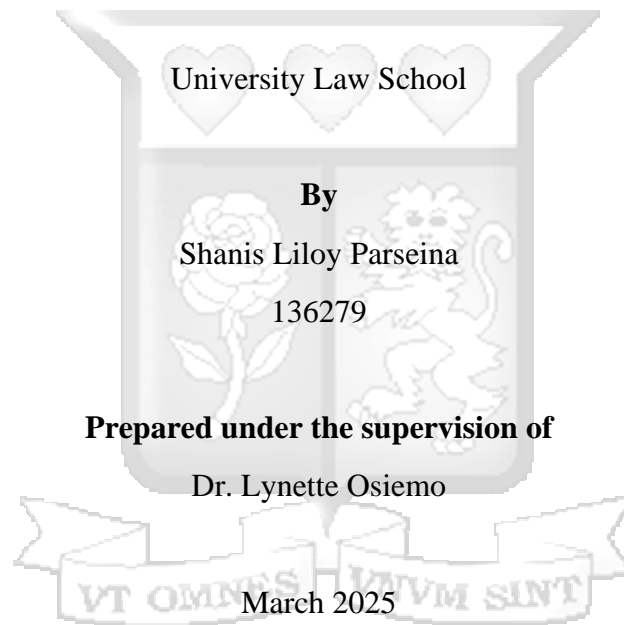




Beyond Physical Impairment and Mental Impairment: The Case for Recognizing Diabetes as a Disability in Kenya

Submitted in partial fulfilment of the requirements of the Bachelor of Laws Degree,
Strathmore



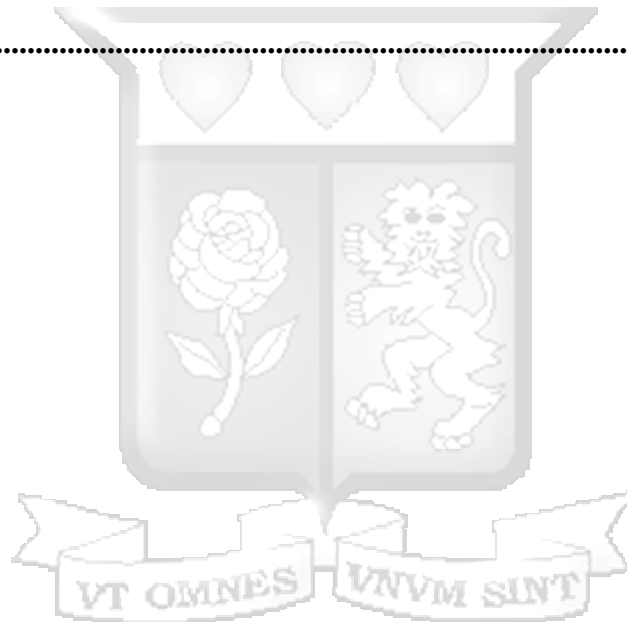
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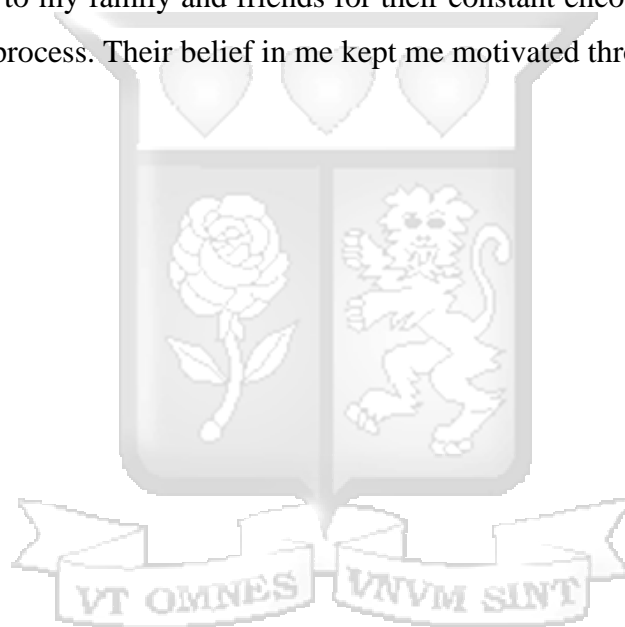
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Declaration

I, **SHANIS LILOY PARSEINA** do hereby declare that this research is my original work and that to the best of my knowledge and belief, it has not been previously, in its entirety or in part, been submitted to any other university for a degree or diploma. Other works cited or referred to are accordingly acknowledged.

Signed: 

Date: 19th March 2025

This dissertation has been submitted for examination with my approval as University Supervisor.

Signed:

Lynette Osiemo



List of Legal Authorities

1. Americans with Disabilities Act of 1990 (as amended).
2. Canada Disability Savings Act
3. Canada Disability Savings Act
4. Constitution of Kenya, 2010.
5. International Covenant on Economic, Social and Cultural Rights, 1966.
6. National Framework for Diabetes Act (S.C. 2021, c. 19).
7. Rehabilitation Act (No. 93-112 of 1973).
8. The Persons with Disabilities Act
9. Universal Declaration of Human Rights, 1948



List of Cases

1. *Kapche v. Holder* (2012), United States Court of Appeals, Fifth Circuit.
2. *Sutton v. United Airlines* (1999), United States Supreme Court, USA.



List of Abbreviations

1. Activities of Daily Living (ADL)
2. Americans with Disabilities Amended Act (ADAAA)
3. Diabetes Medical Management Plan (DMMP)
4. Disability Tax Credit (DTC)
5. Instrumental Activities of Daily Living (IADL)
6. International Diabetes Federation (IDF)
7. Milligrams Per Decilitre (mg/dL)
8. Non-communicable diseases (NCDs)
9. Organization for Economic Co-operation and Development (OECD)
10. Registered Disability Savings Plan (RDSP)
11. United States of America (USA)



Abstract

Diabetes is a chronic condition that affects millions of individuals globally, significantly impacting their quality of life. In Kenya, diabetics face numerous challenges, including high medical costs, limited access to healthcare, and social stigma. Despite these barriers, diabetes is not explicitly recognized as a disability under Kenya's legal framework, leaving affected individuals without necessary legal protections. This study addresses this gap by examining whether diabetes should be classified as a disability under Kenyan law.

The core thesis of this study asserts that diabetes meets the criteria for disability when analysed through the Social Model of Disability and the Nagi Model. These theoretical frameworks highlight how systemic barriers and day-to-day functional limitations restrict an individual's ability to participate fully in society. Comparative case studies from Canada and the United States, along with a review of existing disability laws in Kenya, demonstrate that recognizing diabetes as a disability would provide diabetics with essential legal protections, including workplace accommodations, financial relief, and improved healthcare access.

The research ultimately recommends amending Section 2 of the Persons with Disabilities Act to align with the broader definition found in Article 260 of the Constitution, ensuring that diabetics receive necessary legal and social support.

Keywords: Diabetes, Kenya, Disability and Legal Recognition

CHAPTER ONE: INTRODUCTION

1.1 Background

The right to standard health and the well-being of an individual is a right established in both Kenyan law¹ and international law.² The right to good health is also one of the Sustainable Development Goals with a number three ranking out of seventeen.³ A challenge that interferes with the achievement of this right and goal for many individuals is Non-Communicable Diseases (NCDs), diabetes mellitus (diabetes) being one of the major ones. Diabetes is a prioritized non-communicable disease that is noted to be a challenge in achieving this fundamental goal.⁴ Diabetes is recognized as one of the top ten causes of death globally and has been noted to be a global burden that is on the rise and is expected to soar in the next few years.⁵ The International Diabetes Federation (IDF) 2021 report shows that approximately five hundred and thirty-seven million adults live with diabetes and that the total number of people living with diabetes is expected to rise from six hundred and forty-three million people in 2030 to seven hundred and eighty-three million people by 2045.⁶ These large numbers led to the launching of the World Health Organization Global Diabetes Compact and the creation of global targets for diabetes to try to curb these numbers.⁷

Diabetes is one of the world's oldest known human diseases and is named after its most obvious symptom, which is the constant passing of sweet urine.⁸ This disease is a set of abnormalities characterized by a state of sustained hyperglycaemia (high blood sugar levels).⁹ For one to be considered diabetic, their fasting blood sugar levels must be one hundred and twenty-six milligrams per decilitre (mg/dL) or higher¹⁰ as opposed to the normal range which

¹ Article 43(1)(a), *Constitution of Kenya*, 2010.

² Article 25, *Universal Declaration of Human Rights*, 1948 and Article 12, *International Covenant on Economic, Social and Cultural Rights*, 1966.

³ UNGA, Transforming our world the 2030 Agenda for Sustainable Development, UN, A/RES/70/1, September 2015.

⁴ Retinarisk Latest, 'United Nation's Sustainable Development Goals and Retina Risk' 31st July 2019-
<<https://www.retinarisk.com/blog/united-nations-sustainable-development-goals-and-retina-risk/>> on 13th January 2023.

⁵ World Health Organization, 'The Top Ten Causes of Death' UN News Centre, 9th December 2020-<
<https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death>> on 13th January 2023.

⁶ International Diabetes Federation, *IDF Diabetes Atlas*, 2021, 4.

⁷ Retinarisk Latest, 'United Nation's Sustainable Development Goals and RetinaRisk' 31st July 2019-
<<https://www.retinarisk.com/blog/united-nations-sustainable-development-goals-and-retina-risk/>> on 13th January 2023.

⁸ Ahmed A, 'History of Diabetes Mellitus' 23(4), *Saudi Med Journal*, 2002, 373.

⁹ Ekoe J, Zimmet P and Williams R, *The Epidemiology of Diabetes Mellitus: An International Perspective*, 1st ed, Wiley, New York, 2001, 7.

¹⁰ Sharma A, 'Hyperglycemia,' 6, *Journal of Diabetic Complications and Medicine* 2, 2001, 1.

is between sixty-five to one hundred mg/dL.¹¹ Hyperglycaemia is a result of a limitation in the endocrine system due to the failure of the pancreatic organ. This failure results in three diverse types of diabetes. There is *Type 1 diabetes* which leads to no production of insulin, *Type 2 diabetes* which is based on little production of insulin or insulin resistance and the final one is *gestational diabetes* which is the body's inability to produce enough insulin to cater to insulin resistance, a natural element of pregnancy.

Hyperglycaemia occurs when a diabetic person ingests food, which the body ought to break down into glucose. However, due to the limited functioning of the pancreas, the body cannot break down the glucose into energy resulting in glucose accumulating in the body. Given that the human cells rely on energy, which they lack in this scenario, they may end up starving to death, which leads to the body shutting down.¹²

Diabetes is known to have both adverse long-term complications and serious short-term effects. These long-term complications include coronary heart disease, diabetic neuropathy, diabetic nephropathy, diabetic retinopathy, kidney disease and death.¹³ The short-term effects on the other hand arise in two instances. The first instance is when one has high blood sugar levels (hyperglycaemia). This leads to a number of effects that are not limited to excessive thirst, extreme exhaustion, blurred vision and slipping into a coma in severe cases.¹⁴ The second instance is low blood sugar levels (hypoglycaemia). Confusion, nervousness, seizures and eventually slipping into a coma if one fails to ingest something sugary are some of the many effects of this instance. Unfortunately, the effects of the shortcomings are unavoidable even with extreme blood sugar control.¹⁵ The long-term complications can however be slowed down or even avoided. A proper management system that involves but is not limited to doing a variety of tests, taking medication, eating a balanced diet and exercising¹⁶ may help one achieve this.

¹¹<https://stanfordhealthcare.org/content/dam/SHC/for-patients-component/programs-services/transplant-diabetes-program/docs/txp-dm-prog-essentials-rev1.pdf> on 13 January 2025.

¹² American Diabetes Association, 'Demonstrating Coverage Under the ADA Amendments Act of 2008 for People with Diabetes' January 2014-< <http://main.diabetes.org/dorg/PDFs/Advocacy/Discrimination/atty-demonstrating-coverage-adaaa.pdf>> on January 2023, 3-4.

¹³ Ekoe, Zimmet and Williams, *The Epidemiology of Diabetes Mellitus: An International Perspective*, 306-369.

¹⁴ American Diabetes Association, 'Demonstrating Coverage Under the ADA Amendments Act of 2008 for People with Diabetes' January 2014-< <http://main.diabetes.org/dorg/PDFs/Advocacy/Discrimination/atty-demonstrating-coverage-adaaa.pdf>> 13 January 2023, 5.

¹⁵ CDC 24/7, 'Low Blood Sugar (Hypoglycemia)' Centers for Diabetes Control and Prevention, 25th March 2021-< <https://www.cdc.gov/diabetes/basics/low-blood-sugar.html>> 13 January 2023.

¹⁶ American Diabetes Association, 'Demonstrating Coverage Under the ADA Amendments Act of 2008 for People with Diabetes' on January 2014-< <http://main.diabetes.org/dorg/PDFs/Advocacy/Discrimination/atty-demonstrating-coverage-adaaa.pdf>> 13 January 2023, 5-6.

Managing diabetes is however a challenge for most Kenyans. This limits both their right to the highest attainable standard of health and their freedom in various ways. These limitations are caused by the costly management, as one has to do various tests and buy devices such as insulin pumps, needles, glucometers and insulin pens as well as the insulin itself.¹⁷ The fact that over eight point nine million Kenyans live below the poverty line¹⁸ means that getting these devices and medication is a major challenge for many Kenyans. Despite the government selling vials of insulin at subsidized costs, managing diabetes is still costly for diabetic Kenyans from low-income households in some parts of Kenya as some parents and children require five hundred Kenya Shillings each way to travel to the clinics, according to a study done in Kenya.¹⁹ Besides the travel expenses, supplies frequently run out and there is miscommunication between local depositories and central medical stores to restock. Lack of policies, poor sensitization on diabetes, lack of adequate knowledge among many health workers leading to suboptimal management and poor parental input in diabetic children are other challenges facing diabetes management in Kenya.²⁰ Cases of discrimination and stigmatization especially among students in rural areas are also challenges that face diabetic teenagers, which has been shown to take a toll on their mental health.²¹

As earlier mentioned, these challenges limit the right to health given that the element of accessibility, a key element in the realization of this right, is overlooked. Accessibility here is about health facilities, goods and services for all. Accessibility encompasses four dimensions which are non-discrimination, physical accessibility, economic accessibility and information accessibility. Non-discrimination entails all persons, especially the vulnerable and marginalized groups of persons being able to access health facilities, goods, services without discrimination on any of the prohibited grounds such as property. When it comes to physical and economic accessibility (affordability), health facilities, goods and services must be within

¹⁷ World Population Review, Cost of Insulin by Country-< <https://worldpopulationreview.com/country-rankings/cost-of-insulin-by-country>> on 13 January 2023 .

¹⁸ Kamer L, 'Extreme Poverty Rate in Kenya 2016-2015' Statista on 6 September 2022-< <https://www.statista.com/statistics/1227076/extreme-poverty-rate-in-kenya>> on 13 January 2023.

¹⁹Palmer T, Waliaula C, Shannon G, Salustri F, Grewal G, Chelagat W, Jennings HM and Skordis J, 'Understanding the Lived Experience of Children With Type 1 Diabetes in Kenya: Daily Routines and Adaptation Over Time' National Library of Medicine 27 November 2021-< <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8721679/#bibr1-10497323211049775>> on 13 January 2023.

²⁰ Ilara Health, Five Challenges of Diabetes in Kenya on 22 August-< <https://www.ilarahealth.com/2022/08/12/five-challenges-of-diabetes-in-kenya>> on 13 January 2023 and Jones T, 'Diabetes Mellitus: the increasing burden of disease in Kenya, South Sudan' *6 Medical Journal* 3, 2013, 60.

²¹ Palmer T, Waliaula C, Shannon G, Salustri F, Grewal G, Chelagat W, Jennings HM and Skordis J, 'Understanding the Lived Experience of Children With Type 1 Diabetes in Kenya: Daily Routines and Adaptation Over Time' National Library of Medicine 27 November 2021-< <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8721679/#bibr1-10497323211049775>> on 13 January 2023.

safe physical reach for all sections of the population and must be affordable for all. Affordability must be based on the principle of equity, ensuring that these services, whether privately or publicly provided, are affordable for all. Lastly, information accessibility entails the right to seek, receive and impart information and ideas concerning health issues.²²

Kenya was ranked number thirty-one in terms of diabetes with a prevalence of about four hundred and sixty diabetic cases per ten thousand population by the IDF and is expected to have a one-point five percent increase in diabetic prevalence soon.²³ Despite this high ranking, Kenya has failed to provide any legal solutions in dealing with diabetes as a whole. The only mention of legal provisions is from 2014 concerning an unpassed bill that aimed to provide for the prevention, treatment and control of diabetes.²⁴ Fortunately, other nations such as the United States of America (USA) and Canada have come up with various provisions and schemes²⁵ that ease the lives of diabetics in their respective nations through allowing diabetes to be termed as a disability and through allowing for tax exemptions. These nations note the challenges diabetic persons face and have come up with ways to ease the burdens of their conditions. It is, therefore, necessary for a study to be done on how diabetic people in Kenya can achieve their right to health through the amendment of the term disability in Section 2 of the Persons with Disabilities Act and through the introduction of various schemes that will aid Kenyan diabetics.²⁶ This definition should be replaced with the one set out in in Article 260 of the Constitution of Kenya 2010.²⁷

1.2 Problem Statement

The right to standard health is a well-established right in both national and international law. A challenge in the attainment of this right for a large number of Kenyan is the rise of Non-Communicable Diseases (NCDs), with diabetes being one of the highest rising diseases and one of the top causes of death globally. Diabetics in Kenya face various challenges that prevent them from attaining this right. Lack of insulin, high costs of diabetic devices like glucometers, lack of policies, poor sensitization on diabetes, lack of adequate knowledge among many health workers leading to suboptimal management and poor parental input in diabetic children are

²² Anita Pereira, 'Live and Let Live: Healthcare is a Fundamental Human Right'3 *Connecticut Public Interest Law Journal* 2, 2004, 420-421.

²³ Katambo Daniel, 'Diabetes Statistics in Kenya', AfyaCode on 23 June 2021 -< <https://afyacode.com/diabetes-statistics-in-kenya/>> on 13 January 2023.

²⁴ Kenya Law, National Assembly Bills 2014- <http://kenyalaw.org/kl/index.php?id=4250>> on 13th January 2023.

²⁵ Section 3, *Americans with Disabilities Act* (1990), Section 2, *National Framework for Diabetes Act* (2021) and Section 6, *Equality Act* (2010) respectively.

²⁶ Section 2, *The Persons with Disabilities Act* (Act No. 14 of 2003).

²⁷ Article 260, *Constitution of Kenya* (2010).

some of the challenges facing this group of persons. Unfortunately, the Kenyan jurisdiction has failed to come up with tangible legal ways that can assist this group of persons. This leads to their freedoms being unfulfilled. Fortunately, other nations have come up with certain legal provisions and measures that assist diabetics in fulfilling their freedoms and in achieving their right to health. One of the most noticeable ways they have achieved this is by expanding their definition of the term disability which allows for diabetes to be recognized as a disability. By doing this, they have been able to come up with schemes and measures such as tax exemptions which reduces the financial burden faced by diabetics. In Kenya, Section 2 the Persons with Disabilities Act defines the term disability. This definition is limited and is contrary to the definition set out in Article 260 of the Constitution of Kenya. This study will therefore assess whether diabetes can be classified as a disability given that it interferes with a diabetic's day-to-day lifestyle as an individual and it limits the realization of their right to health and the achievements of their freedoms.

1.3 Research Objectives

- 1.** To assess the meaning of the term disability in the legal, general and medical field and assess whether the term endocrine impairment (diabetes) fits this set definition.
- 2.** To investigate the freedoms diabetics have curtailed based on this interpretation.
- 3.** To propose the best way a diabetic's right to health can be actualized and how their curtailed freedoms can be compensated for by borrowing resolutions from various jurisdictions and by amending Section 2 of the Disability Act.

1.4 Research Questions

- 1.** What is the legal, medical and general meaning of the term disability? How does endocrine impairment fit into this definition?
- 2.** Are there certain freedoms curtailed by this impairment (diabetes) and if so, what freedoms are these?
- 3.** How can a diabetic's right to health be realized and freedoms be compensated for by borrowing resolutions from various jurisdictions and amending Section 2 of the Disability Act?

1.5 Hypothesis

Observing the trend in the increasing prevalence of diabetes and challenges faced by diabetics in Kenya,²⁸ there is a rising need to address how current and future diabetics can be supported and compensated for the challenges they face in actualizing their right to the highest attainable standard of health. These challenges include but are not limited to stigmatization, high management costs, lack of policies, poor sensitization on diabetes and lack of adequate knowledge among many health workers leading to suboptimal management.²⁹ Apart from these challenges, diabetics also face day to day challenges such as the various symptoms of hypoglycaemias and hyperglycaemias.³⁰ Unfortunately, Kenya is yet to set policies and laws that address these challenges which in turn limits both the realization to their right to health and their freedom as they are unable to achieve certain capabilities. Fortunately, other nations such as the (USA) and Canada have come up with measures that compensate diabetics for their limited freedoms and assist them in the realization of their right to health. One of the key steps taken by these two nations in addressing the challenges faced by diabetics is by terming this disease as a disability. They have also set up measures such as tax exemption for diabetics. Given the achievements attained in these nations, this paper seeks to assess whether terming diabetes as a disability under Section 2 of the Persons with Disabilities Act will allow for Kenyan diabetics to have their right to health actualized and their freedoms compensated for, which entails easing the challenges diabetic persons face in managing their blood sugars which will ultimately allow them to actualize their right to the highest attainable standard of health.

²⁸Afya code, Diabetes in Children < <https://afyacode.com/diabetes-in-children/#:~:text=On%20a%20wider%20scale%2C%20the,pc%20by%202025%20in%20Kenya>> on 7 March 2023 and The World Bank, Metadata Glossary -[https://datbank.worldbank.org/metadataglossary/health-nutrition-and-population-statistics/series/SH.STA.DIAB.ZS#:~:text=Diabetes%20prevalence%20\(%25%20of%20population,a%20standa rd%20population%20age%2Dstructure](https://datbank.worldbank.org/metadataglossary/health-nutrition-and-population-statistics/series/SH.STA.DIAB.ZS#:~:text=Diabetes%20prevalence%20(%25%20of%20population,a%20standa rd%20population%20age%2Dstructure) on 7 March 2023.

²⁹ Palmer T, Waliaula C, Shannon G, Salustri F, Grewal G, Chelagat W, Jennings HM and Skordis J, 'Understanding the Lived Experience of Children With Type 1 Diabetes in Kenya: Daily Routines and Adaptation Over Time' National Library of Medicine 27 November 2021-< <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8721679/#bibr1-10497323211049775>> on 13 January 2023, Ilara Health, Five Challenges of Diabetes in Kenya on 22 August-< <https://www.ilarahealth.com/2022/08/12/five-challenges-of-diabetes-in-kenya/>> 13 January 2023 and Palmer T, Waliaula C, Shannon G, Salustri F, Grewal G, Chelagat W, Jennings HM and Skordis J, 'Understanding the Lived Experience of Children With Type 1 Diabetes in Kenya: Daily Routines and Adaptation Over Time' National Library of Medicine 27 November 2021-< <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8721679/#bibr1-10497323211049775>> on 13 January 2023. All these summarise the challenges faced by diabetics which limit their freedoms.

³⁰ CDC 24/7, 'Low Blood Sugar (Hypoglycemia)' Centers for Diabetes Control and Prevention, 25th March 2021-< <https://www.cdc.gov/diabetes/basics/low-blood-sugar.html>> on 13 January 2023.

1.6 Justification Of Study

Diabetes is one of the four main NCDs with a sixty-three percent mortality rate when conjoined with the other three forms of NCDs.³¹ According to the IDF Diabetes Atlas, low-income nations are expected to experience a ninety-two percent diabetes prevalence in the next coming years.³² Kenya specifically has an estimated four point five percent increase in diabetes prevalence among both children and adults by 2025.³³ The lack of the current recognition of diabetes as a disability in Kenya has led to many individuals having their right to the highest attainable standard of health being infringed as set out under national and international law.³⁴ Kenya has tried making some strides in ensuring that these rights are met but has failed in doing so as the bills relating to this matter have never been passed.³⁵ This study is important as it will bring the conversation back up by arguing for diabetes to be recognized as a disability in the Kenyan jurisdiction ultimately leading to the rights stated above to be fully achieved and for certain freedoms diabetics lack to be compensated for. My study will be useful to lawmakers as they will be able to amend the necessary section of the Act and come up with future laws relating to this topic. It will further assist policymakers charged with developing policies around disabilities. Researchers will also benefit from this study as this study is a unique perspective on disability law by incorporating diabetes into it.

1.7 Theoretical Framework: The Social Model of Disability and The Nagi Model

In the field of disability law, there has been a contestation of viewing disabilities as an individual burden or a personal tragedy.³⁶ To avoid using this view, disability studies under Mike Oliver came up with their own theory which they termed the social model of disability.³⁷ This model views disabilities as a disadvantage on two fronts which are the individual's physical or mental traits and the surrounding environment. This model proposes that the disadvantages faced by disabled persons should be shifted to their social, architectural and

³¹Retinarisk Latest, 'United Nation's Sustainable Development Goals and RetinaRisk' 31st July 2019- <<https://www.retinarisk.com/blog/united-nations-sustainable-development-goals-and-retina-risk/>> on 13 January 2023.

³² International Diabetes Federation, IDF Diabetes Atlas, 2021, 4.

³³Afya code, Diabetes in Children <<https://afyacode.com/diabetes-in-children/#:~:text=On%20a%20wider%20scale%2C%20the,pc%20by%202025%20in%20Kenya>> on 7 March 2023.

³⁴ Office of the United Nations High Commissioner for Human Rights, Fact sheet No. 31, *The Right to Health*, 2008, June and Article 43, *Constitution of Kenya*, 2010.

³⁵ The Kenya Gazette Supplement No. 213 (Senate Bills No. 29) and The Diabetes Management Bill, 2014.

³⁶ Reddy R, 'From Impairment to Disability and Beyond: Critical Explorations in Disability Studies' 60(2), *Sage Publications*, 2011, 288.

³⁷ Mike Oliver, 'The Social Model in Action: if I had a hammer' *Implementing the Social Model of Disability: Theory and Research*, The Disability Press, 2004, 18-31.

economic environment. The 'disability' is therefore seen to arise from society and external factors such as discrimination and stigma from society.³⁸ It is often contrasted with the medical theory which places the human body at the centre which many criticized for reducing the body to a non-social entity.³⁹

This theory has however faced many criticisms as it fails to account for the model's scope in terms of defining the term disability and the ambiguity of disadvantage as there is no standard threshold to measure the disadvantage faced by these individuals.⁴⁰

To overcome this ambiguity, the Nagi model is used. This model was developed by Nagi and further developed by Woods. This model's core argument when it comes to disability is the element of functional limitation. This functional limitation occurs as a result of an active or residual pathology (such as the loss or abnormality of the pancreas). According to Woods, being functionally limited is the inability or limitation in performing roles expected of an individual within a socio-cultural and physical environment.⁴¹ These roles include activities that an individual does on a day-to-day basis such as self-care, work roles and family roles. Diabetic persons usually face some limitations when it comes to roles such as work and educational roles when they experience hypoglycaemic and hyperglycaemic episodes and eating, which are classified as Activities of Daily Living (ADL).⁴²

Taking these two theories together, I will use them to show how diabetes can be classified as a disability under Section 2 of the Persons with Disabilities Act. The social disability model approach mentions that disability is not simply an impairment as seen in diabetes, but it is also about the environmental barriers these individuals face. Diabetics fit this definition as their endocrine system is impaired and they face a variety of external barriers such as discrimination, difficulty in accessing medication and the expenses of the medication and necessary medical equipment. The removal of these barriers which is the aim of this theory will be possible through amending Section 2 of the Persons with Disabilities Act as they will be protected by disability laws and may get benefits such as exemption from taxes. The Nagi model further supports this amendment of Section 2 of the Persons with Disabilities Act by acknowledging

³⁸ Reddy R, 'From Impairment to Disability and Beyond, 291.

³⁹ Reddy R, 'From Impairment to Disability and Beyond, 292.

⁴⁰ Samaha A, 'What Good Is the Social Model of Disability?' 74 *The University of Chicago Law Review* 4, 2007, 1262.

⁴¹ Mitra S, 'The Capability Approach and Disability' 16 *Journal of Disability Policy Studies* 4, 2006, 237-238.

⁴² Wendell S, 'Unhealthy Disabled: Treating Chronic Illnesses as Disabilities' 16 *Wiley on behalf of Hypatia, Inc* 4, 2001, 19-27.

the day-to-day challenges faced by diabetic persons. These two theories will therefore show that diabetes should be considered a disability based on the fact that it is an endocrine impairment, it limits their freedoms and interferes with their day-to-day life functioning. Applying the two theories will compensate for their lack of freedom and will allow them to live to their full potential.

1.8 Literature Review

To date, the literature on diabetes being recognized as a disability in the Kenyan jurisdiction is yet to be discussed. There have, however, been discussions on areas around diabetes. These discussions have been on the prevalence of diabetes in the Kenyan jurisdiction⁴³ and how diabetics face challenges in managing and controlling their blood sugar levels.⁴⁴ Reports have also been done to assess the strategies on how the government can control diabetes.⁴⁵ Various medical online posts have discussed diabetes and its complications in detail. Given this existing gap and the need for answers, there is a need to look into literature from outside the Kenyan jurisdiction.

1.8.1 On whether diabetes is a disability given that it is termed as an impairment of the endocrine system

The ongoing literature review on diabetes being viewed as a disability has been greatly discussed in certain Western nations leading to most of these nations recognizing this impairment as a disability. Patients, families, employers and clinical systems are considered in defining diabetes, which is considered wide.⁴⁶ Nagi and Woods also look at disability in a broad manner and are the founders of its umbrella term. They look at it in four elements of *pathology* (hypoglycemia), *impairment* (diminished vision), *functional impairment* (slow reaction time/ inability to drive at night) and *disability* (no working until hypoglycemia is treated). Wood further states that a disability is any inability to perform an activity in the manner considered normal for an abled individual as a result of an impairment, in this case, the endocrine

⁴³Afya code, Diabetes in Children < <https://afyacode.com/diabetes-in-children/#:~:text=On%20a%20wider%20scale%2C%20the.pc%20by%202025%20in%20Kenya>> on 7 March 2023 and The World Bank, Metadata Glossary -[https://databank.worldbank.org/metadataglossary/health-nutrition-and-population-statistics/series/SH.STA.DIAB.ZS#:~:text=Diabetes%20prevalence%20\(%25%20of%20population,a%20standard%20population%20age%2Dstructure](https://databank.worldbank.org/metadataglossary/health-nutrition-and-population-statistics/series/SH.STA.DIAB.ZS#:~:text=Diabetes%20prevalence%20(%25%20of%20population,a%20standard%20population%20age%2Dstructure) on 7 March 2023.

⁴⁴Ilara Health, Five Challenges of Diabetes in Kenya on 22 August-< <https://www.ilarahealth.com/2022/08/12/five-challenges-of-diabetes-in-kenya/>> on 13 January 2023.

⁴⁵ Ministry of Public Health and Sanitation, *Kenya National Diabetes Strategy 2010-2015*, July 2010.

⁴⁶ Gregg E, Menke A, 'Diabetes and Disability' in Diabetes in America (ed), 3rd ed, *National Institute of Diabetes and Digestive and Kidney Diseases (US)*, Bethesda, 2018, 2.

impairment for diabetics. They further state that the impact the disease has on an individual is a factor to be considered. They base this argument on the fact that diabetes covers a wide range such as the physical, emotional, medical and anatomical elements of an individual.⁴⁷

Wendell also argues for the same but through a different prism, which happens to be feminism. She posits that chronic illnesses (unhealthy disabilities) should be considered disabilities, as they are impairments. She sees impairments and disability to be equal and the distinction between the two will result in the impaired persons being discriminated against and prevents the impaired from effectively dealing with their pain and being cast out of the disabled community despite their known suffering.⁴⁸

1.8.2 On whether diabetics face certain limitations on their freedoms and what possible ways can be used to compensate for this

Philosophical discussions view freedom as the human essence. Philosophers such as Augustine and Sartre discuss it as the centrality of freedom and posit that all actions undertaken by humans ought to be characterized by freedom in some way.⁴⁹ Thomas Green is the philosopher I will be relying on, specifically his ideas on both positive and negative freedom. He begins by defining freedom as the power man has in exercising his will which is ultimately achieving a purpose or goal which they have set out to do.⁵⁰ This achievement leads to self-realization which requires capacity in order for it to be achieved.⁵¹ Green defines negative freedom as the ability for one to act without restraints or interference, a definition that is argued to fit in with the Social Model of disability according to Hirschmann.⁵² This model argues that factors in society, such as the built environment, discriminatory attitudes, punitive and harsh public policies are all considered to be obstacles that make an impaired person disabled.⁵³ Applying this in the diabetic context, there is a need for diabetics to have their negative freedoms actualized in order for them to truly be seen as free. The actualization of this freedom entails

⁴⁷ Songer T, 'Disability in Diabetes' in Diabetes in America, 2nd Edition, *National Diabetes Data Group*. NIH Pub, Washington DC, 1995, 60.

⁴⁸ Wendell S, 'Unhealthy Disabled' 19-27. She uses feminism as more women than men often become disabled/suffer from chronic illnesses.

⁴⁹ Jacobs J, 'The Inherent Limitations of Human Freedom' 13 *A Journal of Catholic Thought and Culture* 1, 2010, 107.

⁵⁰ Vitols P, 'What is Freedom' *Philosophy Now*, May 2012 <https://philosophynow.org/issues/143/What_is_Freedom> on 3 March 2023.

⁵¹ Simhoney A, 'Beyond Negative and Positive Freedom: T. H. Green's View of Freedom' 21(1) Sage Publications Inc, 1993, 31.

⁵² Mamlok D, 'Negative and Positive Freedom: considering education and the Digital World' 47, *Ohio Valley Philosophy of Education Society*, 2016, 89.

⁵³ Hirschmann N, 'Disability Rights: A Question of Justice or Freedom?' 12 *Journal of International Political Theory* 1, 2016, 16.

but is not limited to removing social barriers such as lack of insulin in hospitals and taxation of these individuals.

Thomas Green further identifies two forms of abilities, internal and external abilities. He terms internal abilities as capacities and external abilities as opportunities. He believes that these two are important for man to achieve self-realization.⁵⁴ Applying this train of thought to a diabetic's life, self-realization and living a good life may be difficult. They face certain challenges such as financial constraints, chances of physical impairments and limited opportunities due to discrimination and stigma.⁵⁵ Together, these two ideas show how diabetics are indeed facing limitations on their freedoms and how certain measures such as tax exemptions and free medication (insulin) can compensate them for the loss of these freedoms.⁵⁶

1.9 Contribution

Although there is a group of scholars who study diabetes today, they have not sought to discuss it from a combined legal, social and medical perspective which will allow them to term diabetes as a disability in Kenya. Their research is more focused on the prevalence of diabetes in Kenya, the risk factors of diabetes, and the challenges faced by diabetics such as gaining access to medical machinery and medicine which are necessary to control and manage diabetes.

As a result of these limited discussions, disability law is yet to classify diabetes as a disability in Kenya. This study will be beneficial in aiding the start of this conversation by answering three main questions which are: diabetes being a disability, the daily interference in a diabetic's life due to this disease/impairment and the freedoms limited as a result of this impairment. Each of these elements will be discussed under the Social Model of Disability, the Nagi Model, Berlin's views on negative and positive freedom as well as Green's views on freedom. It will also offer approaches on how the limitation of freedoms faced by diabetics can be compensated for through the ultimate amendment of Section 2 of the Persons with Disabilities Act by replacing it with the definition in Article 260 of the Constitution of Kenya and by the passing the Persons with Disabilities Bill 2023 which aims to redefine the term disability. This study will thus unite the medical, legal and social fields to achieve the realization of diabetic's rights

⁵⁴ Simhoney A, 'Beyond Negative and Positive Freedom, 36-39.

⁵⁵ Ilara Health, 'Five Challenges of Diabetes in Kenya on 22 August-<
<https://www.ilarahealth.com/2022/08/12/five-challenges-of-diabetes-in-kenya/>> 13 January 2023.

⁵⁶ NHS, 'Understanding medicine'-< <https://www.nhs.uk/conditions/type-2-diabetes/understanding-medication/#:~:text=If%20you%20take%20diabetes%20medicine,known%20as%20a%20PF57%20form> > on 4 March 2023.

and freedoms thus contributing to disability law as the new amendment will allow for more than diabetes to be recognized as disabilities.

1.10 Methodology

The research I will conduct in this study is desk-based research in nature with both primary and secondary sources such as the Persons with Disabilities Act, The Constitution of Kenya and The Americans with Disabilities Act as Amended and relevant case law, books, book chapters, reports, academic blog posts and other internet sources being heavily relied on. I intend to arrive at my final answers by using a deductive approach as I will try to answer my hypothesis through the findings of the research questions, I have set out for this study above in part 1.4 of this paper.

Chapter two seeks to explain the meaning of the term disability. It will then show how diabetes can be classified as a disability in the Kenyan jurisdiction. I will be using documentary and doctrinal analysis to answer this. I will do this by looking at two theoretical frameworks, various national and international statutes listed above as well as academic works on defining the term disability.

The study will then proceed to investigate whether diabetics have certain freedoms curtailed and what freedoms these may be. Chapter three will rely heavily on philosophical analysis with views from both Green and Berlin while also using deductive analysis.

The next chapter which aims to investigate how the limitation of these freedoms can be compensated for by using a comparative and deductive analysis. A comparative analysis will be used to show how diabetic's freedoms have been compensated for in various jurisdictions such as the USA and Canada. This dissertation will also do this by using books, chapters in books, academic posts and various statutes. Finally, this chapter will assess the best way to amend Section 2 of the Persons with Disabilities Act which will be by using the definition set out in Article 260 of the Constitution of Kenya 2010. This will be done by looking at the doctrine of constitutional supremacy and by using a documentary analysis.

1.11 Chapter Breakdown

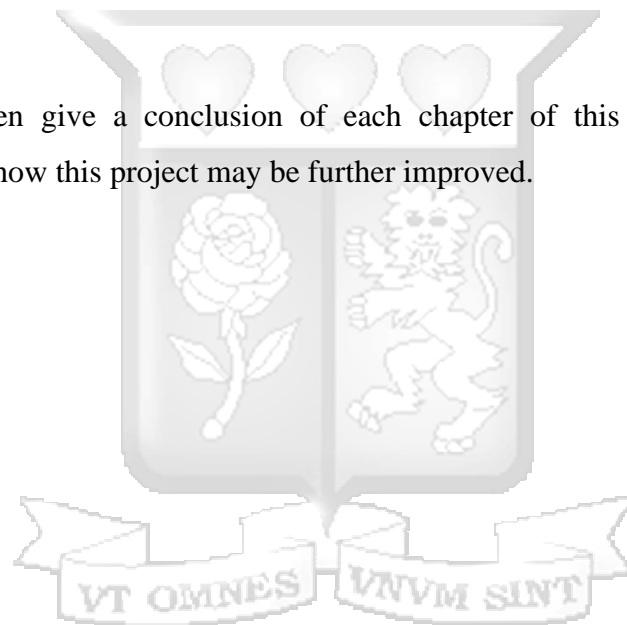
This research proposal forms the first chapter of this study. It includes but is not limited to the research objectives, the conceptual framework as well as the justification of the study. All these aspects in this chapter are the necessary background required in tackling the subsequent chapters. Chapter two will be a discussion of what the term disability means. It will then go

into a discussion on how diabetes is linked to disability based on the impact it has on one's day-to-day activities and major life functioning as explained under the Nagi Model and the Social Model of Disability. This chapter will lay the foundation for the upcoming chapters.

Chapter three will examine the idea of freedom from a philosophical angle through Berlin and Green's ideas on freedom in order to show how diabetics are limited by this disease. This limitation robs them of certain freedoms which can only be compensated for by having them termed as disabled and by being given certain benefits.

The fourth chapter will then proceed to discuss how these freedoms can be compensated for by having them legally termed as disabled and by being given certain benefits. Benefits such as tax exemption, and other borrowed ideas from the USA and Canadian jurisdictions will be relied on.

Chapter five will then give a conclusion of each chapter of this dissertation and give recommendations on how this project may be further improved.



CHAPTETR TWO: DIABETES AS A DISABILITY: A LEGAL AND THEORETICAL ANALYSIS

2.1 Introduction

This chapter delves into defining the term disability, as this influences how society, specifically non-disabled people perceive and interact with disabled persons.⁵⁷ Based on the definition given, this chapter will then proceed to assess how diabetes can be classified as a disability.

Disability is an ancient concept⁵⁸ with a meaning that changes over time and place and is influenced by factors such as political ideology, economic conditions and cultural values.⁵⁹ To explain what the term disability is, a tool called disability models are used. These models provide a basis upon which society can come up with ways of meeting the needs of disabled persons. They further reveal the ways in which society provides or limits access to work, goods and services, economic influence as well as political power for people with disabilities.⁶⁰

2.2 Models of Disability

There are numerous disability models,⁶¹ however, this chapter will only focus on two: the Social Model of Disability and the Nagi model. Following this discussion, this chapter will proceed to define disability in the legal context as well. A discussion on how diabetes fits this definition will be found throughout the chapter.

2.2.1 The Social Model of Disability

This model's starting point can be traced back to 1976 and was published by the Union of the Physically Impaired Against Segregation (UPIAS).⁶² The creators of this model conceptualise disability as a public form of social oppression or disadvantage that is imposed upon people with impairments.⁶³

⁵⁷ <https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/Northern-Officers-Group-defining-impairment-and-disability.pdf> on 13 November 2024.

⁵⁸ Brief Historical View of Disability and Related Legislation [chapter 2 refff.pdf](#) on 14 November 2024.

⁵⁹ Evans N, Broido E, Brown K and Wilke A 'Disability Models' in *Jossey-Bass (eds), Disability in Higher Education: A Social Justice Approach*, 1ed, Jossey Bass, New Jersey, 2017, 54.

⁶⁰ Amponsah-Bediako K, 'Relevance of disability models from the perspective of a developing country: An analysis' 3, *Developing Country Studies*, 11,2013, 122.

⁶¹ <https://core.ac.uk/download/pdf/234681343.pdf> on 7 February 2025.

⁶² Oliver M, 'Implementing the Social Model of Disability: Theory and Research' in 1 ed, 'Implementing the Social Model of Disability: Theory and Research, 1st ed, Policy Press, Bristol, 2004, 2.

⁶³ Thorneycroft R, 'Screwing the Social Model of Disability' 26, *Scandinavian Journal of Disability Research* 1, 2024, 287.

Under this model, there is a distinction between impairment and disability.⁶⁴ According to this model, impairment is defined as lacking part of or all of a limb or having a defective, limb, organ or mechanism of the body.⁶⁵ Impairments in this case are a significant part of an individual's life and is unique to each individual. Disability on the other hand is the disadvantage, inequality or discrimination which affects people with impairments as a result of barriers to access and inclusion.⁶⁶

Following the above discourse, we can see that this model views that disability as socio-political issue. This model allows disabled people to lift the blame from their shoulder and place it on society which in turn leads to society creating different policy priorities and choices, mainly around the removal of disabling barriers.⁶⁷

The social model of disability is important in aiding the discussion around defining diabetes as a disability. Diabetes in this case is an impairment given that it stems from having a defective organ which is the pancreas. Diabetic persons face barriers that are placed there by society. These barriers include but are not limited to stigmatization, poor health care services and lack of insulin and medical equipment provision as discussed in chapter one. By applying this model which seeks to come up with policies that do away with disabling barriers such as discrimination and bullying, diabetics in Kenya will be able to actualize their right to the highest attainable standard of health, which includes the right to health care services, including reproductive health. Recognizing diabetes as a disability under the law will allow for the creation of policies that will do away with these barriers.

2.2.2 The Nagi Model

Saad Nagi, a sociologist, is credited with the creation of this model back in the early 1960s. This was the first disablement model created and is based on four components⁶⁸ being pathology, impairment, functional limitation and disability.⁶⁹

⁶⁴ [atisn17524doc7.pdf](#) on 14 November 2024.

⁶⁵ Bigby C and Hough A, *Disability Practice Safeguarding Quality Service Delivery*, 1 ed, Springer Nature, Singapore, 2023, 15.

⁶⁶ [atisn17524doc7.pdf](#) on 14 November 2024.

⁶⁷ Albert B, 'The social model of disability, human rights and development' Disability KaR Research Project, September 2004, [Disability and Development](#) on 14 November 2024.

⁶⁸ Snyder A, Parsons J, Valovich T, Bay C and Michener L, 'Using Disablement Models and Clinical Outcomes Assessment to Enable Evidence-Based Athletic Training Practice, Part I: Disablement Models' *43 Journal of Athletic Training* 4, 2008, 430.

⁶⁹ Songer T, 'Disability in Diabetes' in *Diabetes in America*, 2nd Edition, *National Diabetes Data Group*. NIH Pub, Washington DC, 1995, 60.

He defines pathology as an interruption of normal body process⁷⁰ such as blood glucose regulation in a diabetic person being interrupted. Impairment which is the second component can be as a result of active pathology which leads to loss or abnormality of any physical, mental, emotional, or physiological structure or function. Impairments are related to specific organs or organ systems⁷¹ such as diabetes which is the result of irregular functioning or loss of the pancreatic organ. To show the direct consequences that pathology has on an individual, he uses the term functional limitation⁷² which shows the restrictions an individual faces in the performance of specific tasks.⁷³ The last concept which is disability is defined as the limitation to perform socially expected roles such as work, family, education and self-care that are expected of an individual within a specific sociocultural or physical environment.⁷⁴

In 1994, this model was broken down further by Lois Verbrugge and Alan Jette who drafted an article on the process of disablement.⁷⁵ This article emphasized the long-term effects of chronic conditions such as diabetes. These two authors postulated that disability is experienced difficulty in doing activities that are typical for one's age and sex due to health or physical problems.⁷⁶ These activities occur at various levels such as ADLs, Instrumental Activities of Daily Living (IADL) and paid employment.⁷⁷ This dissertation will however focus on ADL and paid employment as these two dimensions apply in this context.

ADLs are activities that people engage in on a day-to-day basis. These are everyday personal care activities that are fundamental to caring for oneself (bathing, eating, feeding) and maintaining independence.⁷⁸

⁷⁰Institute of Medicine (US) and National Research Council (US) Committee to Review the Social Security Administration's Disability Decision Process Research, 'Survey Measurement of Work Disability: Summary of a Workshop' National Academies Press, Washington (DC), 2000,7.

⁷¹ [Disablement, Models of | Encyclopedia.com](#) on 10 February 2025.

⁷² Institute of Medicine (US) and National Research Council (US) Committee to Review the Social Security Administration's Disability Decision Process Research, 'Survey Measurement of Work Disability', 7.

⁷³ Jette A, 'Toward a Common Language of Disablement' 64 *Journal of Gerontology: Medical Sciences* 11, 2009, 1165.

⁷⁴Henley M, 'Topic 1 Transcript' Centre for Research and Disability,2022,1.

⁷⁵ [Disablement, Models of | Encyclopedia.com](#) on 10 February 2025.

⁷⁶ Jette A and Verbrugge L, 'The Disablement Process' 38 *Social science & medicine* 1, 1994, 4.

⁷⁷ Institute of Medicine (US) and National Research Council (US) Committee to Review the Social Security Administration's Disability Decision Process Research, 'Survey Measurement of Work Disability', 8.

⁷⁸

https://www.cedarhurstliving.com/hubfs/Cedarhurst_Content%20Offer%20Assets/ADL%20IADL%20Checklist/Cedarhurst-ADL-IADL-Checklist-final.pdf on 13 February 2025.

One of the key elements to effective blood sugar management when it comes to diabetes is making wise food decisions.⁷⁹ Carbohydrate is the primary determinant of blood glucose levels which is why it is important for diabetic persons to monitor their carbohydrate intake. Monitoring in this case means eating a certain amount and type of carbohydrates such as low glycaemic foods⁸⁰ (foods that have a low level in the Glycaemic Index, preferably below fifty-five).⁸¹ Besides monitoring what to eat, diabetic persons also have to maintain consistency in food timing and energy intake during the day.⁸² They should eat three meals a day with snacks in between and long gaps between meals should be avoided as it may lead to hypoglycaemic episodes.⁸³ Given all these factors a diabetic person has to consider, it is clear that they face limitations that are atypical to those faced by others when it comes to eating.

The other dimension discussed by Lois Verbrugge and Alan Jette is paid and unpaid role activities such as work and education. In the employment role, an individual is expected to perform certain work roles such as completion of work, compliance with norms and procedures and time management. These roles can however be difficult for diabetic employees to fulfil. Hypoglycaemic episodes which are characterized by shakiness, sweating, confusion and irritability⁸⁴ can occur at work. To treat it, one must take a break from work to go and drink or eat a fast-acting carbohydrate.⁸⁵

Students also face similar day to day disruptions as a result of hypoglycaemic (low blood sugar) and hyperglycaemic episodes which can occur during daily routine.⁸⁶ These episodes can affect the student's mood, behaviour and ability to learn and participate in school activities⁸⁷ as they may have difficulties with attention, memory, processing speed and perceptual skills. It is

⁷⁹ National Institute of Health, *What I Need to Know About Eating and Diabetes*, 2007, 3.

⁸⁰ Noe V, Food Security in Relation to Diabetes Management and Assessment of Food Security Status in Children with Diabetes Mellitus, Published Senior Honors Thesis, University of North Carolina, Chappel Hill, 2018, 7-8.

⁸¹ Department Of Endocrinology, Diabetes & Metabolism, *Dietary Information for Diabetes Patients*, 2019, 3.

⁸² World Health Organization Regional Office for the Eastern Mediterranean Alexandria, *Management of Diabetes Mellitus Standards of Care and Clinical Practice Guidelines*, 1994, 13.

⁸³ [https://www.kentcht.nhs.uk/leaflet/reactive-hypoglycaemia/#:~:text=Eating%20three%20small%20meals%20and,of%20food%20\(or%20carbohydrates](https://www.kentcht.nhs.uk/leaflet/reactive-hypoglycaemia/#:~:text=Eating%20three%20small%20meals%20and,of%20food%20(or%20carbohydrates) on 10 February 2025.

⁸⁴ National Institute of Health, *What I Need to Know About Eating and Diabetes*, 2007, 7.

⁸⁵ Diabetes Australia, *Diabetes in the Workplace*, 2023.6-7.

⁸⁶ G Linda, Z John, B Andrea, R Lee, M Joshua, C Daniel and C William, 'Cognitive Function Is Disrupted by Both Hypo- and Hyperglycaemia in School-Aged Children with Type 1 Diabetes: A Field Study' *32 Diabetes Care* 6, 2009, 1004.

⁸⁷ Diabetes Canada, *Guidelines for the Care of Students Living with Diabetes at School*, 2014,2.

therefore necessary for the school to provide measures and accommodations to support these students.⁸⁸

This model illustrates how diabetes progresses from a pathology to a disability by limiting daily functioning in dietary management, school activities and in the employment sector as well thus making it a disability.

Having examined disability through theoretical models, the next section explores how national and international legal frameworks define disability and whether diabetes fits these definitions.

2.3 The National and International Legal Context

2.3.1 The Constitution of Kenya (2010)

The legal context is also of significant importance in proving my hypothesis as the term disability has been subject to different definitions in different contexts.⁸⁹ Following the *Grund norm* principle,⁹⁰ this section will begin with the definition in the Constitution of Kenya. Disability is defined as any physical, sensory, mental, psychological or other impairment, condition or illness that has been or is perceived by significant sectors of the community to have a substantial or long-term effect on an individual's ability to carry out ordinary day-to-day activities.⁹¹

This definition is broad as it includes diabetes, which is both a disease and long-term condition that affects an individual's daily functioning. It further aligns with both the Social Model of Disability and the Nagi model which highlight impairments as well as the societal and functional limitations faced by individuals. By recognizing conditions like diabetes within its definition, the Constitution supports a more inclusive understanding of disability, one that accounts for both medical and social challenges.

⁸⁸ [Looking after a child with diabetes in school | Diabetes UK](#) on 10 February 2025.

⁸⁹Hollenweger J, 'Definition and Classification of Disability' The United Nations Children's Fund, Webinar 2, 2019, 14 [Definition and Classification of Disability, Webinar 2 - Companion Technical Booklet](#) on 13 November 2024.

⁹⁰[KELSEN'S THEORY OF GRUNDNORM](#) on 13 November 2024.

⁹¹Article 260, *Constitution of Kenya* (2010).

2.3.2 United Nations Convention on the Rights of People with Disabilities

The term disability is also defined in the United Nations Convention on the Rights of People with Disabilities (UNCRPD),⁹² a convention that Kenya signed⁹³ making it a source of law in Kenya.⁹⁴ Article 1 of this convention sets out elements that guide the application of this convention. Through the application of these elements, the UNCRPD defines disability to include long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.⁹⁵ The use of the word include in the preamble enlarges the meaning of words or phrases in the body of the statute.⁹⁶ This makes the definition of the term disability inclusive in nature and prevents a statute from being interpreted in a restrictive manner. It therefore enlarges the meaning of words used in a statute.⁹⁷

Using the word include in the preamble ensures that disability is not narrowly interpreted but instead accounts for various conditions and barriers that limit participation. By adopting this approach, the UNCRPD aligns with social and functional perspectives of the two discussed models.

2.3.3 The Persons with Disabilities Act of Kenya

Section 2 of the Persons with Disabilities Act of Kenya defines disability to mean a physical, sensory, mental or other impairment, including any visual, hearing, learning or physical incapability, which impacts adversely on social, economic or environmental participation.⁹⁸

This definition is narrow and excludes diabetes which makes it inconsistent with the social model of disability, the Nagi model of disability, the Constitution of Kenya and the UNCRPD. The social model of disability critiques this definition for failing to focus on the role society plays (stigmatization and discrimination) in disabling and preventing the full participation of impaired individuals such as diabetics. Similarly, the Nagi model highlights that disability is also about functional limitation in day-to-day life (education, work and food management). The definition further fails to consider chronic conditions as disabilities. Both models,

⁹² Article 1, *United Nation Convention on Persons with Disabilities*, 30 May 2008, A/RES/61/106

⁹³ [https://www.knchr.org/Our-Work/Research-and-Compliance/Disability on 14 November 2024](https://www.knchr.org/Our-Work/Research-and-Compliance/Disability%20on%2014%20November%202024).

⁹⁴ Article 2(6), *Constitution of Kenya* (2010).

⁹⁵ Article 1, *Convention on the Rights of Persons with Disabilities and Optional Protocol*, 2006.

⁹⁶ Singh A, 'Interpretation of Statutes' *Academike*, 13 November 2015 [Interpretation of Statutes - Academike](#) on 13 November 2024.

⁹⁷ Agarwal S, "Includes": What Does It Include?' *Tax Management India*, 20 June 2011, [Includes What Does It Include ?](#) on 13 November 2024.

⁹⁸ Section 2, *Persons with Disabilities Act*, (Act No 14 of 2003).

therefore, critique this definition and call for a more inclusive definition of the term disability that considers the societal barriers and daily challenges faced by those with diabetes.

2.4 Conclusion

Having looked at the Social Disability Model, the Nagi Model and the legal context that is applied in Kenya, diabetes can be defined as a disability as explained in each section of this chapter. Following this conclusion, the next chapter seeks to investigate how diabetic persons have their positive and negative freedoms limited as a result of being diabetic.



CHAPTER THREE: BARRIERS TO FREEDOM FOR DIABETIC PERSONS IN KENYA

3.1 Introduction

The concept of freedom is a concept that is believed to have originated from ancient Greece.⁹⁹ It is a multifaceted and fundamental concept that has shaped human societies throughout history. Philosophers like Aristotle and later Enlightenment thinkers such as John Locke and Jean-Jacques Rousseau laid the groundwork for understanding the nature and importance of freedom in society.¹⁰⁰ Different theorists have produced various theories on how freedom is to be viewed.¹⁰¹ This paper will rely on a number of theorists to come up with its argument on how diabetic persons in Kenya have certain freedoms limited. The first two theories which are negative and positive freedoms have come up from this concept over time.¹⁰² This classification of freedom is traced back to Kant but was greatly associated with Berlin who examined and defended it in depth.¹⁰³ This chapter will also be incorporating Thomas Greens' ideas of internal and external abilities in showing how diabetic persons in Kenya have their freedoms curtailed which in turn is the ultimate violation of their right to the highest attainable standard of health, which includes the right to health care services.¹⁰⁴

3.2 Negative Freedom

To begin examining how freedom applies to diabetic persons in Kenya, it is essential to first understand the theoretical foundations of negative freedom, which forms the basis of many modern discussions on individual liberty and is the most widespread concept in both modern moral and political thought.¹⁰⁵ This type of freedom centres around the absence of obstacles, barriers or constraints¹⁰⁶ or the freedom from interference.¹⁰⁷ Interference as attributed to Locke and Hobbes among others entails the intentional encroachment aimed at worsening an

⁹⁹McCord W, 'The Origins of Freedom' 21 *American Sociological Association*, 2, 1992, 176.

¹⁰⁰ [Freedom | Encyclopaedia MDPI](#) on 13 December 2024.

¹⁰¹ Andreas S, *Freedom in Political Philosophy*, in WR Thompson edition, Oxford University Press, Indiana, 2022, 2.

¹⁰² White M, 'Positive Freedom, Negative Freedom, and Possibility' 70 *Journal of Philosophy Inc*, 11, 1973,2.

¹⁰³ Carter I, 'Positive and Negative Liberty', Stanford Encyclopaedia of Philosophy, 27 February 2003 [Positive and Negative Liberty \(Stanford Encyclopaedia of Philosophy\)](#) on 13 December 2024.

¹⁰⁴ Article 43 1 (a), *Constitution of Kenya* (2010).

¹⁰⁵Turcan C, 'The Negative Freedom and Politics of Modus Vivendi' *Journal of Education Culture and Society*, 2023, 95 [\(PDF\) The Negative Freedom and Politics of Modus Vivendi](#) on 13 December 2024.

¹⁰⁶ Carter I, 'Positive and Negative Liberty', Stanford Encyclopaedia of Philosophy, 27 February 2003 [Positive and Negative Liberty \(Stanford Encyclopaedia of Philosophy\)](#) on 13 December 2024.

¹⁰⁷ [Microsoft Word - NegativePositiveFreedom.doc](#) on 13 December 2024.

individual's situation of choice.¹⁰⁸ This interference or constraint has to stem from the actions of another individual or group of individuals.¹⁰⁹

Hirschmann who I briefly mentioned in chapter one ties this type of freedom to the social model of disability which views disability as a socio-political issue given that it is as a result of the barriers placed by society.¹¹⁰ Barriers such as built environment, discriminatory attitudes, punitive and harsh public policies are some factors Hirschmann identifies as impediments to an individuals' autonomy and participation in society. This is because the number of doors open to them are fewer than if they were not disabled.¹¹¹

3.3 Positive Freedom

Positive freedom on the other hand is a much more difficult notion to understand than negative freedom.¹¹² This freedom is primarily considered to be the physical ability to do something such as having physical control over strengths, resources, information and knowledge.¹¹³ This type of freedom has been discussed in the context of disability and has been found to play a crucial role in advancing disability rights.¹¹⁴ This type of freedom builds on to the idea of negative freedom which has all sorts of doors open but they may find that there are still obstacles to taking full advantage of their opportunities.¹¹⁵ This perspective strengthens the need for proactive measures such as affirmative resources and universal accessibility for disabled individuals.¹¹⁶

3.4 Freedom as Internal and External Abilities

While negative and positive freedoms address important aspects of liberty, Thomas Green extends the conversation by emphasizing the interplay between internal capacities and external opportunities, which is particularly insightful for analysing the lived experiences of diabetic persons in Kenya.

¹⁰⁸ Eliaz K, Załuski W, 'Legal Values: Freedom' in Sellers Mortimer and Stephen Kirste (eds.), *Encyclopaedia of the Philosophy of Law and Social Philosophy*, Springer, Dordrecht, 2017,2.

¹⁰⁹ Roberts J, Isaiah Berlin's Two Concepts of Liberty: Negative and Positive Liberty' The Collector 11 November 2023 [Isaiah Berlin's Two Concepts of Liberty: Negative and Positive Liberty](#) on 13 December 2024.

¹¹⁰ Hirschmann N, 'Disability Rights: A Question of Justice or Freedom?' 16.

¹¹¹ [Microsoft Word - NegativePositiveFreedom.doc](#) on 13 December 2024.

¹¹² [Microsoft Word - NegativePositiveFreedom.doc](#) on 13 December 2024.

¹¹³ Illarionov A, 'Conditions for Freedom A Few Theses on the Theory of Freedom and on Creating an Index of Freedom' in McMahon, Fred (ed.), *Towards a Worldwide Index of Human Freedom*, Fraser Institute, Canada, 2013, 153.

¹¹⁴ Kaish S, Beyond Welfare Reform: Rethinking Disability Rights through the Lens of Freedom' 4 *Sambhāṣaṇ*, 4, 2024, 74.

¹¹⁵ [Microsoft Word - NegativePositiveFreedom.doc](#) on 13 December 2024.

¹¹⁶ Kaish S, Beyond Welfare Reform,' 75.

Thomas Green, a nineteenth century thinker¹¹⁷ also discussed the concept of freedom by borrowing from the Kantian view of freedom.¹¹⁸ He went a step further than Kant when it came to defining the term freedom. Green argues that for an individual to be absolutely free they need to have more than negative and positive freedoms which he believes are the first two stages of human realization. Freedom in his view has ability at the centre of it making it tied to internal (capacities) and external (opportunities) abilities.¹¹⁹

He defines internal abilities as the possibility of exercising the capacities of will and reason. This is contrasted to external abilities which will be the focus of this dissertation. External abilities are defined as the opportunities and conditions in society that allow individuals to practice their internal capacities. In this context, healthcare is a necessary external ability that relies on other abilities such as the economic opportunities and social support systems that will allow an individual to achieve their internal abilities such as the pursuit of their own personal goals.

The actualization and fulfilment of both the internal and external ability (freedom) occurs in the external environment which are the social institutions. Social institutions as defined by Green constitute family, education systems, legal frameworks, and economic structures. Individuals must therefore have enabling opportunities in their social institutions for them to be free.¹²⁰

3.5 Application of the Freedoms in the Kenyan Context

The concepts of negative freedom, positive freedom, and Green's internal and external abilities provide a lens to understand the challenges faced by diabetic persons in Kenya. The following section explores how these freedoms are curtailed by systemic barriers in healthcare, policy, and society.

Diabetes is one of the NCDs that depletes the wealth of any individual both directly and indirectly due to the cost associated with treatment of the illness itself and its complications.¹²¹

¹¹⁷ Wempe B, *T.H. Green's Theory of Positive Freedom from Metaphysics to Political Theory*, Imprint Academic, Imprint Academic, United Kingdom, 2004, 11.

¹¹⁸ Awasthi P, 'Thomas Hill Green (1836-1882)' Preeti Awasthi, July 2018 [Thomas-Hill-Green.pdf](#) on 5 February 2025.

¹¹⁹ Simhony A, 'Beyond Negative and Positive Freedom: T. H. Green's View of Freedom' 21 *Sage Journals* 1, 1993, 37.

¹²⁰ Simhony A, 'Beyond Negative and Positive Freedom: T. H. Green's View of Freedom' 21 *Sage Journals* 1, 1993, 36-39.

¹²¹ Harerrimana A, 'Estimating the Economic Burden of Diabetes Mellitus in Kenya: A Cost of Illness Study' 18 *European Scientific Journal* 22, 2022, 2.

In Kenya, this illness is an economic burden on, individuals, households, the community and the nation as a whole.¹²² This dissertation uses a form of economic evaluation known as the cost of illness analysis which is used to evaluate the economic burden illness imposes on society to show the economic burden of diabetes on Kenyan individuals.¹²³ The Cost of Illness analysis highlights the economic burden of diabetes through direct and indirect health costs.¹²⁴ Direct health costs include hospital treatment, medications, specialist care, use of diagnostic and medical services while direct non-healthcare costs, consists of transport to and from medical services, childcare, and home care.¹²⁵

In Kenya, a nation classified as a middle-income nation,¹²⁶ with over eight point nine million Kenyans majority who live below the international poverty line of two point one five United States Dollars (USD) per day (approximately two hundred and seventy-eight Kenya shillings),¹²⁷ the cost of managing diabetes ranging from five thousand to twenty thousand Kenya shillings per month for residents in Nairobi is exorbitantly high.¹²⁸

While the Kenyan government has subsidized the costs of insulin in national hospitals to four hundred Kenya shillings (which is higher than the previous cost of two hundred Kenya shillings), this price still remains unaffordable for many low-income households.¹²⁹ Besides the direct medical costs incurred, parents of diabetic children and diabetic persons in certain parts of Kenya further incur direct non-medical costs as they require five hundred Kenya shillings each way to travel to the clinics which are up to three hundred kilometres away from their homes.¹³⁰ This further exacerbates the problem, limiting the external abilities of diabetic persons to access necessary healthcare.

¹²² Mwaura J, 'Diabetes in Kenya: Latest Updates in 2024' LabtestZote, 27 June 2024 [Diabetes In Kenya: Latest Updates In 2024](#) | on 13 December 2024.

¹²³ Tarricone R, 'Cost-of-illness analysis. What room in health economics?' *77 Health Policy* 1, 2006, 52.

¹²⁴ Arshad M, Alqahtani F, Rasool M, 'A Systematic Review of the Economic Burden of Diabetes in Eastern Mediterranean Region Countries' *Diabetes, Metabolic Syndrome and Obesity*, 2024, 2 [DMSO A 440282 479..487](#) on 13 December 2024.

¹²⁵ Australian Institute of Health and Welfare, *Diabetes: Australian fact*, 2008, 84-85.

¹²⁶ [Inclusive Economic Growth | Kenya | Fact Sheet | U.S. Agency for International Development](#) on 13 December 2024.

¹²⁷ Cowling N, 'Extreme poverty rate in Kenya from 2016 to 2030' *Statista*, 8 March 2024 [Kenya: extreme poverty rate 2016-2030 | Statista](#) on 13 December 2024.

¹²⁸ [Enhancing Hypertensive/Diabetic Management Support through community pharmacy in Nairobi | Maarifa Centre](#) on 13 December 2024.

¹²⁹ Okwany R, 'Price of insulin for diabetes patients shoots up' *Daily Nation*, 29 June 2020, 1.

¹³⁰ Waliaula C, Shannon G, Salustri F, Grewal G, Chelagat W, Jennings HM and Skordis J, 'Understanding the Lived Experience of Children With Type 1 Diabetes in Kenya: Daily Routines and Adaptation Over Time' *National Library of Medicine* 27 November 2021- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8721679/#bibr1-10497323211049775> on 13 December 2024.

Besides the direct and indirect medical costs diabetic persons face, supplies frequently run out and there are miscommunication challenges between local depositories and central medical stores to restock.¹³¹ The Diabetes CarePak initiative conducted a survey in Kenya and found that supplies such as alcohol swabs which are needed for injecting insulin and other medications were unavailable in three out of the four counties they surveyed. Their survey further noted that there was an uneven access to supplies based on the type of facility and location as well.¹³² This systemic failure limits their freedoms as it is a barrier which prevents diabetic persons from accessing necessary supplies that will allow them to effectively manage their condition.

Students in rural areas face stigmatization and discrimination which has been shown to have a negative impact on their mental health and leads to poor compliance to treatment with insulin.¹³³ Teenagers in Nairobi have also shared similar concerns of being stigmatized, excluded and discriminated against during social activities and playtime as well. It was noted that they further had challenges relating to their peers, their parents and those of the opposite sex as well as in attending social events which are significant events to adolescents given the important role peers play in their lives.¹³⁴ This stigmatization and discrimination not only infringes on their right to be free from discrimination¹³⁵ but also limits their negative freedom as they are unable to fully participate in social events and in school.

Diabetes education is important when it comes to the management of diabetes as it improves treatment adherence and reduces the risk of complications¹³⁶ listed in chapter one. Nurses for example are found to be particularly important as they are in unique position to improve the outcomes for patients with diabetes due to the length of time they spend with patients.¹³⁷ Unfortunately, Kenya has a lack of adequate knowledge among healthcare providers¹³⁸ which

¹³¹Jones T, 'Diabetes Mellitus,' 60.

¹³² Hodges M, 'Five critical issues facing people living with diabetes resurge in Diabetes CarePak landscape assessments' PATH, 14 November [Five critical issues facing people living with diabetes resurge in Diabetes CarePak landscape assessments | PATH](#) on 13 December 2013.

¹³³ Palmer T, Waliaula C, Shannon G, Salustri G, Grewal G, Chelagat W, Jennings H, Skordi J, 'Understanding the Lived Experience of Children with Type 1 Diabetes in Kenya: Daily Routines and Adaptation Over Time' 32, *Qualitative Health Research*, 1, 2022, 150.

¹³⁴Bakesia G, 'Challenges Facing Adolescents with Type 1 Diabetes Mellitus in Nairobi County' Published LLM Thesis, Nairobi, 2015, 50-51.

¹³⁵ Article 27, *Constitution of Kenya*, (2010).

¹³⁶ Wang Y, Zhang Y, Han J, Yongfeng Chen, Li L, Xiaohui Wei and Fu G, 'Diabetes knowledge and training needs among non-endocrinology nurses' 9 *Heliyon* 5, 2023,2.

¹³⁷ Farzaei M, Shahbazi S, Gilani N, Ostadrahimi A and Gholizadeh L, 'Nurses' knowledge, attitudes, and practice with regards to nutritional management of diabetes mellitus' 23 *BMC Medical Education* 192,2023, 2.

¹³⁸Jones T, 'Diabetes Mellitus,' 61.

limits the freedom of diabetics in Kenya as this incompetence leads to diabetic persons being unable to access accurate diagnoses, effective treatment plans, and proper guidance, thereby restricting their freedom to make informed decisions about their health and care.¹³⁹ This is a direct limitation of their positive freedom as they are unable to have physical control over information and knowledge that will assist them in managing their illness.

The challenges listed above which limit freedoms of diabetic Kenyan individuals stem from policy issues.¹⁴⁰ Policy implementation in Kenya has been noted to be slow and with predominantly weak monitoring and evaluation systems which are major challenges for diabetes control in Kenya.¹⁴¹

3.6 Conclusion

In summary, societal barriers, inadequate healthcare, economic challenges, and weak policies limit the freedoms of diabetic persons in Kenya as they lack the external ability to achieve their freedoms and further face obstacles that prevent them from doing so. This chapter has used the frameworks of negative and positive freedom, and Green's internal and external abilities, to show how these systemic issues curtail a diabetic's autonomy and opportunities which ultimately leads to the violation of their right to the highest attainable standard of health, which includes the right to health care services.

The next chapter will now proceed into a discussion of how the negative and positive freedoms of Kenyan diabetics are curtailed and how these restrictions on their freedoms and rights can be addressed by borrowing from certain jurisdictions and by amending Section 2 of the Persons with Disabilities Act.

¹³⁹ Wang Y, Zhang Y, Han J, Yongfeng Chen, Li L, Xiaohui Wei and Fu G, 'Diabetes knowledge and training needs among non-endocrinology nurses' 9 *Heliyon* 5, 2023,1-2.

¹⁴⁰ Onteri S, Kariuki J, Mathu D, Wangui A, Magige L, Mutai J, Chuchu V, Karanja S, Ahmed I, Mokua S, Otambo P, Bukania Z, 'Diabetes health care specific services readiness and availability in Kenya: Implications for Universal Health Coverage' *Plos Global Public Health*, 2023, 14-15 [Diabetes health care specific services readiness and availability in Kenya: Implications for Universal Health Coverage](#) on 13 December 2024.

¹⁴¹ Shiroya V, Neuhann F, Müller O and Deckert A, 'Challenges in policy reforms for non-communicable diseases: the case of diabetes in Kenya' *Global Health Action*, 2019, 8 [Challenges in policy reforms for non-communicable diseases: the case of diabetes in Kenya](#) on 13 December 2024.

CHAPTER FOUR: ADDRESSING BARRIERS TO HEALTH AND FREEDOM: INSIGHTS FROM CANADA AND THE USA FOR COMPENSATING DIABETICS IN KENYA

4.1 Introduction

In contrast to Kenya, other jurisdictions such as Canada and the USA have implemented certain laws and frameworks that seek to address the limitations on freedoms experienced by individuals with diabetes as discussed in chapter three of this dissertation. This chapter will delve into these specific laws and frameworks to show how they can be used to compensate the curtailed freedoms of diabetic persons in Kenya.

4.2 Canada

Diabetes is one of the most common chronic diseases affecting Canadians.¹⁴² Approximately nine-point four percent of the Canadian population has been diagnosed with diabetes¹⁴³ and the prevalence is noted to be increasing at a rate of three-point three percent per year¹⁴⁴ which makes Canada one of the nations with the highest prevalence rate in the Organization for Economic Co-operation and Development (OECD).¹⁴⁵ Canadian diabetics face challenges that are similar to those faced by Kenyan diabetics. These challenges range from physical to emotional and economic challenges¹⁴⁶ which include stigmatization, mental health issues, poor public awareness and education and financial challenges given that a Canadian diabetic would spend fifteen thousand dollars a year in managing their illness.¹⁴⁷ Fortunately, Canada has made some positive strides in addressing these challenges which are discussed in the next section.

4.2.1 The Disability Tax Credit

One step the Canadian Government took was by Parliament unanimously passing the National Framework for Diabetes Act in June 2021.¹⁴⁸ This Act requires the Minister of Health, in

¹⁴² [Framework for Diabetes in Canada | Breakthrough T1D](#) on 4 February 2025.

¹⁴³ Universal Access to Diabetes Medications, and Diabetes Device Fund for Devices and Supplies, Health Canada, 29 February 2024 [Universal Access to Diabetes Medications, and Diabetes Device Fund for Devices and Supplies - Canada.ca](#) on 4 February 2025.

¹⁴⁴ Public Health Agency of Canada, *Framework for Diabetes in Canada*, 2022,2.

¹⁴⁵ [Framework for Diabetes in Canada | Breakthrough T1D](#) on 4 February 2025.

¹⁴⁶ Public Health Agency of Canada, *Framework for Diabetes in Canada*, 2022,6.

¹⁴⁷ House of Commons, *A Diabetes Strategy for Canada: Report of The Standing Committee on Health*, April 2019, 13-20.

¹⁴⁸ [Government of Canada Announces New Framework for Diabetes in Canada - Canada.ca](#) on 4 February 2025.

consultation with other relevant stakeholders to develop a national framework designed to support improved access to diabetes prevention and the treatment for all types of diabetes.¹⁴⁹

The Framework for Diabetes in Canada is considered a great milestone for the diabetic community in Canada.¹⁵⁰ One of the framework's key achievements is the reliance on the Disability Tax Credit (DTC) which is administered by the Canada Revenue Agency.¹⁵¹

The DTC is established under Section 118.3 of the Income Tax Act.¹⁵² This credit was created to reduce the amount of income tax Canadians with disabilities are required to pay annually. The DTC amount changes every year and is subtracted from the amount of taxes and individual should pay the government.¹⁵³ For a diabetic to be eligible for this benefit, either them or their supporter pays federal taxes in the years they are claiming the DTC for, they are a Canadian citizen and they should be dependent on life sustaining therapy or have a lifelong impairment.¹⁵⁴

Previously, Section 118.3(1.1) of the Income Tax Act required all individuals with diabetes to prove that they spent at least fourteen hours a week on medication management that required daily adjustments. However, this requirement has been revised. As a result of the Budget Implementation Act of 2021, individuals with Type 1 diabetes are now automatically considered dependent on life-sustaining therapy and no longer need to prove the fourteen-hour weekly medication requirement. In contrast, individuals with Type 2 diabetes are evaluated under the general criteria, which may allow them to claim the DTC retroactively for up to ten previous years if appropriate documentation is provided.¹⁵⁵

The DTC is available to individuals of all income levels.¹⁵⁶ One can apply for the DTC in two ways. The first one is annually where eligible individuals can claim the DTC refund annually when they prepare their taxes. The second way applies retroactively. In this instance, eligible

¹⁴⁹ Public Health Agency of Canada, *Framework for Diabetes in Canada*, 2022,2.

¹⁵⁰ [Framework for Diabetes in Canada - Diabetes Canada](#) on 4 February 2025.

¹⁵¹ Section (2)(f), *National Framework for Diabetes Act*, (S.C. 2021, c. 19).

¹⁵² Section 118.3, *Income Tax Act*, (R.S.C. 1985, c. 1 (5th Supp.))

¹⁵³ [Claiming the credit - Disability tax credit \(DTC\) - Canada.ca](#) on 4 February 2025.

¹⁵⁴ Disability Credit Canada, *The Disability Tax Credit Ultimate Resource Guide An extensive guide to help you navigate around the Disability Tax Credit*, February 2021, 5-6.

¹⁵⁵ Section 118.3, *Income Tax Act*, (R.S.C. 1985, c. 1 (5th Supp.)) read together with [Diabetes Disability Tax Credit | Breakthrough T1D](#) on 4 February 2025 and <https://disabilitycreditcanada.com/disability-tax-credit-ultimate-resource-guide/> on 5 February 2025.

¹⁵⁶ Access RDSP and Doctors of BC, *A Medical Practitioner's Guide to the Disability Tax Credit (DTC)*, June 2024, 1.

individuals are allowed to claim tax credits (which change every year)¹⁵⁷ for the past ten years.¹⁵⁸ For type 1 diabetic persons however, they are only allowed to apply for tax credits from 2021 onwards.¹⁵⁹

The DTC not only covers the disabled person, but it allows for tax credits which arise when an individual who does not pay a significant amount of income taxes to be rolled over (this is because they do not owe much income tax). These credits are rolled over or transferred to a family member who is considered as someone who regularly helps financially with food, shelter, or clothing.¹⁶⁰

This measure which was put in place to ease the financial difficulties of Canadian diabetics is applicable in the Kenyan jurisdiction through amending the definition of the term disability in the Kenyan Disability Act.¹⁶¹ If this amendment aligns with the broader definition of disability in the Constitution of Kenya, diabetic persons will become eligible for tax relief, as the Persons with Disabilities Act allows individuals with disabilities who earn an income to apply to the responsible Minister for an exemption from income tax and other sources of taxable income.¹⁶²

4.2.2 The Registered Disability Savings Plan

Another way Canadian diabetic persons are supported by the government is through the Registered Disability Savings Plan (RDSP). This savings plan is established under the Canada Disability Savings Act.¹⁶³ This savings plan is tax free and is set up to help an individual who is approved to receive the DTC to save for their long-term financial security.¹⁶⁴ In order to qualify for this savings plan, one must be a Canadian resident, they must have a valid social insurance number, they must be qualified for the DTC and they must be below sixty years old.¹⁶⁵ Once they reach sixty years old, they may start making regular withdrawals from their

¹⁵⁷ [Claiming the credit - Disability tax credit \(DTC\) - Canada.ca](#) on 4 February 2025.

¹⁵⁸ Disability Credit Canada, *The Disability Tax Credit Ultimate Resource Guide An extensive guide to help you navigate around the Disability Tax Credit*, February 2021, 7.

¹⁵⁹ Juvenile Diabetes Research Foundation, *The Disability Tax Credit – What You Need to Know*, July 2022, 1.

¹⁶⁰ Access RDSP and Doctors of BC, *A Medical Practitioner's Guide to the Disability Tax Credit (DTC)*, June 2024, 1-2.

¹⁶¹ Section 2, *The Persons with Disabilities Act* (Act No. 14 of 2003).

¹⁶² Section 35(1) and (2), *The Persons with Disabilities Act* (Act No. 14 of 2003).

¹⁶³ Section 3, *Canada Disability Savings Act*, (S.C. 2007, c. 35, s. 136)

¹⁶⁴ Section 3, *Canada Disability Savings Act*, (S.C. 2007, c. 35, s. 136) and [How Registered Disability Savings Plans work | GetSmarterAboutMoney.ca](#) on 5 February 2025.

¹⁶⁵ Disability Alliance BC, Plan Institute, and The Ontario Council of Agencies Serving Immigrants, *Guide to The DTC & RDSP For Newcomers with Disabilities*, 2023, 16.

RDSP account.¹⁶⁶ The RDSP has two types of contribution known as the Canada Disability Savings Bond and the Canada Disability Savings Grant.¹⁶⁷

The Canada Disability Savings Bond is an amount paid by the Government of Canada directly into an RDSP¹⁶⁸ and has a limit of twenty thousand dollars. The government will pay a bond of up to one thousand USD a year to low-income Canadians¹⁶⁹ (those who earn thirty-six thousand, five hundred and two dollars or less) with disabilities. For those earning between Thirty-six thousand five hundred two dollars and fifty-five thousand eight hundred sixty-seven dollars, the bond amount is determined based on the formula in the Canada Disability Savings Act. For those earning more than this, there is no bond paid. For this type of bond, no contributions must be made to get the bond¹⁷⁰ making it ideal for low-income individuals and families.

Just like the bond, the Disability Savings Grant is provided by the Canadian government. The government matches every one dollar contributed to the RDSP with up to three dollars. Beneficiaries, who are the persons living with a disability will receive the money from the RDSP in the future,¹⁷¹ may be eligible to receive three thousand five hundred dollars in grants per year up to a maximum of seventy thousand dollars¹⁷² in their lifetime.¹⁷³ For beneficiaries who are eighteen years and below, their parent(s) or legal guardian's income will be assessed. Once the beneficiary turns nineteen, either their individual, their partner's income will be assessed, even if they are not the holder on their RDSP.¹⁷⁴

Canada's approach to supporting individuals with diabetes through the RDSP provides an effective way for diabetics to secure their long-term future. The Disability Savings Bond in particular ensures that the vulnerable in society are financially included and compensated as those with no income can benefit from government contributions without making any personal

¹⁶⁶ [Withdraw money from your plan - Canada.ca](#) on 5 February 2025.

¹⁶⁷ Section 2(1), *Canada Disability Savings Act*, (S.C. 2007, c. 35, s. 136) read together with Disability Alliance BC, Plan Institute, and The Ontario Council of Agencies Serving Immigrants, *Guide to The DTC & RDSP For Newcomers with Disabilities*, 2023, 18.

¹⁶⁸ RDSP Withdrawals: A Closer Look, *Mackenzie Investments*, 4.

¹⁶⁹ <https://www.canada.ca/en/revenue-agency/services/tax/individuals/topics/registered-disability-savings-plan-rdsp/canada-disability-savings-grant-canada-disability-savings-bond.html> on 19 March 2025.

¹⁷⁰ [Canada disability savings grant and Canada disability savings bond - Canada.ca](#) on 5 February 2025.

¹⁷¹ [How Registered Disability Savings Plans work | GetSmarterAboutMoney.ca](#) on 5 February 2025.

¹⁷² Disability Alliance BC, Plan Institute, and The Ontario Council of Agencies Serving Immigrants, *Guide to The DTC & RDSP For Newcomers with Disabilities*, 2023, 17.

¹⁷³ [Canada disability savings grant and Canada disability savings bond - Canada.ca](#) on 5 February 2025.

¹⁷⁴ Disability Alliance BC, Plan Institute, and The Ontario Council of Agencies Serving Immigrants, *Guide to The DTC & RDSP For Newcomers with Disabilities*, 2023, 18.

deposits. Kenya adopting a similar initiative could provide a safety net for diabetics, helping them plan for the future and reducing the financial strain associated with managing their condition.

4.3 The United States of America (USA)

Diabetes is considered a serious threat to the health of the American public. This is because of its high prevalence rate, the complications it causes and the impact it has on the quality of an individual's life.¹⁷⁵ Just like many other nations, the American public notes that there is widespread agreement that diabetes and related chronic diseases warrant public attention and resources.¹⁷⁶ To support diabetic persons, the country has produced certain legal measures such as anti-discriminatory laws.¹⁷⁷

Disabled individuals in the USA were previously protected under the Americans with Disabilities Act (ADA) which was signed into law in 1990 by George H.W Bush, the forty-first President of the USA. This piece of law however had a narrow interpretation of the term disability which was a result of decisions made by the United States Supreme Court. This narrower definition excluded individuals with diabetes, epilepsy, and muscular dystrophy from the protection the Act was to provide disabled individuals with.¹⁷⁸ An example of such a decision which set precedence for future cases was seen in the *Sutton versus United Airlines*¹⁷⁹ case which ruled that mitigating measures (medicine, medical equipment) must be considered when determining disability.¹⁸⁰ Based on this logic, a person with diabetes who effectively managed their condition with insulin and diet might not be considered disabled.¹⁸¹

In January 2009, the definition of the term disability was broadened by the passing of the Americans with Disabilities Amended Act (ADAAA) which was a result of several months of negotiations between representatives of the disability and business communities.¹⁸² Section

¹⁷⁵Menke A and Gregg E, 'Diabetes and Disability' in National Institute of Diabetes and Digestive and Kidney Diseases (eds), *Diabetes in America*, 3rd ed, National Institutes of Health, Bethesda, 2018,1.

¹⁷⁶Wiley L, 'Applying The Health Justice Framework To Diabetes As A Community-Managed Social Phenomenon' *Houston Journal of Health Law & Policy*, 2016,207 [V16 - Wiley-Final\(Updated\).pdf](#) on 4 February 2025.

¹⁷⁷ Carnes K and Elliot T, 'The Americans with Disabilities Act Amendments Act: What About Reasonable Accommodation? Where Are We Now?' 38 *Touro Law Review* 2, 2022, 561.

¹⁷⁸ Benfer E, 'The ADA Amendments Act: An Overview of Recent Changes to the Americans with Disabilities Act' The American Constitution Society (ACS), 2009, 1.

¹⁷⁹ *Sutton v. United Airlines* (1999), The Supreme Court of the United States.

¹⁸⁰ *Sutton v. United Airlines* (1999), The Supreme Court of the United States para 13-14.

¹⁸¹ Leeds H and Richards E, 'Legal Issues in Accommodating the Americans with Disabilities Act to The Diabetic Worker'29, *Journal of Legal Medicine* 3, 2008, 280-281.

¹⁸²Benfer E, 'The ADA Amendments Act: An Overview of Recent Changes to the Americans with Disabilities Act' The American Constitution Society (ACS), 2009, 1.

12102(1)(a) of the ADAAA defines disability as a physical or mental impairment that substantially limits one or more major life activities of such individual.¹⁸³ Through the ADAAA, an explicit list of major life activities was provided under Section 12102(2)(a).¹⁸⁴ This list includes but is not limited to, caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working.¹⁸⁵ Section 12102(2)(b) went on to define major bodily functions which constitute disability. The operation of a major bodily function includes but is not limited to, functions of the immune system, normal cell growth, digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions.¹⁸⁶ This inclusion is what made it possible for individuals with certain condition like diabetes (endocrine impairment) to be covered by the ADAAA.¹⁸⁷ The ADAAA went on to reject the rule set in the Suttons case. It is now established that the determination of whether an impairment substantially limits a major life activity shall be made without regard to the mitigating measures one may use.¹⁸⁸

In the case of *Jeffrey Kapche versus Eric Holder*,¹⁸⁹ Kapche who was a Type 1 diabetic received a conditional offer at his workplace which was later revoked because the Federal Bureau of Investigation concluded that he would be unable to take on certain responsibilities due to his insufficient control over his diabetes. Kapche sued Eric Holder, the Attorney General of the time under the Rehabilitation Act and was awarded one hundred thousand USD.¹⁹⁰ Eric Holder then brought this case to the United States District Court, District of Columbia as a matter of law and for a new trial. In determining this matter, the court established that eating and taking care of oneself are major life activities that are limited by diabetes.¹⁹¹ It was noted that although Kapche's treatment regimen allowed him to control his diabetes, the treatment regimen itself substantially limited his major life activity of eating.¹⁹² Kapche's medical expert,

¹⁸³ Section 12102(1)(a), *Americans with Disabilities Act of 1990 (As Amended)*.

¹⁸⁴ Button P, Armour P and Hollands S, 'Estimating the Effects of the ADA Amendments Act on the Hiring and Termination of Individuals with Disabilities, Using New Disability Categorizations' Upjohn Institute for Employment Research, Upjohn Institute Working Paper No. 22-377, 2023, 11 [Estimating the Effects of the ADA Amendments Act on the Hiring and Termination of Individuals with Disabilities, Using New Disability Categorizations](#) on 4 February 2025.

¹⁸⁵ Section 12102(2)(A), *Americans with Disabilities Act of 1990 (As Amended)*.

¹⁸⁶ Section 12102(2)(B), *Americans with Disabilities Act of 1990 (As Amended)*.

¹⁸⁷ Button P, Armour P and Hollands S, 'Estimating the Effects of the ADA Amendments Act on the Hiring and Termination of Individuals with Disabilities, 12.

¹⁸⁸ Carnes K and Elliot T, 'The Americans with Disabilities Act Amendments Act,' 561-562.

¹⁸⁹ *Jeffrey Kapche v Eric Holder* (2009), District Court of Columbia, United States.

¹⁹⁰ *Jeffrey Kapche v Eric Holder* (2009), District Court of Columbia, United States para 3.

¹⁹¹ *Jeffrey Kapche v Eric Holder* (2009), District Court of Columbia, United States para 3.

¹⁹² *Jeffrey Kapche v Eric Holder* (2009), District Court of Columbia, United States para 12.

Dr Gavin, stated that Kapche must adhere strictly to his demanding regimen to avoid dire and immediate consequences. Even after the mitigating measures of his treatment regimen, he is never free to eat whatever he pleases because he risks both mild and severe bodily reactions if he disregards his blood sugar readings. Dr Gavin further stated that Kapche must always concern himself with the availability of food, the timing of when he eats, and the type and quantity of food he eats. He must also adjust his diet to compensate for any greater exertion or illness that he experiences. Type 1 insulin-dependent diabetes substantially limited the manner in which he performed the major life activities of eating and caring for himself when compared to an average person in the general population. It was for these substantial limitations, that Kache was found to be disabled.¹⁹³ Based on this foregoing, disability is determined on an individual basis as an individual must show how they are substantially limited by their impairment.

Once a diabetic person is termed as disabled, they are now protected by Section 504 of the Rehabilitation Act of 1973 which is a civil rights law that conforms to the definition of disability found in the ADA and prohibits discrimination based on disability in any program or activity that receives federal financial assistance.¹⁹⁴ Programmes or activities that are protected are those that receive federal financial assistance. They include colleges, universities, other postsecondary institutions, public systems of higher education, local educational agencies, systems of vocational education or other school systems.¹⁹⁵ Besides being protected from discrimination, the Rehabilitation Act ensures that students have certain modifications (sometimes referred to as accommodations) to meaningfully access or benefit from the school's educational opportunities.¹⁹⁶ To be protected by this section, a student must be between the ages of three years old to twenty-two years old and must be disabled according to an evaluation process.¹⁹⁷

The required accommodations must be in a written plan such as a 504 plan or Individualized Education Program. These two documents exist to address the needs of students with physical,

¹⁹³ *Jeffrey Kapche v Eric Holder* (2009), District Court of Columbia, United States.

¹⁹⁴ Meller J and Gamm S, 'The Impact of the Americans with Disabilities Act Amendments Act on Section 504' Public Consulting Group, 2017,1.

¹⁹⁵ Section 504(b)(2)(A), *Rehabilitation Act* (No 93-112 of 1973).

¹⁹⁶ U.S. Department of Education Office for Civil Rights, *Section 504 Protections for Students with Diabetes*, February 2024, 3.

¹⁹⁷ Meller J and Gamm S, 'The Impact of the Americans with Disabilities Act Amendments Act on Section 504' Public Consulting Group, 2017,1.

medical or cognitive conditions that directly impact education.¹⁹⁸ These accommodations should also be based on the student's individualized Diabetes Medical Management Plan (DMMP).¹⁹⁹ The DMPP is a form that is filled in by the student's parents or guardians annually or whenever the child's regimen, level of self-management, or school circumstances change. The information filled in is gotten from the student's diabetes care provider and should contain information on the care and assistance the diabetic student may need while in school.²⁰⁰

Reasonable accommodations commonly offered to diabetic students includes various measures to support the management of their diabetes while in school. These accommodations include immediate access to hypoglycaemia treatment from a trained school staff member and permission to check their glucose levels and administer insulin. For students who are unable to manage their condition independently, the school provides a school nurse or non-nurse school staff who are trained to check a student's glucose and ketones level as well as administer any insulin, glucagon and other medications as indicated in the student's DMMP during the school day and any school events. Additionally, diabetic students are granted permission to use the restrooms and access water or carbohydrate beverages as necessary.²⁰¹ Diabetic student are also allowed to reschedule an exam if their blood sugar is high or pause the clock if they experience a hypoglycaemic episode during an exam. Besides granting students with reasonable accommodations, the Rehabilitation Act also requires the school to respond to any bullying or harassment targeted at diabetic students because of their disability.²⁰²

The USA put these laws in place to ensure that students have reasonable accommodations and have protection from discrimination while in school. The USA definition of disability is broad and is similar to the one in Article 260 of the Kenyan Constitution.²⁰³ If this definition were to

¹⁹⁸ Schultz S, 'Differences between a 504 Plan and an Individualized Education Program (IEP)' National Education Association, December 2022 <https://www.nea.org/professional-excellence/student-engagement/tools-tips/differences-between-504-plan-and-individualized-education-program-iep#:~:text=There%20are%20significant%20differences%20between.and%20progress%20in%20the%20curriculum> on 6 March 2025.

¹⁹⁹ Cogen F, Rodriguez H, March C, Munoz C, McManemin J, Pellizzari M, Rodriguez J, Wyckoff L, Yatvin A, Atkinson T, ElSayed N, Bannuru R, Pekas E, Woodward E and Sherman J, 'Diabetes Care in the School Setting: A Statement of the American Diabetes Association' 47 *Diabetes Care* 12, 2024, 2051.

²⁰⁰ [Diabetes Medical Management Plan | American Diabetes Association](#) on 4 February 2025.

²⁰¹ Cogen F, Rodriguez H, March C, Munoz C, McManemin J, Pellizzari M, Rodriguez J, Wyckoff L, Yatvin A, Atkinson T, ElSayed N, Bannuru R, Pekas E, Woodward E and Sherman J, 'Diabetes Care in the School Setting' 2024, 2056-2058.

²⁰² U.S. Department of Education Office for Civil Rights, *Section 504 Protections for Students with Diabetes*, February 2024, 3.

²⁰³ Article 260, *Constitution of Kenya* (2010).

reflect in the Kenyan Disabilities Act, students would be granted similar rights which are already established in the Persons With Disabilities Act.²⁰⁴

4.4 Conclusion

In conclusion, Kenya has much to gain by adapting elements from USA's and Canada's legal frameworks to better support individuals with diabetes in Kenya. These measures would be easy to implement, as the foundation already exists within the Persons with Disabilities Act. All that is needed is an amendment of the term disability which will match the broader definition found in the Constitution of Kenya which includes diseases such as diabetes.



²⁰⁴ Section 9, *The Persons with Disabilities Act* (Act No. 14 of 2003).

CHAPTER FIVE: RECOMMENDATIONS AND CONCLUSIONS

5.1 Introduction

This chapter will give a summary of chapters one to four of this dissertation and highlight the key arguments in each chapter. It will then proceed into recommendations then a conclusion of the study.

5.2 Summary and Findings

5.2.1 Chapter One

Chapter one introduced the challenges that diabetic persons face when it comes to achieving their right to the highest attainable standard of health. Costly management, stigmatization and discrimination, lack of policies, poor sensitization on diabetes, lack of adequate knowledge among many health workers leading to suboptimal management and poor parental input in diabetic children are some of the challenges that infringe on their freedom and their right to the highest attainable standard of health. To overcome these challenges, this study proposes that the definition of the term disability should be widened to incorporate conditions like diabetes.

5.2.2 Chapter Two

This chapter discussed the theoretical framework that supports this study. Two theories, The Social Model of Disability and the Nagi Model were relied on. These two models show how diabetes leads to societal barriers and functional limitations respectively which is what makes the condition a disability. Legal definitions found in the Constitution and the UNCRPD support this definition unlike the narrow definition found in the Persons with Disabilities Act.

5.2.3 Chapter Three

Diabetic persons in Kenya face restricted freedoms due to high treatment costs, limited healthcare access, social stigma, and weak policies. Chapter three uses Berlin's views on negative and positive freedom and Green's internal and external abilities to show how systemic barriers hinder the autonomy and the right to the highest attainable standard of health for diabetic persons.

5.2.4 Chapter Four

Chapter four explores how Canada and the USA address the limitations faced by diabetic persons. Benefits from Canada such as the RDSP and the DTC provide financial relief to diabetic persons. The USA through the ADA and the Rehabilitation Act on the other hand

legally recognize diabetes as a disability, grants protection from discrimination and bullying and ensures that there are reasonable accommodations for diabetic students in schools.

5.3 Recommendations

5.3.1 Amending Section 2 of The Persons with Disabilities Act (2003)

Currently, the Persons with Disabilities Act does not explicitly recognize diabetes as a disability, limiting access to essential support systems. Kenya should amend this Act to align with the broader definition of disability found in Article 260 of the Constitution of Kenya, which includes impairments that substantially limit daily activities. This is possible through the passing of the Persons with Disabilities Bill of 2023. By doing so, diabetic persons will be eligible for disability-related benefits, such as tax exemptions and employment protections which are already provided for in the Act.

5.3.2 Provision of School and Workplace Accommodations

Various laws in Kenya recognizes the principle of reasonable accommodation for disabled persons.²⁰⁵ In the work environment, this principle entails the alteration or change made to the work environment with the aim of allowing the employee to fully participate in the workplace and to perform essential tasks that are associated with their job.²⁰⁶

Accommodations such as blood glucose monitoring, storage and access to diabetes care supplies, access to food, water and meal breaks and bathroom breaks are necessary for diabetic persons to manage their blood glucose levels.²⁰⁷ These accommodations with the addition of delaying educational tests if blood sugars are high or low should also be available to diabetic students.²⁰⁸ Storage in this instance is an area that is temperature controlled and easily accessible to the diabetic to store insulin.²⁰⁹

²⁰⁵ Article 54, *Constitution of Kenya* (2010) and Article 2, *United Nations Convention on Persons with Disability*, 30 May 2008, A/RES/61/106.

²⁰⁶ Nyaguthii N, 'Access to Employment for Persons with Disabilities: The Case of Kenya' Published LLB Thesis, Strathmore University, Nairobi, 2017, 23.

²⁰⁷ Dimmick B and Douglas D, 'Reasonable Accommodations for Diabetes Management in the Workplace' American Diabetes Association, 2023, 8-19.

²⁰⁸ Los Angeles Unified School District, *Student with Diabetes*, 2012, 1-2.

²⁰⁹ [Diabetes](#) on 11 February 2025.

5.3.3 Education Programmes and Public Awareness

Diabetes education is an essential element when it comes to effective diabetes management.²¹⁰ For the education to be classified as successful, the education should go beyond clinical knowledge and should include practical self-management skills which will aid diabetic persons in the day-to-day management of their condition. To achieve this, Kenya needs to train healthcare professional with a diabetes education curriculum that has been approved by national governing bodies.²¹¹

Besides educating a diabetic person, diabetes education also extends to public awareness. This education aims to communicate to the public the risk, seriousness and consequences of living with diabetes. To achieve this goal, stigmatization must be done away with as only then will society be receptive to diabetes education and benefit from all it has to offer.²¹²

5.4 Conclusion

Diabetic persons in Kenya face challenges in actualizing their right to the highest attainable standard of health and restriction of certain freedoms due to challenges such as high treatment costs, limited healthcare access, social stigma, and inadequate policies. This study argues that for diabetic persons to actualize their right to the highest attainable standard of health, diabetes should be recognized as a disability under Kenyan law.

This study has used two theoretical frameworks to demonstrate how diabetes is a disability given that it limits functional limitations in day-to-day activities and is brought about by societal barriers placed by society. It went into an analysis of the current legal frameworks that define the term disability and showed that the one found in the Persons with Disabilities Act is narrow and contradicts the one found in the Constitution of Kenya.

Through an analysis of the barriers diabetics face in Kenya, the study identifies financial burdens, workplace discrimination, stigmatization and restricted access to education as key constraints on their freedoms. Without formal recognition of diabetes as a disability, diabetic persons experience limitations in employment opportunities, access to medical care, and full participation in society. These limitations directly hinder their ability to exercise negative

²¹⁰ Chawla S, Kaur S, Bharti A, Garg R, Kaur M, Sooin D, Ghosh A and Pal R, 'Impact of Health Education on Knowledge, Attitude, Practices and Glycaemic Control in Type 2 Diabetes Mellitus' 8 *Journal of Family Medicine and Primary Care* 1, 2019, 261.

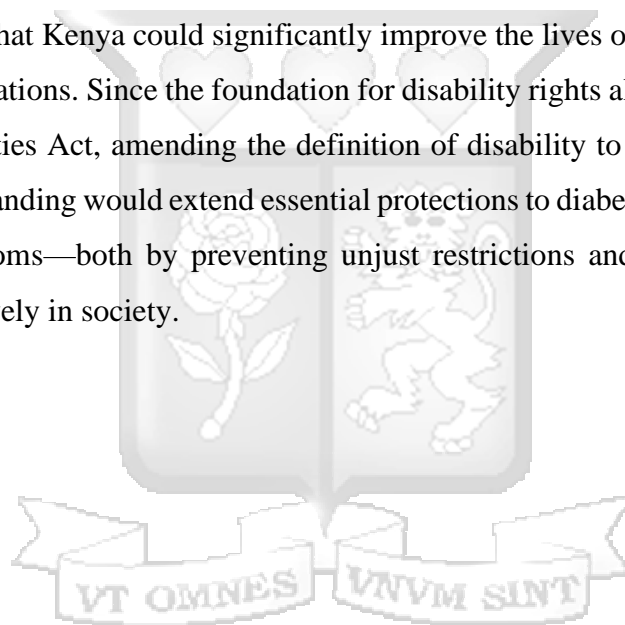
²¹¹ <https://diabetesafrica.org/diabetes-educators-in-africa/> on 11 February 2025.

²¹² The Lancet Diabetes Endocrinology, 'Diabetes education: The Key to a Brighter Tomorrow' 10 *The Lancet. Diabetes Endocrinology* 12, 2022, 827.

freedoms (such as freedom from discrimination) and positive freedoms (such as the ability to access necessary resources to live a dignified life).

To address these issues, the study examines legal frameworks in Canada and the USA that provide financial relief, workplace protections, and educational accommodations for diabetics. In Canada, DTC and the RDSP reduce financial strain by offering tax relief for those managing diabetes, thus enhancing their economic freedom. In the USA, the ADA and the Rehabilitation Act protect diabetics from discrimination and provide reasonable accommodations in schools and workplaces. These laws recognize that diabetes can substantially limit major life activities, thereby ensuring that diabetics have greater freedom to participate in society without systemic barriers.

The study concludes that Kenya could significantly improve the lives of diabetics by adopting elements from these nations. Since the foundation for disability rights already exists within the Persons with Disabilities Act, amending the definition of disability to align with the broader constitutional understanding would extend essential protections to diabetics. Such a shift would safeguard their freedoms—both by preventing unjust restrictions and by enabling them to function more effectively in society.



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