	Special fasteners, bath & shower seats, toilet seat raiser, commode chairs, safety rails, eating aids	1	2	3
7	<b>For handling products &amp; goods</b>	Gripping tongs, aids for opening containers, tools for gardening	1	2	3

8	<b>Computer assistive technology</b>	Keyboard for the blind, screen reader, synthetic speech	1	2	3
9	<b>Other</b>	Specify:	1	2	3

**Question (24):**

Is the assistive device(s) mentioned above in good working condition/order?

*[If more than one device in one category, choose **most important** device - List device by **name**]*

Name of Device:	Good working condition?	CODING
a.		1 = Yes
b.		2 = No
c.		8 = Don't know

**Question (25):**

Think about how much you used your assistive device over the past two weeks. On an average day, how many hours did you use it? [*Circle one only*]

None	1
Less than 1 hour	2
1-4 hours	3
5-8 hours	4
More than 8 hours	5

**Question (26):**

Does your device help you as intended? [*Circle one only*]

Helped not at all	1
Helped slightly	2
Helped moderately	3
Helped quite a lot	4
Helped very much	5

**Question (27):**

How much difficulty do you still have even if you use the assistive device? [*Circle one only*]

Very much difficulty	1
Quite a lot of difficulty	2
Moderate difficulty	3
Slight difficulty	4
No difficulty	5

**Question (28):**

Has obtaining and using the device been worth the trouble? [*Circle one only*]

Not at all worth it	1
Slightly worth it	2
Moderately worth it	3
Quite a lot worth it	4
Very much worth it	5

**Question (29):**

Considering everything, how much has your use of assistive devices improved your quality of life? [*Circle one only*]

Worse	1
No change	2

Slightly better	3
Quite a lot better	4
Much better	5

**Question (30):**

Where did you get the assistive device(s)? *[Read out; record only **one** answer for each line]*

*[If more than one device in one category, choose **most important** device - List device by **name**]*

Name of Device:	Where did you get the device?*	Can you give an estimate of the cost of the device?
a.		
b.		
c.		

*CODING
1 = Private hospital
2 = Government health service
3 = Other government service (not health)
4 = NGO
5 = Other
8 = Don't know

**Question (31):**

Were you given any information or help on how to use your device(s)? *[Record only **one** answer for each line]*

Name of Device:	Information or help
a.	
b.	
c.	

CODING
1 = Complete/full information
2 = Some information
3 = No information
8 = Don't know/ Can't remember

**Question (32):** Who, if any, maintains or repairs your assistive device(s)? *[Do not read out: record only **one** answer for each line]*

*[If more than one device in one category, choose **most important** device - List device by **name**]*

Name of Device:	Maintenance /Repair
a.	
b.	
c.	

CODING
1 = Self
2 = Government
3 = Family
4 = Employer
5 = NGO
6 = Other (specify)
7 = Not maintained

8 = Cannot afford to  
maintain or repair it  
98 = Don't know

**SECTION G: INVENTORY OF ENVIRONMENTAL FACTORS**

**Question (33):**

First, please tell me how often each of the following has been a barrier to your own participation in the activities that matter to you. Think about the past year, and tell me whether each item on the list below has been a problem **daily, weekly, monthly, less than monthly, or never.**

*[Please CIRCLE only one]*

	1. Daily	2. Weekly	3. Monthly	4. Less than monthly	5. Never	8. Not applicable	2. Big problem	1. Little problem
a) In the past 12 months, how often has the availability/accessibility of transportation been a problem for you?	1	2	3	4	5	8		
<b>a1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
b) In the past 12 months, how often has the natural environment – temperature, terrain, climate – made it difficult to do what you want or need to do?	1	2	3	4	5	8		
<b>b1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
c) In the past 12 months, how often have other aspects of your surroundings – lighting, noise, crowds, etc – made it difficult to do what you want or need to do?	1	2	3	4	5	8		
<b>c1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
d) In the past 12 months, how often has the information you wanted or needed not been available in a format you can use or understand?	1	2	3	4	5	8		
<b>d1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
e) In the past 12 months, how often has the availability of health care services and medical care been a problem for you?	1	2	3	4	5	8		
<b>e1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
f) In the past 12 months, how often did you need someone else’s help in your home and could not get it easily?	1	2	3	4	5	8		
<b>f1)</b> When this problem occurs has it been a big problem or a little problem?							1	2

	1. Daily	2. Weekly	3. Monthly	4. Less than . . .	5. Never	8. Not applicable	2. Big problem	1. Little problem
<b>g)</b> In the past 12 months, how often did you need someone else's help at school or work and could not get it easily?	1	2	3	4	5	8		
<b>g1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
<b>h)</b> In the past 12 months, how often have other people's attitudes toward you been a problem at home?	1	2	3	4	5	8		
<b>h1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
<b>i)</b> In the past 12 months, how often have other people's attitudes toward you been a problem at school or work?	1	2	3	4	5	8		
<b>i1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
<b>j)</b> In the past 12 months, how often did you experience prejudice or discrimination?	1	2	3	4	5	8		
<b>j1)</b> When this problem occurs has it been a big problem or a little problem?							1	2

**Question (34):**

To what extent does your usual environment make it easier for you to perform activities of daily living? [Circle *one* only]

**Makes it easier for you:**

Environmental factor	Yes	No	Don't know
<b>a)</b> Positive attitudes towards you of others	1	2	8
<b>b)</b> Support from others when needed	1	2	8
<b>c)</b> Accessibility of buildings	1	2	8
<b>d)</b> Easy terrain (pathways, roads etc.)	1	2	8
<b>e)</b> Good climate and other conditions (heat, cold, rain, noise, pollution, no crowding, etc.)	1	2	8
<b>f)</b> Accessibility of transport	1	2	8
<b>g)</b> Service provision	1	2	8
<b>h)</b> Accessible information	1	2	8
<b>i)</b> Inclusion in society by all	1	2	8

**SECTION H: HEALTH SERVICE AWARENESS**

I am going to ask you about different services:

**Question (35):**

Which services, if any, are you *aware of* and have ever *needed/received*?

[Read out; and enter the appropriate code for each column of each row].

	Aware of service <b>1=Yes</b> <b>2=No</b>	Needed service <b>1=Yes</b> <b>2=No</b>	Received service <b>1=Yes</b> <b>2=No</b>
	(1)	(2)	(3)
<b>a) Medical rehabilitation:</b>			
<b>aa)</b> Physiotherapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ab)</b> Occupational therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ac)</b> Speech therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ad)</b> Hearing therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ae)</b> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>b) Assistive devices service:</b>			
<b>ba)</b> Sign language interpreter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>bb)</b> Wheelchair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>bc)</b> Hearing aids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>bd)</b> Visual aids, Braille etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>be)</b> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>c) Primary health care clinic/centre</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>d) Secondary health care (e.g. hospital)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>e) Mobile health clinic</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>f) Home based care</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>g) Counselling</b>			
<b>ga)</b> Psychologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>gb)</b> Psychiatrist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>gc)</b> Social worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>gd)</b> School counsellor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ge)</b> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>h) Health information</b>			
<b>ha)</b> Media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>hb)</b> Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>hc)</b> Clinics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>hd)</b> Hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>he)</b> Counselling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>hf)</b> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>i) Traditional healer/faith healer</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION I: HEALTH CARE UTILISATION**

I would like to know about your recent experiences with obtaining health care from health care workers, hospitals, clinics and the health care system. I want to know if you needed health care recently, and if so, why you needed health care and what type of health care provider you received care from.

**Question (36):**

When was the last time that you needed health care?

Years ago	
Months ago	
Weeks ago	
Days ago	
Never	97
Don't know	98

**Question (37):**

The last time you needed health care, did you get health care?

Yes	1
No	2
Don't know/ Don't remember	8

*Skip → Go to Q:  
40*

**Question (38):** Which reason(s) best explains why you did not get health care the last time you needed it?

*[Mark all that the respondent indicates, but do not read out items]*

Reasons	Code
a) No one to accompany me	1
b) Cost	2
c) No transport	3
d) Discrimination	4
e) Attitudes of health care providers	5
f) Had a bad incident and so don't go anymore	6
g) The gender of health care provider	7
h) The type (professional category) of health care provider	8
i) Old age	9
j) Disability	10
k) Crime, danger	11

Reasons	Code
n) Did not want family to know I am ill	14
o) There are no services	15
p) Language barrier	16
q) Distance from home to clinic	17
r) Physical accessibility of the facility	18
s) Not satisfied with outcomes of previous experience	19
t) Traditional (culture)	20
u) Opening times are not suitable	21
v) Not sick enough or not sick (do not need)	22
w) Waiting times too long	23
x) Religious belief	24

<b>l)</b> Lack of time due to domestic or other responsibilities	12
<b>m)</b> Lack of medication	13

<b>y)</b> No knowledge about the health facility	25
<b>z)</b> Other, specify	26

**Question (39):**

Thinking about health care you usually need, where do you normally go? [*Circle one only*]

Private doctor's office	01
Private clinic or health care facility	02
Private hospital	03
Public clinic or health care facility	04
Public hospital	05
Charity or church run clinic	06
Charity or church run hospital	07
Traditional healer [ <i>use local term</i> ]	08
Faith healer [ <i>use local term</i> ]	09
Pharmacy or dispensary	10
Have not needed any health care in the last 3 years	11
Other (specify)	12

**Question (40):**

Now, let us think back to the last time you needed health care. What was the reason you needed health care the last time, even if you did not get it?

	<i>Office use</i>

**Question (41):**

The last time you used health care, how did you get there? [*Circle one only*]

Private vehicle (car or motorcycle)	1
Public transportation	2
Taxi/cab	3
Bicycle	4
Walk	5
Other (specified)	6
Never used health care	7
Don't know	8

**Question (42):**

About how long did it take you to get there?

Hours	
Minutes	
Don't know	98

**Question (43):**

Once you got to the health care facility the last time you used health care, how long did you wait?

Hours	
Minutes	
Don't know	98

	Yes	No	Don't know/ Don't remember
<b>Question (44):</b> The last time you went to the health facility, did you go with someone to assist you?	1	2	8
<b>Question (45):</b> Do you usually need someone to come with to assist you whenever you come to the health facility?	1	2	8

**Question (46):**

Considering your own experience, tell me whether the following make it difficult for you to get health care:

*[Read out the alternatives, and show card. Circle only one code for each row]*

	No problem	Small problem	Moderate problem	Serious problem	Insurmountable problem
<b>a)</b> Lack of transport from home to health facility	1	2	3	4	5
<b>b)</b> No services available	1	2	3	4	5
<b>c)</b> Physical access to facility	1	2	3	4	5
<b>d)</b> Because of faith/belief	1	2	3	4	5
<b>e)</b> Negative attitudes among health workers	1	2	3	4	5
<b>f)</b> There is no accommodation at the health facility	1	2	3	4	5
<b>g)</b> Communication with health workers	1	2	3	4	5
<b>h)</b> Standard of the health facility	1	2	3	4	5
<b>i)</b> The journey to the health care is dangerous	1	2	3	4	5
<b>j)</b> You did not know where to go	1	2	3	4	5

<b>k)</b> Could not afford the cost of the visit	1	2	3	4	5
<b>l)</b> Don't have the necessary document (health card/passport)	1	2	3	4	5
<b>m)</b> You thought you were not sick enough	1	2	3	4	5
<b>n)</b> You tried but were denied health care	1	2	3	4	5
<b>o)</b> The health care provider's drugs or equipment were inadequate	1	2	3	4	5
<b>p)</b> Could not take time off work or had other commitments	1	2	3	4	5
<b>q)</b> You were previously badly treated	1	2	3	4	5
<b>r)</b> Could not afford the cost of transport	1	2	3	4	5
<b>s)</b> Other (specify)	1	2	3	4	5

**Question (47):**

Considering your experience receiving or visiting health care providers, how would you rate the following?

*[Circle one only code for each row]*

	Very good	Good	Moderate	Bad	Very bad
<b>a)</b> The amount of time you waited before being attended to.	1	2	3	4	5
<b>b)</b> Your experience of being treated respectfully.	1	2	3	4	5
<b>c)</b> How clearly health care providers explained things to you.	1	2	3	4	5
<b>d)</b> Your experience of being involved in making decisions for your treatment.	1	2	3	4	5
<b>e)</b> The way the health services ensured that you could talk privately to providers.	1	2	3	4	5
<b>f)</b> The ease with which you could see a health care provider you were happy with.	1	2	3	4	5
<b>g)</b> The cleanliness in the health facility.	1	2	3	4	5

**Question (48):**

Overall, how satisfied are you with the provision of health care in your area?

*[Circle one only]*

Very satisfied	1
Satisfied	2
Neither satisfied nor dissatisfied	3
Dissatisfied	4
Very dissatisfied	5

**Question (49):**

Overall, how satisfied are you with the personnel in your area or those that are accessible to you? [*Circle one only*]

Very satisfied	1
Satisfied	2
Neither satisfied nor dissatisfied	3
Dissatisfied	4
Very dissatisfied	5

**Question (50):**

Has a health worker visited you at home during the last 3 years?

Yes	1	
No	2	<i>Skip → Go to Q: 52</i>

**Question (51):**

If yes, how many times? [*Circle one only*]

Once	1
A few times	2
Many times	3

**Question (52):**

Have you ever accessed the following services? [*Circle ALL that apply or ONLY 'Not applicable' (8) if none of the services were accessed*]

a) Malaria prevention (bed nets, etc.)	1
b) HIV/AIDS counselling	2
c) HIV/AIDS testing	3
d) Immunisation	4
e) Not applicable	8

**SECTION J: ATTITUDES TOWARDS HEALTH SERVICES**

**Question (53):**

Please tell me how much you agree with the following statements. *[Circle only one code for each row]*

	<b>Strongly Disagree</b>	<b>Slightly Disagree</b>	<b>Slightly Agree</b>	<b>Strongly Agree</b>
<b>a)</b> The health personnel at the <u>local clinic/health center</u> have appropriate competence to help with your health problems	1	2	3	4
<b>b)</b> The health personnel at <u>the hospital</u> have appropriate competence to help with your health problems	1	2	3	4
<b>c)</b> <u>The traditional healer</u> have appropriate competence to help with your health problems	1	2	3	4
<b>d)</b> You trust the treatment provided by health personnel at the hospital	1	2	3	4
<b>e)</b> You trust the treatment provided by health personnel at the clinic/health center	1	2	3	4
<b>f)</b> You trust the treatment provided by the traditional healer to be effective	1	2	3	4
<b>g)</b> People are received in a positive manner in the clinic/health center	1	2	3	4
<b>h)</b> People are received in a positive manner at the hospital	1	2	3	4
<b>i)</b> People are received in a positive manner at the traditional healer	1	2	3	4

**Question (54):**

Thinking about your general physical health (things like: sickness, illness, injury, disease etc.) – on a scale from 1 (poor) to 4 (very good) – How would you describe your overall physical health today? *[Circle one only]*

Poor	1
Not very good	2
Good	3
Very good	4
Don't know	8

**Question (55)**

Thinking about your general mental health (things like: anxiety, depression, fear, fatigue, tiredness, hopelessness etc.) – on a scale from 1 (poor) to 4 (very good) – How would you describe your overall mental health today? [*Circle one only*]

Poor	1
Not very good	2
Good	3
Very good	4
Don't know	8

**Question (56):**

Do you consider yourself to have a disability?

Yes	1
No	2

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**We may want to follow up with you on these issues, would you be willing to participate in another interview at a later stage?**

**If no – don't record name and phone number**

**If yes, record full name and phone number:**

**Name:** \_\_\_\_\_

**Phone number:** \_\_\_\_\_

**Thank you very much for your time!**



<p><b>TO BE COMPLETED BY THE INTERVIEWER</b></p> <p>Time interview started <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Time <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> d</p> <p>Name of interviewer: _____ <input type="text"/> <input type="text"/></p> <p>Comments:</p> <p>Signature _____</p>	<p><b>Date of interview</b></p> <p>Day <input type="text"/> <input type="text"/></p> <p>Month <input type="text"/> <input type="text"/></p> <p>Year <input type="text"/> 2 <input type="text"/> 0 <input type="text"/> 1 <input type="text"/> 1</p>
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<p><b>SUPERVISOR</b></p> <p>Name : _____ <input type="text"/> <input type="text"/></p> <p>Signature _____</p>	<p><b>INTERVIEW STATUS</b></p> <p>Complete <input type="checkbox"/> Incomplete <input type="checkbox"/></p>	<p>Enumerator has to return to the household</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p><b>CHECKED by the Supervisor</b></p> <p><input type="checkbox"/></p>
<p><b>*Codes for REGION, CONSTITUENCY AND LOCALITY see separate sheet</b></p>			

**SECTION A: DIFFICULTIES AS A RESULT OF RESULT OF A HEALTH PROBLEM**

**Question (1):**  
 The next questions ask about difficulties you may have doing certain activities BECAUSE OF A HEALTH PROBLEM: [Circle only **one** per row]

	No	Some	A lot	Unable
a) Do you have difficulty seeing, even if wearing glasses?	1	2	3	4
b) Do you have difficulty hearing, even if using a hearing aid?	1	2	3	4
c) Do you have difficulty walking or climbing steps?	1	2	3	4
d) Do you have difficulty remembering or concentrating?	1	2	3	4

e)	Do you have difficulty with self-care such as washing all over or dressing?	1	2	3	4
f)	Using your usual (customary) language, do you have difficulty communicating for example understanding or being understood?	1	2	3	4
g)	Do you have a problem with nerves, sadness or depression?	1	2	3	4
h)	Do you have a problem performing tasks that are expected of people of your age?	1	2	3	4

**Question (2):**

In the last 30 days, how much difficulty did you have doing the following activities BECAUSE OF A HEALTH PROBLEM? [*Circle only one per row*]

	None	Mild	Moderate	Severe	Extreme or cannot do
a) Standing for long periods such as 30 minutes?	1	2	3	4	5
b) Taking care of your household responsibilities?	1	2	3	4	5
c) Learning a new task, for example, learning how to get to a new place?	1	2	3	4	5
d) How much of a problem did you have joining in community activities (for example, festivities, religious or other activities) in the same way as anyone else can?	1	2	3	4	5

*If all of Questions 2a – 2d scored “1” (none) skip Question 3 and go straight to Section C*

**Question (3):**

In the last 30 days, how much difficulty did you have doing the following activities  
BECAUSE OF A HEALTH PROBLEM? [*Circle only one per row*]

	None	Mild	Moderate	Severe	Extreme or cannot do
a) Concentrating on doing something for ten minutes?	1	2	3	4	5
b) Walking a long distance such as a kilometer [or equivalent]?	1	2	3	4	5
c) Washing your body?	1	2	3	4	5
d) Getting dressed?	1	2	3	4	5
e) Dealing with people you do not know?	1	2	3	4	5
f) Maintaining a friendship?	1	2	3	4	5
g) Your day to day work?	1	2	3	4	5

<b>SECTION C: FATIGUE</b>
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**Question (17):**

In the past 3 months, how often did you feel very tired or exhausted? [*Circle one only*]

Never	1
Some days	2
Most days	3
Every day	4

*Skip → Go to Q: 20*

**Question (18):**

Thinking about the last time you felt tired or exhausted, how long did it last?  
[*Circle one only*]

Some hours	1
Some days	2
Most days	3
Every day	4

**Question (19):**

Thinking about the last time you felt very tired or exhausted, how would you describe the level of tiredness?

A little	1
----------	---

A lot	2
Somewhere in between a little and a lot	3

**SECTION D: HEALTH CONDITIONS**

**Question (20):**

Tell me the health conditions that you have.

*[Show card, read out if the respondent is not able to read. In case of other illnesses, write at "Other"].*

*[Circle one for each row]*

Condition/impairment	Yes	No
a) Heart problems	1	2
b) Lung problems	1	2
c) Mental health problems	1	2
d) Joint problems	1	2
e) Malaria	1	2
f) Diabetes / Sugar disease	1	2
g) Blood pressure	1	2
h) Cancer	1	2
i) Albinism or disfigurement	1	2
j) Intellectual disability	1	2
k) Epilepsy / Fits / Seizures	1	2
l) HIV / AIDS	1	2
m) Measles	1	2
n) Diarrhoea / cholera	1	2

Condition/impairment	Yes	No
o) Foetal alcohol syndrome	1	2
p) Drug related problems	1	2
q) Alcoholism, drug abuse	1	2
r) Malnutrition	1	2
s) Stroke	1	2
t) Pregnancy problems	1	2
u) Birth problems	1	2
v) None	1	2
	1	2
w) Other 1 _____	1	2
x) Other 2 _____	1	2
y) Other 3 _____	1	2
z) Other 4 _____	1	2

**Question (20b):**

I would like to ask you how your health has been in general.

*[Circle one for each row]*

	Yes	No
a) Able to concentrate?	1	2
b) Have been worried?	1	2
c) Feeling useful?	1	2
d) Able to make decisions?	1	2
e) Felt under strain?	1	2
f) Able to overcome difficulties?	1	2

	Yes	No
g) Enjoy normal activities?	1	2
h) Able to face problems?	1	2
i) Felt unhappy or depressed?	1	2
j) Losing confidence?	1	2
k) Thinking of yourself as a worthless person?	1	2
l) Feeling happy?	1	2

**SECTION E: PARTICIPATION RESTRICTION**

For the following questions, think about the environment in which you live, including the use of assistive devices or personal support:

**Question (21):**

Do you have any difficulty doing the following? *[Read out the options and code using the codes below]*

Participation restriction items	Score
a) shopping (getting goods and services)	
b) preparing meals (cooking)	
c) doing housework (washing/cleaning)	
d) taking care of personal objects (mending/ repairing)	
e) taking care of others	
f) making friends and maintaining friendships	
g) interacting with persons in authority (officials, village chiefs)	
h) interacting with strangers	
i) creating and maintaining family relationships	

Participation restriction items	Score
j) making and maintaining intimate relationships	
k) going to school and studying (education)	
l) getting and keeping a job (work & employment)	
m) handling income and payments (economic life)	
n) taking part in clubs/organisations (community life)	
o) taking part in recreation/leisure (sports/play/crafts/hobbies/arts/culture)	
p) taking part in religious/spiritual activities	
q) taking part in political life and citizenship	

**Coding**

- 0 = No problem
- 1 = Mild problem
- 2 = Moderate problem
- 3 = Severe problem
- 4 = Complete problem (unable to perform)
- 8 = Not specified/not applicable

**SECTION G: INVENTORY OF ENVIRONMENTAL FACTORS**

**Question (33):**

First, please tell me how often each of the following has been a barrier to your own participation in the activities that matter to you. Think about the past year, and tell me whether each item on the list below has been a problem **daily, weekly, monthly, less than monthly, or never.**

*[Please CIRCLE only one]*

	1. Daily	2. Weekly	3. Monthly	4. Less than monthly	5. Never	8. Not applicable	2. Big problem	1. Little problem
<b>a)</b> In the past 12 months, how often has the availability/accessibility of transportation been a problem for you?	1	2	3	4	5	8		
<b>a1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
<b>b)</b> In the past 12 months, how often has the natural environment – temperature, terrain, climate – made it difficult to do what you want or need to do?	1	2	3	4	5	8		
<b>b1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
<b>c)</b> In the past 12 months, how often have other aspects of your surroundings – lighting, noise, crowds, etc – made it difficult to do what you want or need to do?	1	2	3	4	5	8		
<b>c1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
<b>d)</b> In the past 12 months, how often has the information you wanted or needed not been available in a format you can use or understand?	1	2	3	4	5	8		
<b>d1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
<b>e)</b> In the past 12 months, how often has the availability of health care services and medical care been a problem for you?	1	2	3	4	5	8		
<b>e1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
<b>f)</b> In the past 12 months, how often did you need someone else’s help in your home and could not get it easily?	1	2	3	4	5	8		
<b>f1)</b> When this problem occurs has it been a big problem or a little problem?							1	2

	1. Daily	2. Weekly	3. Monthly	4. Less than . . .	5. Never	8. Not applicable	2. Big problem	1. Little problem
<b>g)</b> In the past 12 months, how often did you need someone else's help at school or work and could not get it easily?	1	2	3	4	5	8		
<b>g1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
<b>h)</b> In the past 12 months, how often have other people's attitudes toward you been a problem at home?	1	2	3	4	5	8		
<b>h1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
<b>i)</b> In the past 12 months, how often have other people's attitudes toward you been a problem at school or work?	1	2	3	4	5	8		
<b>i1)</b> When this problem occurs has it been a big problem or a little problem?							1	2
<b>j)</b> In the past 12 months, how often did you experience prejudice or discrimination?	1	2	3	4	5	8		
<b>j1)</b> When this problem occurs has it been a big problem or a little problem?							1	2

**Question (34):**

To what extent does your usual environment make it easier for you to perform activities of daily living? [Circle *one* only]

**Makes it easier for you:**

Environmental factor	Yes	No	Don't know
<b>a)</b> Positive attitudes towards you of others	1	2	8
<b>b)</b> Support from others when needed	1	2	8
<b>c)</b> Accessibility of buildings	1	2	8
<b>d)</b> Easy terrain (pathways, roads etc.)	1	2	8
<b>e)</b> Good climate and other conditions (heat, cold, rain, noise, pollution, no crowding, etc.)	1	2	8
<b>f)</b> Accessibility of transport	1	2	8
<b>g)</b> Service provision	1	2	8
<b>h)</b> Accessible information	1	2	8
<b>i)</b> Inclusion in society by all	1	2	8

**SECTION H: HEALTH SERVICE AWARENESS**

I am going to ask you about different services:

**Question (35):**

Which services, if any, are you *aware of* and have ever *needed/received*?

[Read out; and enter the appropriate code for each column of each row].

	Aware of service 1=Yes 2=No	Needed service 1=Yes 2=No	Received service 1=Yes 2=No
	(1)	(2)	(3)
<b>a) Medical rehabilitation:</b>			
<b>aa)</b> Physiotherapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ab)</b> Occupational therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ac)</b> Speech therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ad)</b> Hearing therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ae)</b> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>b) Assistive devices service:</b>			
<b>ba)</b> Sign language interpreter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>bb)</b> Wheelchair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>bc)</b> Hearing aids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>bd)</b> Visual aids, Braille etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>be)</b> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>c) Primary health care clinic/centre</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>d) Secondary health care (e.g. hospital)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>e) Mobile health clinic</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>f) Home based care</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>g) Counselling</b>			
<b>ga)</b> Psychologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>gb)</b> Psychiatrist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>gc)</b> Social worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>gd)</b> School counsellor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ge)</b> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>h) Health information</b>			
<b>ha)</b> Media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>hb)</b> Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>hc)</b> Clinics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>hd)</b> Hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>he)</b> Counselling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>hf)</b> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>i) Traditional healer/faith healer</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION I: HEALTH CARE UTILISATION**

I would like to know about your recent experiences with obtaining health care from health care workers, hospitals, clinics and the health care system. I want to know if you needed health care recently, and if so, why you needed health care and what type of health care provider you received care from.

**Question (36):**

When was the last time that you needed health care?

Years ago	
Months ago	
Weeks ago	
Days ago	
Never	97
Don't know	98

**Question (37):**

The last time you needed health care, did you get health care?

Yes	1
No	2
Don't know/ Don't remember	8

*Skip → Go to Q:  
39*

**Question (38):** Which reason(s) best explains why you did not get health care the last time you needed it?

*[Mark all that the respondent indicates, but do not read out items]*

Reasons	Code
a) No one to accompany me	1
b) Cost	2
c) No transport	3
d) Discrimination	4
e) Attitudes of health care providers	5
f) Had a bad incident and so don't go anymore	6
g) The gender of health care provider	7
h) The type (professional category) of health care provider	8
i) Old age	9
j) Disability	10
k) Crime, danger	11

Reasons	Code
n) Did not want family to know I am ill	14
o) There are no services	15
p) Language barrier	16
q) Distance from home to clinic	17
r) Physical accessibility of the facility	18
s) Not satisfied with outcomes of previous experience	19
t) Traditional (culture)	20
u) Opening times are not suitable	21
v) Not sick enough or not sick (do not need)	22
w) Waiting times too long	23
x) Religious belief	24

<b>l)</b> Lack of time due to domestic or other responsibilities	12
<b>m)</b> Lack of medication	13

<b>y)</b> No knowledge about the health facility	25
<b>z)</b> Other, specify	26

**Question (39):**

Thinking about health care you usually need, where do you normally go? [*Circle one only*]

Private doctor's office	01
Private clinic or health care facility	02
Private hospital	03
Public clinic or health care facility	04
Public hospital	05
Charity or church run clinic	06
Charity or church run hospital	07
Traditional healer [ <i>use local term</i> ]	08
Faith healer [ <i>use local term</i> ]	09
Pharmacy or dispensary	10
Have not needed any health care in the last 3 years	11
Other (specify)	12

**Question (40):**

Now, let us think back to the last time you needed health care. What was the reason you needed health care the last time, even if you did not get it?

	<i>Office use</i>

**Question (41):**

The last time you used health care, how did you get there? [*Circle one only*]

Private vehicle (car or motorcycle)	1
Public transportation	2
Taxi/cab	3
Bicycle	4
Walk	5
Other (specified)	6
Never used health care	7
Don't know	8

**Question (42):**

About how long did it take you to get there?

Hours	
Minutes	
Don't know	98

**Question (43):**

Once you got to the health care facility the last time you used health care, how long did you wait?

Hours	
Minutes	
Don't know	98

**Question (46):**

Considering your own experience, tell me whether the following make it difficult for you to get health care:

*[Read out the alternatives, and show card. Circle only one code for each row]*

	No problem	Small problem	Moderate problem	Serious problem	Insurmountable problem
a) Lack of transport from home to health facility	1	2	3	4	5
b) No services available	1	2	3	4	5
c) Physical access to facility	1	2	3	4	5
d) Because of faith/belief	1	2	3	4	5
e) Negative attitudes among health workers	1	2	3	4	5
f) There is no accommodation at the health facility	1	2	3	4	5
g) Communication with health workers	1	2	3	4	5
h) Standard of the health facility	1	2	3	4	5
i) The journey to the health care is dangerous	1	2	3	4	5
j) You did not know where to go	1	2	3	4	5
k) Could not afford the cost of the visit	1	2	3	4	5

<b>l)</b>	Don't have the necessary document (health card/passport)	1	2	3	4	5
<b>m)</b>	You thought you were not sick enough	1	2	3	4	5
<b>n)</b>	You tried but were denied health care	1	2	3	4	5
<b>o)</b>	The health care provider's drugs or equipment were inadequate	1	2	3	4	5
<b>p)</b>	Could not take time off work or had other commitments	1	2	3	4	5
<b>q)</b>	You were previously badly treated	1	2	3	4	5
<b>r)</b>	Could not afford the cost of transport	1	2	3	4	5
<b>s)</b>	Other (specify)	1	2	3	4	5

**Question (47):**

Considering your experience receiving or visiting health care providers, how would you rate the following?

[Circle **one** only code for each row]

	Very good	Good	Moderate	Bad	Very bad
a ) The amount of time you waited before being attended to.	1	2	3	4	5
b ) Your experience of being treated respectfully.	1	2	3	4	5
c ) How clearly health care providers explained things to you.	1	2	3	4	5
d ) Your experience of being involved in making decisions for your treatment.	1	2	3	4	5
e ) The way the health services ensured that you could talk privately to providers.	1	2	3	4	5
f ) The ease with which you could see a health care provider you were happy with.	1	2	3	4	5
g ) The cleanliness in the health facility.	1	2	3	4	5

**Question (48):**

Overall, how satisfied are you with the provision of health care in your area?

[Circle **one** only]

Very satisfied	1
Satisfied	2
Neither satisfied nor dissatisfied	3
Dissatisfied	4
Very dissatisfied	5

**Question (49):**

Overall, how satisfied are you with the personnel in your area or those that are accessible to you? [Circle **one** only]

Very satisfied	1
Satisfied	2
Neither satisfied nor dissatisfied	3
Dissatisfied	4
Very dissatisfied	5

**Question (50):**

Has a health worker visited you at home during the last 3 years?

Yes	1	
No	2	Skip → Go to Q: 52



**Question (51):**If yes, how many times? [*Circle one only*]

Once	1
A few times	2
Many times	3

**Question (52):**Have you ever accessed the following services? [*Circle ALL that apply or ONLY 'Not applicable' (8) if none of the services were accessed*]

a) Malaria prevention (bed nets, etc.)	1
b) HIV/AIDS counselling	2
c) HIV/AIDS testing	3
d) Immunisation	4
e) Not applicable	8

**SECTION J: ATTITUDES TOWARDS HEALTH SERVICES****Question (53):**Please tell me how much you agree with the following statements. [*Circle only one code for each row*]

	<b>Strongly Disagree</b>	<b>Slightly Disagree</b>	<b>Slightly Agree</b>	<b>Strongly Agree</b>
<b>a)</b> The health personnel at the <u>local clinic/health center</u> have appropriate competence to help with your health problems	1	2	3	4
<b>b)</b> The health personnel at <u>the hospital</u> have appropriate competence to help with your health problems	1	2	3	4
<b>c)</b> <u>The traditional healer</u> have appropriate competence to help with your health problems	1	2	3	4
<b>d)</b> You trust the treatment provided by health personnel at the hospital	1	2	3	4
<b>e)</b> You trust the treatment provided by health personnel at the clinic/health center	1	2	3	4
<b>f)</b> You trust the treatment provided by the traditional healer to be effective	1	2	3	4
<b>g)</b> People are received in a positive manner in the clinic/health center	1	2	3	4
<b>h)</b> People are received in a positive manner at the hospital	1	2	3	4
<b>i)</b> People are received in a positive manner at the traditional healer	1	2	3	4



**Question (54):**

Thinking about your general physical health (things like: sickness, illness, injury, disease etc.) – on a scale from 1 (poor) to 4 (very good) – How would you describe your overall physical health today? [*Circle one only*]

Poor	1
Not very good	2
Good	3
Very good	4
Don't know	8

**Question (55)**

Thinking about your general mental health (things like: anxiety, depression, fear, fatigue, tiredness, hopelessness etc.) – on a scale from 1 (poor) to 4 (very good) – How would you describe your overall mental health today? [*Circle one only*]

Poor	1
Not very good	2
Good	3
Very good	4
Don't know	8

**Thank you very much for your time!**