

Diabetes Mellitus

*An analysis of the conflict between the Global and
Caribbean Discourse of Diabetes*

by

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Abstract

Diabetes prevalence has been growing rapidly through the years. This condition has affected many individuals and has been the cause of extremely high government expenditures within health care. Diabetes is not only a health condition, but its prevalence has affected communities in many ways which has led to the understanding that nowadays diabetes is defined as a social problem in need of immediate change. This research will study the discourse of diabetes in the Caribbean. Studies about diabetes are limited especially in the Caribbean. The global discourse of diabetes is different and differs depending on the context. This research will be based on analysis of documents of global discourse of diabetes and documents in the Caribbean context. The main aim of the research is to explain and unmask unrevealed truths of the discourse of diabetes in the Caribbean and its factors and what the meaning is of the Caribbean discourse of diabetes means and implies.

Keywords discourses, diabetes, global, Caribbean, social constructionism, conflict

Preface

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1 Introduction

Diabetes has long since been problematized not only as a condition or a lifestyle problem as it is referred to but also as an understanding of what health means in itself (Keval, 2015). Social scientists have framed it in different ways, claiming that it is in need of change (Shetty, Jena & Kadithi, 2013). Several actors including international organizations and national governments have agreed that diabetes is considered as problematic, and this goes as far as being theoretically recognized as a social problem. However, many underlying factors and general conditions are diverse and highly debatable. The social construction of illness has been extensively researched, the social construction of diabetes has been researched but limited globally. What is striking is that the discourse of diabetes in the Caribbean has not been researched extensively either.

These discourses are not only explanations of what diabetes implies or means medically for certain communities. The discourses are deeper into the way in which perceptions are expressed through words. These discourses give a more in-depth meaning of how diabetes is seen by actors involved. Actors include diabetes associations, medical experts such as specialists, nutritionists, government ministers and professionals in the field. These are individuals that have the power to influence not only the way people with diabetes treat their condition but also how they perceive their condition. The discourse of diabetes has been transforming through the years. It explains how the disease affects the lifestyle of people. However, understanding the disease is complex and requires the analysis from different perspectives and involves different actors. The focus of this study is to draw attention to the discourse of diabetes but in the Caribbean to create an understanding of this illness in this region.

1.1 Diabetes Globally and in the Caribbean

Diabetes has been an alarming health issue for many years. The International Diabetes Federation estimates that people living with diabetes will surge from 382 million to 697 million people by 2035 (International Diabetes Federation [IDF], 2015). Diabetes mellitus, better known as diabetes is a chronic disease. Thus, it is a lifelong condition. Around the world, one in six adults has diabetes. One is diabetic when one's body cannot either produce enough insulin, the body cannot effectively use insulin (insulin resistance), or one cannot effectively produce insulin. Insulin is a hormone that regulates blood sugar in the body. There are three main types of diabetes that are mostly known which type 1 diabetes, type 2 diabetes and

gestational diabetes are (IDF, 2015). Hyperglycaemia, better known as raised or high blood sugar is a common effect or consequence of uncontrolled or inappropriate treatment of diabetes. Inadequate or lack of treatment of diabetes may lead to among other kidney failures, heart failure, blindness or nerve damage (IDF, 2015). In other words, International Diabetes Federation has identified his disease as an immense health problem worldwide. Diabetes is an illness that has been growing at an unstoppable pace globally. The disease does not only affect the patient's physical health but also his or her mental health. Just as many other diseases, it changes the life of the patients and of those who surround them. It affects the personal life and social life and requires many changes that are usual or normal as part of their lives. This means that diabetes calls for drastic changes in one's lifestyle including diet and physical activity that leads to a lot of challenges for patients. According to the International Diabetes Federation's estimation, 44.3 million people between 29 and 79 years of age suffer from diabetes in the region of North America and Caribbean. This is the highest prevalence compared with the other regions of International Diabetes Federation (International Diabetes Federation (IDF, 2015).

World Health Organization [WHO] referred to the illness of diabetes is a burden socially, economically and financially. One drastic fact is that in 2012, 1.5 million deaths were caused by diabetes. This was the 8th leading cause of death among all genders and the fifth among female in 2012. Besides the deaths directly caused by diabetes, other deaths were caused by diseases related to the condition for example cardiovascular disease and chronic kidney disease. Furthermore, large numbers of death due to high blood glucose occur in upper middle-class income countries and the lower numbers in low-income countries. According to WHO, the effectiveness of the management of this illness ultimately depends on the individual's compliance with recommendations and treatment they should follow. This condition requires a lot of attention and treatment. It is also known that if it is not treated well it may lead to further complications. Diabetes is related to other non-communicable diseases (2016). Countries around the world act and create strategies to tackle this issue within universal health coverage. There are different factors that determine which services are prioritized in these different countries are; epidemiological context, health systems development, level of socioeconomic development and the expectations of people. This defers from country to country because healthcare systems are diverse worldwide as well as the context and therefore they should be among other characteristics, adaptable innovative and flexible (WHO, 2016). These systems and services are people-centred and are aimed that providing care to the individuals that require of its benefits. WHO global strategy aims at engaging individuals, strengthening health governance and accountability.

WHO identified global actors involved in the treatment of diabetes? Medical experts or health care providers (specialists, general practitioners, nurses, physicians, dieticians, pharmacies), International Standardization Organization (technological innovations for glucose measures and mobile phone technology). Patients were also identified as actors and a component that partakes in the treatment of diabetes because there is claimed that they must try to manage their disease along with the other actors (WHO, 2016). Recently, IDF stated in their annual atlas that United Nations adopted the post-2015 Development Goals Agenda and the Sustainable Development Goals (SDG's). This event took place at the United Nations Summit. This included a special target on a non-communicable disease with many different diseases, which includes diabetes mellitus (IDF, 2015). Other international actors involved are G7 governments that have launched a call to action during the Summit in Germany in 2015, for cost-effective policy options to improve health outcomes for people who suffer from diabetes. Furthermore, other actors groups are Parliamentarians for Diabetes Global Network (PDGN), Young Leaders in Diabetes which are initiative groups by IDF to promote action on the disease on different levels from different approaches with different groups. Thus, International Diabetes Federation is a remarkable organization that leads advocacy projects for the diabetic community. The vision of International Diabetes Federation is to live in a world without diabetes. And as a mission is to besides be leading an authoritative global voice for diabetics, is to prevent individuals from becoming diabetics and improving their quality of life, moreover, to fight against discrimination that affects diabetics worldwide. This organization also aims at doing high quality research and policy development. IDF has a very crucial role because it is the global reference to relevant and up to date estimates of the prevalence of the disease around the world. As goal IDF strives to promote models of care and resources to support excellent management of diabetics. A total of 12% of global health expenditure is spent on the disease of diabetes. It is accord to WHO the largest health emergency of this century and that nor all governments and professionals in public health are aware of the gravity of this disease and its consequences. According to data, there is little gender difference in the global numbers of prevalence. However, there are more people with diabetes in the urban areas than in the rural areas. The range of health spending is remarkable for the treatment and prevention of diabetes; it was estimated to a range from 673 billion dollars to 1197 billion dollars in 2015. This high price of expenditure is referred to as economic burden because for example, people in low and middle-income countries pay more share of health expenditure than people in high-income countries because they lack access to health insurance and medical services. Therefore, the focus is set on prevention of this disease to reduce the economic burden especially in developing

countries (IDF, 2016).

Diabetes facts are of concern and have been described and called by different names; deadly, the cause of further complications. The actors involved do not only explain certain realities that according to them is so, but they also present it in certain ways to the world and those concerned with the disease. Therefore, the majority of national governments have developed different policies and programs to address this disease. By tackling the problem by healthy promotion diets, physical activity and creating national guideline standards for diabetes management like treatment protocols and procedures since diagnoses and during the treatment after diagnosis. The availability of essential medicine and technology are not included in all national policies since low-income countries are not able to afford these and in the light of this issue focus on providing care in the primary care facilities or to the extent where the budget permits these countries to act and apply surveillance and monitoring to especially diagnosed patients (WHO, 2016).

1.2 Research Goals

This research aims at understanding and explaining the discourses of diabetes globally to be able to tell the difference and similarities with the Caribbean discourse and to discuss why and how Caribbean discourses are formed as they are formed and why they differ from the global perspective based on the social constructivist perspective. This research also aims strongly at unmasking the different layers of the Caribbean context and its characteristics in contradiction and relation to the global context. global perspective is thoughts, perceptions, and definitions formed by the global actors involved in diabetes which are the global organizations World Health Organization, International Diabetes Federation, and on the regional level Pan American Health Organization. Thus, the focus remains on the formed discourse of diabetes in the global sphere and in the Caribbean and the formulation of current and present-day formulations, definitions, assumptions and metaphors recently used to understand this disease, and to define its reality. To understand the global discourses, influence on policy actors in the Caribbean as well as Caribbean discourses influence on policy actors.

1.3 Research Questions and Research Approach

The construction of diabetes has been formed and defined by organizations that have claimed that it is problematic for different communities. However, the question is how the discourse of

diabetes is formed in the Caribbean and what the issue is with the construction as is of this disease, especially because these are derived from powerful actors that are involved in the health industry. The Caribbean may differ and contradict in culture, tradition, and beliefs from the global perspective possibly creating conflict in ways in which diabetes is seen as a disease, for example, its definition, assumption of its causes and severity.

The central (main) research question of this study is as follows;

“How is the meaning of the Caribbean discourse of diabetes explained by national actors?” The following sub-questions will support the main research question and contribute to the answer the main research question. There will be four sub questions which will answer the main research question by describing and explaining the meaning of the discourse in a constructive manner.

Sub question 1

The first sub-question ‘What are the characteristics of the global diabetes discourse derived out of global policy actors?’ will purely describe how global policy actors define and describe diabetes globally. This question will give a general and broad idea of diabetes as a problem by explaining the definition, description, metaphors and assumptions made through discourses. Moreover, this question will be the basis to define categories and coding terms for the analysis of the other sub-questions. The global actors are the international organizations involved in diabetes on an overarching level namely. World Health Organization, International Diabetes Federation and Pan American Health Organization. These actors are referred to as “global actors” or “powerful actors” in this research.

Sub question 2

The second sub-question ‘How is the discourse of diabetes described in the Caribbean by the government and national actors?’ This question will give a more specific view of diabetes but from the perspective of government and national actors in the Caribbean. This question will give a description of how diabetes is communicated by this actors in written which included the definition, description, metaphors, and assumptions. These actors are individuals or organizations involved medically or non-medically with diabetes for example doctors, specialists, ministries, government, and associations. These will be referred to as “national actors” in the thesis.

Sub question 3

The third sub-question ‘What factors explain the discourse of diabetes in the Caribbean? Will explain the factors that contribute and lead to the discourse of diabetes in the Caribbean.

Sub question 4

The last sub-question ‘How are the differences between the global and the Caribbean discourse of diabetes explained?’ will make a comparison between the global discourse and the Caribbean discourse of diabetes. Categories were defined and derived from the theory section to appropriately analyse the policy documents in such a system that it leads to answering the research question. The categories derived out of theory were based on the characteristics from Rubington & Weinberg’s constructivist perspective (2011). The categories for data analysis; causes, conditions, consequences, and solutions were used for the data analysis with the support of specificities also derived out of theory and policy documents discussed in the Theory section.

1.4 Scientific Relevance

This research is of scientific relevance because; it contributes to the understanding of diabetes in the Caribbean. Research on diabetes in the Caribbean is limited especially the Caribbean discourse about diabetes. This phenomenon is complex and is defined and treated differently around the world. A lot of research has been conducted throughout the years to comprehend this disease and its underlying factors, along with the changes in the community, technology and the medical world. Research has been conducted on social constructionism and relations have been made between this domains and illness or diseases. However, research has not linked nor explained this sociological domain focusing on the relation between global constructs and regional constructs. Thus, the added value of this research is delineating discourse of diabetes since the 20th century until present day. It will also explain factorial differences and similarities explained by these social constructs that have already existed for many years. It will explain why certain diseases are built the way they are constructed, what actors construct them and why for example. This research will delineate what this disease means in the Caribbean and what factors make it a unique discourse in comparison to countries in other continents and historical backgrounds. It will also bring clarity to why this disease might be difficult to be treated in the Caribbean as an explanation for the high prevalence that prevails. This research will also give more explanation about what approaches could be considered in the medical world regarding treatment because it provides descriptions and explanations of the Caribbean context that formed upon actual and relevant data seeing that the diabetes discourse has not been explored

deeply mainly in the Caribbean and neither recently. Furthermore, this research will draw attention to the culture that has marked the Caribbean and that have shaped it and has had influence until the present day. It will bring more insight about how the Caribbean was shaped and why. This contributes to societal development because, it highlights among other Caribbean values, culture, heritage and tradition which in the Caribbean is highly respected and cherished. This disease is difficult to completely understand, especially behavior of the diabetic community. Therefore, this research will contribute to especially understanding and explaining behavior.

1.5 Research Outline

The outline of this thesis is as follows. The theoretical chapter has five different sections. It covers theoretical background on diabetes discourse in the year 90's explaining scientific research from 1900 until 1950. Secondly, the theoretical section also covers theory on Caribbean discourses of diabetes explain theories such as post colonialism and stigmatization. The theory presented show the nature of the global Discourse of diabetes and the Caribbean. To theorize the central issue the perception of actors involved in different fields of expertise within diabetes were included in this research. The line of thought was set in the frame of social constructivism using its main characteristics. A contrast between the global and Caribbean theories will be given as well. The methodology chapter has three sections, research design, data collection method and data analysis method. The research design will explain information about the whole structure of the research. This chapter continues with explaining the methods used to collect the data and the last section, the data analysis method explains how the data collected was analysed and categorized. In the following section, the main findings from the collected data will be presented. Finally, in the conclusion section, an answer will be given to each sub-question and the primary research question alongside with a discussion on the overall research and policy implications.

2 Theory

The theory chapter sets a foundation to find an answer to the research questions. The topic that needs more explanation is diabetes discourse in the global context and the Caribbean. Explaining diabetes discourse gives a basis to study how it is viewed by the actors globally, and in the Caribbean. The theory section will unfold the dimensions of diabetes discourse, social construction and constructivism. It will reveal the meaning of diabetes discourse in the global context and the Caribbean context. Furthermore, it will gradually explain the factors and actors that influence and the discourse of diabetes.

2.1 Social Construction of Diabetes

According to theory, diabetes is a social problem as it has been a phenomenon that individuals have been dedicated to solve or alleviate. Thus, people are those who identify problems. This means that what individuals consider as a social problem depends on the subjective assumptions they make for the conditions they claim are troublesome. A phenomenon becomes a social problem when it has been defined as culturally troublesome and needs change (Rubington & Weinberg, 2011). A problem is socially constructed when there is a definition that is defined as a trouble; there is a cause which describes activities people have been engaging in, conditions that manifest interaction between complaints, consequences, and solutions of the problem. “Social problems are conditions that have to become culturally defined as troublesome, widespread, changeable and in need of change” (Rubington & Weinberg, 2011, p. 297). These problems are caused by defining activities by individuals that engage in as they seek a redress of grievances. The conditions are often a process of interaction between complainants and initiators or participants as responders to the demands for redress. According to Rubington & Weinberg (2011), the consequences are contingent depending on the clarity of the definition and management strategy of the claim makers which is also the case with the solutions seeing that it highly depends on the defining process.

Two schools were created under social constructionism; strict constructionism and contextual constructionism. Both agree on the fact that claim makers make subjective assumptions however there is a difference between these two schools. Strict constructionism focuses on asking claim makers how they perceive and describe social conditions. Contextual constructionism asks how the larger context shapes claims. Additionally, the perspective considered two claim making groups. The first one consists of people who are directly affected

by a condition and the second one consists of a so-called 'value group' that includes different actors for example policy actors for non-profit organizations or government. The claim making groups find or consider a condition as troublesome and therefore construct them as social problems (Rubington & Weinberg, 2011).

Diabetes has been also defined as a medical problem which means that it has been defined under medicalization, which is the process in which problems are defined as a medical problem and as a deviation from the normal variation in health or behavior (Blackburn, 2011). Strategies have been created to tackle this problem with different forces. It has gotten the attention of governments as well as industry involved with non-communicable diseases [NCD's] such as diabetes. Many roles have been involved in this process namely physicians, healthcare workers, medicines and medical monitoring (Clark, 2014). Moreover, Conrad & Barker discussed that the construction of specifically illness is particularly embedded with cultural meaning. This means that this meaning is not derived from the nature of the illness itself yet these meanings do shape how society responds to those affected by the illness. These meanings are embedded in how individuals perceive and understand their illness. "[W]hen a physician diagnoses a human's condition as an illness, he [sic] changes the man's [sic] behavior by diagnosis; a social state is added to a biophysiological state by assigning the meaning of illness to disease" (2010, p. 68). According to Brown, the condition's social construction is centered more towards the illness experience than on the diagnosis itself. Factors like; caregiving choices, local medical cultures, race, class, and gender are all influencing factors on the construction of the disease (1995). Thus, the individual that is diagnosed defines diabetes based on their perception of their experience.

There are different ways in which claim making groups can construct a condition as a social problem in such a way it becomes popular or known. An example is constructing a popular frame by expanding that existing problem into a new domain to give it a different perspective. Another example is constructing a very common condition for example cancer or diabetes by using large numbers to emphasize the gravity of the problem or pointing out characteristics such as the impact on middle-class individuals. Additionally, constructing horrifying consequences of the condition, for example, putting emphasis on the fact that the condition is morally troublesome or that the condition is or could become an epidemic (Rubington & Weinberg, 2011). According to Conrad & Barker, claim making groups within medical knowledge construct certain diseases as problems yet, these are not necessarily given by nature but is constructed and are developed by these groups that are interested parties (2010).

In the case of the construction of diabetes there are different claim making groups and

parties involved. Some of these groups are powerful and heard but other groups are powerless and are not heard. Powerful groups or actors that contribute to the construction of diabetes are among other governments, international health organizations like World Health Organization and International Diabetes Federation, professionals in the medical field and national health organizations. However, these are not the only groups of individuals involved in the construction of diabetes. There are more groups that are involved in this process but that do not have the same prominent position or not at all as organizations that advocate or work in the field of health and diabetes. Not all claiming groups are heard or have a voice. The following paragraphs of the theory chapter will reveal different roles of the claim making groups identified from different periods of time.

2.2 Global Governance and the Construction of Diabetes

2.2.1 Diabetes Discourse from 1800 to 1950

Diabetes' emergence, has caused a lot of concern within health care. Many theories have been formed because of thorough research and observations. The direct causation that was discovered was lifestyle and genetics while other factors such as psychological distress were less paid attention to. Many experts of diabetes formed discourse about the causes and management of this disease between 1800 and 1950 (O'Donnell, 2015). The historian Furdell (2009), explained how individuals suffering from the disease were treated in the 19th century in the English society. Since that time already there was a question of finding who to blame. This has been central to the medical development for an understanding of the disease.

In the 20th century, diabetology emerged. Tools such as textbooks of the disease appeared not as common as other diseases like cholera. There was little written about the disease around this time and therefore the discourses presented cannot be considered fully representative of the beliefs of the physicians and medical experts. Still, these discourses provide evidence that during the time there were shifts in the medical thinking of the disease. The general thought during this time was that the disease was categorized as a complicated or complex problem (Furdell, 2009). As diabetes transformed from being a ‘disease from the rich’ to the poor discourses also changed and shifted and what was argued was that the relations were explained by the dynamics of class at the time. An example of a discourse at the time is ‘Sick, isolated in their misery... dysfunctional in their personal habits, and unwelcome among strangers and friends alike, diabetics of the past caused serious consternation in their families

and incurred social judgments about who or what was to blame'' (O' Donnell 2015 as cited by Furdell 2009: 121). Thus, this is an example of how people with the disease were treated in that respectful century in the English society. As mentioned before, around this time one central question and part of the discourse was finding who or what the development of this illness was to blame for, this has been central to the development of illness in the medical world. Thus, the image of diabetes is that it is a self-inflicted disease as a cause of a combination of poor lifestyle.

Genetics was also referred to as a cause but to a lesser extent. Additionally, in the medical world, individuals who suffered from other conditions for example cancer and heart disease were held responsible for their disease by leading unhealthy lifestyles (O'Donnell 2015, as cited by Crawford; 1980, Galvin 2002, Lupton; 1995 & Petersen et al. 2010). This has shown the crucial role of medicine in the field. In a way that the patient was framed as guilty for their condition. However, these suppositions and inculcation were not based on hard evidence, but these judgments arose from the influence of social and cultural values (O'Donnell, 2015). O'Donnell explained that in the article has discussed further sociological topics. The author suggested that there was too much focus on income inequalities as part of structural causes or influence on this disease. However, one author, Coburn (2004) has emphasized that the effects of this disease are more profound than shallow causes such as unequal income, for example, political power structures that may or may not reproduce or create unequal health outcomes (O'Donnell, 2015). On the other hand, the focus was drawn to the education of the poor where a true challenge would be making them understand what to eat, drink and what to avoid. There was suggested that there were limited foods available to the poor or industrial working-class people making it almost impossible to eat with a specific regimen. Moreover, the diet of a diabetic is restricted, and there would be no insurance that individuals with limited intelligence would carry the diet out as required. A complete other discourse is that this disease is a disease of the rich. The reasoning behind this is that the rich had more financial resources available to eat regularly and even more often than necessary. Moreover, through the years vigorous physical activity was not required for these individuals because of their environment for example office job. Moreover, for example in the United States of America, massive food production has made food more easily available to those who could afford it as they desired and at the time they desired which eventually has led to individuals "...dying of overeating..." (O'Donnell, 2015 as cited by Emerson 1924: 24). Individuals have learned that this disease is a combination of a strict regimen pertaining a diet, insulin, exercise to stimulate a healthy lifestyle and good health, longevity for those who follow the rules. As a contrast, those who do not follow the rules, diets would suffer from poor health and will live shorter. The individuals

that do not comply with the rules are labeled as careless. This meant that there was expected that patients would carry out things as was said by medical experts and they had the 'moral obligation' to have control over their illness. In the 20th century the medical world has innovated, and more resources and material was available for a proper treatment of the disease. For this reason, patients that did not comply with the rules were blamed for their poor health and the consequences of their supposedly poor lifestyle. Medical experts have been expecting that patients were intelligent and understood all the principles of this disease for example nutrition principles and to have self-control. Medical experts have promised that they would be able to control diabetes if patients would comply with all the rules. Thus, patients who would not comply with all rules and regimen properly would be held responsible for their poor health and any sign of regress would be blamed to the careless and self-neglected patients.

There are different examples and descriptions of how diabetes was perceived in the English society in the 19th and 20th century. However, what stood out is that in this period what is described by scientists is that there have been different labels and constructions of the disease played between practically two groups; the working class and the non-working class. The imagination that is displayed in the theory is that the working class may lack knowledge and intelligence to understand and comprehend what must be done to maintain a good health. At the same time there is showed how diabetes is constructed by the none working class and or medical experts as a disease that could be blamed on the lifestyle decisions of individuals. At the same time medical experts would expect based on their imagination of the knowledge level of individuals that these individuals would follow and carry out things as they said (O'Donnell, 2015).

2.2.2 Diabetes Discourse from 1900 to 1950

Since the 1950's there have not been a lot of research conducted about the discourse of diabetes globally. However, authors have managed to somewhat study diabetes discourse in different ways. The following scientists researched different topics close to the forming of discourses namely, discursive construction of diabetes and social stigma on diabetes. Keval (2015) researched diabetes as a racialized discursive construction in South Asia on culture and genetics related to diabetes. According to this author, diabetes has become an increasingly focus on health science discourse on UK South Asian population. Diabetes has not only been a concern for this population but also globally which is evident because it has been consistently reported in health policy and research reports. The discourse of diabetes has been focused on the lifestyle

and cultural factors which contribute to the development of this disease (Keval, 2015). Keval found that some research focuses on the social context and life experimental themes of diabetes within ethnicity, but there is a discourse which locates the main concern of diabetes as cultural and lifestyle issue. Diabetes has been framed socially scientifically as a problem with its core in health, choice, and lifestyle thus the frame of the condition is a 'lifestyle problem' (Keval, 2015). "The social scientific framing of health has long since problematized understandings of "healthy," the notions of "choice" and "lifestyle"' (as cited in Bunton, Nettleton, and Burrows, 1995). Thus, it is a problem that requires a solution and change of attitudes. Different studies revealed that an appropriate attitude and knowledge about diabetes type 2 would reduce the risk of morbidity of diabetes and thus, diabetes is seen as a situation that requires change and that people that have better knowledge of the condition can be "change agents" for better knowledge of diabetes (Shetty, Jena & Kadithi, 2013). Knowledge is considered as a weapon to change the situation of diabetes. Experts have dedicated themselves to raise more awareness for the disease and to create programs that would facilitate diabetes management. In India diabetes is considered a huge burden that continues to grow and that puts pressure on the country's economies. That is one of the main reasons why these facilitating programs and knowledge within the community are so crucial (Shetty, Jean & Kadithi, 2013). On the contrary, writers have used the argument of cultural difference to explain the dynamics of diabetes prevalence for a long time. However, these formulations lead to and result in "pathologisation of culture" (as cited in Sheldon and Parker 1992; Ahmad 1993; Ahmad and Bradby 2007). This means that uncertainties related to the cultural factors of the condition are moderated with genetic arguments (Keval, 2015).

Diabetes discourse between 1900 and 1950 somewhat focused not only on pointing out the fact that diabetes was perceived as a "lifestyle problem". It has also been discussed as a complex problem caused by class struggles influenced by lack of education and lack of resources. A disease that has changed from being a disease of the rich to the poor. Yet, apart from focusing on class differences and socioeconomic differences. During this period thus between 1850 and 1900, the focus was on blaming who or what is responsible for the cause of diabetes and on the imagination of knowledge gap between working class and non-working class. On the other hand. After 1950 the focus did not move a lot away from blame theory, however, the focus did shift to finding solutions and stimulating change to solve this problem by promoting healthy habits and lifestyle changes and if it is the responsibility and choice of the individual for their health. In 1950 what was also revealed is the role of medical experts to stimulate change and action in the direction that is desirable and appropriate in their perception. Thus, from 1850-

1900 what is observable is the continuation of the relationship of the powerful actors such as medical experts and individuals that follow them for example patients. During 1900-1950 this kind of power relation towards individual is still visible through the effort of medical experts to push change in their desired direction.

2.3 Discourse of Diabetes in the Caribbean

2.3.1 Culture and Beliefs

Sociological studies in the medical sector have shown that there are many religious and spiritual beliefs to the cause of illness as a form of punishment or the consequences of violating moral and religious taboos. Illness can also be considered as the result of a failure to maintain inter or intra personal harmony which is described because of the sort of the devotion that the individual has to his culture and traditions. Culture is part of one's life and this translates in the actions and behaviours of individuals. In other words, culture and tradition have a lot of influence on the health and behaviour of individuals (Adejumo et al, 2015). Diabetes is a problem and a threat for many. There has been a lot of effort to break the taboo that surrounds this disease. Diabetes still is connected consistently with broader cultural health systems. It is difficult to define how diabetes is problematic because some beliefs suggest that health is about equilibrium and that illness is caused by excesses and deficiencies (Adejumo et al., 2015).

Based on scientific research it is believed that diabetes is caused by eating unhealthily, especially sweets (sugar), stress and is even considered as a punishment for unmoral behaviour (Tripp-Reimer et al., 2001). A common example belief system that may lead to unhealthy behaviour is that members of certain ethnic groups believe that a physique that is heavier indicates that a person is healthier while other ethnic groups consider it as an indication of wealth and prosperity which increases healthy risks because based on this belief individuals would not be motivated to do physical activities (Tripp-Reimer et al., 2001). Another example is that faith, healing and prayer are factors that influence the mindset of individuals in dealing with this disease. Certain individuals believe, based upon culture and tradition, that diabetes may be a serious condition, but it can be treated and cured effectively by spiritual means and by the reduction of stress (Cooper-Brathwaite & Lemonde, 2015). Thus, faith and belief are influential in the attitude of Caribbean individuals often accompanied by the thought of their illness being related to higher power (Brown, Avis and & Hubbard 2007).

Disparities exist in how diabetes is managed and constructed as an illness or a problem,

there is argued (Noakes, 2010). This also includes the different beliefs of black and African-Caribbean ethnic groups regarding insulin and medicine. Insulin is a hormone which is used in treatment when the diabetes patient does not produce insulin nor has insulin deficiency. Certain members of this ethnic group do not believe in the usage of insulin as a treatment but rather prefer healing through prayers and the desire to leave destiny to nature's will (Noakes, 2010). Moreover, participants of s study expressed mistrust of medications used to treat diabetes and expressed concern about chemical nature of tablets and insulin because according to their beliefs these could bring harm instead of good (Brown, Avis and & Hubbard 2007).

Additionally, diabetes appeared to be a taboo, a topic that was not mentioned because the existence of the illness is not accepted and affected individuals from this ethnic group would suffer from the disease in silence (2010). The way individuals treat the disease does not only depend on eating habits, more factors contribute because eating habits are often based upon among other religion, beliefs, economic status, influence of family members and psychological and personal factors (Tripp-Reimer et al., 2001). All these factors play a role in the disease of the individual. Because certain ethnic groups, including the African-Caribbean ethnic group, value tradition and food it is difficult to advise these groups for a change in dietary habits (Carr, 2012). Tradition and food is valued to a point in which individuals are extremely challenged to make adaptations that call for sacrifice (Carr, 2012).

However, in order to successfully give medical advice in adapting habits, medical experts should not disregard cultural components that clearly are a great influence in the diet. The impact of beliefs, culture and tradition is not a phenomenon that can be denied and has to be considered in treatment and prevention. This problem is extremely complex and differs from culture to culture and from community to community, therefore it cannot be only viewed as a health problem, but it has to be approached as a global challenge about understanding the diversity of culture and beliefs regarding health and illness that greatly influences the Caribbean region. Additionally, individuals perceive diabetes as a disease that distinguishes the patients from non-patients. Caribbean Latinos patients that participated in a research conducted in 1994 stated that they perceive diabetes as a negative social impact. They claimed that this condition hindered them of participating in daily activities like household chores and social gatherings. They claimed to suffer from feelings of dependency on other for example for insulin administration. Another word they used to describe how they perceived this disease was 'other'. They perceived themselves as other than others who do not have the condition (Quatromoni et al., 1994).

2.3.2 Diabetes Stigma and Blame Theory

Different scientists like Browne et al. (2016) and Balfe et al. (2013) argue in their psychological and behavioral study of the stigma that diabetes type 2 is often perceived as a ‘‘lifestyle related’’ disease by the general population. This is due to negative stigma’s that influence how individuals perceive certain conditions. Public stigma often influences self-stigma of individuals leading to the internalization of negative perceptions towards their condition (Kato et al., 2017). In a study, adults described how they were self-conscious of their diabetes (Balfe et al., 2013). Some adults describe diabetes as awkward, in particular when they had to manage their condition around other people. Other adults that participated in this research perceive diabetes as stigmatizing and discrediting condition, making them feel ‘‘inalienably different’’ (Balfe et al., 2013, p. 4). The management of a condition like diabetes type 2 is harsh and places an emotional burden on the individual with the condition. The management of the disease may also invite attention and judgment that is negative which suggests socioemotional burden (Browne et al., 2016). Thus, the negativity around the disease has a negative impact on individuals who have diabetes.

There is a body of evidence that shows that individuals with type 2 diabetes experience stigma that is related to their condition. The International Diabetes Federation has also identified stigma related to diabetes as a problem that urgently needs attention in order to develop a world free of discrimination and stigma (Browne et al., 2016). What is striking is that the participants of this research themselves claimed that they felt that diabetes type 2 was receiving ‘‘disproportionate attention and resources from the media, policy makers and charities’’ (Balfe et al., 2013, p. 5). The claim is that all attention is drawn to type 2 diabetes and the requirements to change lifestyle to improve the condition and then little attention is left for type 1 diabetes. Furthermore, diabetes type 1 does not get the services necessary either (Balfe et al., 2013). Frustration and anger were descriptions given by half of more or less half of the participants of a study on distress in type 1 diabetes patients. There are two reasons given for these anger feelings. The first reason is that the participants feel that they could be misidentified as diabetics type 2. The other reason is that they have the feeling that the public in general very negative and prototypical views have of diabetes, which according to them are derived from media reports of diabetes type 2. Some examples of these media reports are reports linking the condition with among other fatness, laziness and eating too much candy. Additionally, the participants also had the feeling that differentiating between type 1 diabetes and type 2 diabetes was necessary to make sure they were not stigmatized for having specifically diabetes type 2 (Balfe et al., 2013).

A small group of participants in this research claimed to be angry about the representation about the disease in the media, articles, news reports which according to them tend to present the worse cases of type 1 diabetes. This kind of absence of positive representations in the media causes stress about their condition. In order to deal with this factor which has a negative influence on them, they indicated that a strategy to avoid distress related to diabetes was to avoid thinking about the negative aspects of diabetes and also negative media representations (Balfe et al., 2013). Another strategy was to obtain social support from health care professionals, family members and peers that also have diabetes because this would help them relieve the distress. Then these individuals develop a negative attitude towards themselves and their illness, which is also related to a low self-esteem and probably a low degree of participation in social life. Browne et al. (2013), also found in their study that there is a social stigma in relation to diabetes. They defined it as “a negative social judgment based on a feature of a condition or its management that may lead to perceived or experienced exclusion, rejection, blame, stereotyping and/or status loss” (Browne et al., p. 2). They described the consequences of stigma as negative for different aspects of patients’ lives’.

The management of a condition like diabetes type 2 is harsh and places an emotional burden on the individual with the condition. The management of the disease may also invite attention and judgement that is negative which suggests socioemotional burden (Browne et al., 2016). Different concepts are used to point towards patients however the concepts mentioned in this article are “blame and shame”. This refers to judging and blaming patients for their worn conditions. Negative stereotypes are also the case by using negative words to describe patients. These stereotypes are typical labeling terms for example “fat” and “obese”. Three sources of stigma were presented namely; media, health care professionals and family and friends. According to the results, the most frequent sources of stigma are the media and family and friends. A participant argued that the media partake in stigma because the condition creates a sensation in public.

On the other hand, family and friends partake in stigma with both negative and positive attitudes towards attempting to support however these attitudes are perceived as judgmental and discouraging. These judgments were mostly directed to type 2 patients and that type 1 diabetes patients were not judged as harshly as type 2 patients. The reason behind this is because type 1 diabetes patients are not perceived as being at fault of their condition (Browne et al., 2013). Many of the participants in this study indicated not having enough opportunity to discuss their emotional problems with professionals during their appointments. The psychosocial issues did not receive enough attention. On the other hand, other participants claimed that they did not

experience distress at all (Balfe et al., 2013). The topic of emotional distress has received popular attention from scientists, diabetics, their families, and healthcare providers. Emotional distress related to diabetes is defined as “the emotional and psychological reactions to the burden and stress associated with continuous diabetes self-management” (Weigner, de Groot & Cefalu, 2016, p. 2124). Diabetes is considered to be a threat to public health in different dimensions. It affects the physical, financial and emotional dimensions of individuals globally. Many diabetics experience challenges managing their condition due to for example lack of resources, no access to medical treatment and supplies. The authors of this article claimed that diabetes is an issue that remains on “fringe of policy makers” (Hilliard et al., 2015, p. 7). A stigma-free identity is needed for effective management of diabetes. Therefore, diabetes-related stigma should be considered and thought of to promote diabetes care. A range of authors and organizations including International Diabetes Federation have tried to reduce this stigma and prevent its adverse consequences (Irani et al., 2013). The main point of this paragraph was to point out that negativity and stigma around diabetes exists and that it does have an effect on diabetes patients. Moreover, as theory showed, the media and family and friends are those who stigmatize the most (Balfe et al., 2013). However, the theory has failed to unmask who influence family and friends and the media with this kind of negativity or from where they form negative attitudes and behaviours towards diabetes.

2.3.3 Eurocentrism and Post-Colonial Theory

This paragraph will elaborate on sociological and cultural studies in the direction of post-colonial theories and eurocentrism. This part is included in the body of the theory because an aspect of the Caribbean is that it has a colonial and thus still have a relationship build in the past with the Western world. Therefore, it is important to point out this aspect of the Caribbean theoretically. Furthermore, postcolonialism is a discipline that is important in cultural and literary studies because it deals with history and culture of the Caribbean in the post-colonial context (Guruprasad, 2014).

McLennan discusses in this book that there are typical postmodern traits of pluralism (2016). Identity in the post-colonial Caribbean is considered pluralistic and multidimensional. It is an identity that is not fixed and changes constantly over time (Guruprasad, 2014). The typical traits of pluralism are decentredness, and a sort of destruction of the structure of domination built with the self-confidence with the West (McLennan, 2006). On the other hand, the authors Adams et al. (2016). Explained that the association that exists between a former colonised

country with the Western world is an association of European global domination. But this domination is not only an aspect of perception but also is about ways of thinking. Adams elaborates that these ways of thinking are products of colonialism resulting in aggressiveness and a sort of colonial violence (Adams et al., 2016). But this aggressiveness at this point in time is referred to as a modern way of being a product of colonial violence.

Furthermore, modern habits of the mind reflect colonial appropriation. This also finds its way to reproduce colonial violence. Individuals experience constraints of freedom and context as a result from colonial violence. This theory of colonial violence goes deeper in to the being of coloniality. Hegemonic psychological science has portrayed West African experience of enemy-ship as a form of pathology (Adams et al., 2016, p. 13). These manifestation of superstitious beliefs are typically referred to as witchcraft and as harmful. But the implication of this is that this manifestation of paranoid cognition constitutes to a form of delusion. This form of delusion lack contact with reality. It is opposite of what English know and is typically a form of knowledge owned by West Africans in this case (Adams et al., 2016). Furthermore, this culture of enemy-ship is related to different cultures. These cultures include ‘‘culture of poverty’’, ‘‘peasant mentality’’ and ‘‘idea of limited good’’. It is the idea that goods and abundance exist in limited quantities, as a sort of mentality and belief. This is considered as a psychological barrier to economic development (Adams et al., 2016, p. 13). However, post colonialism relates to different aspects such as de-colonization, slavery and emancipation. This lead to the Caribbean society to find a new world or ethnicity (Guruprasad, 2014). Decolonial perspectives propose that indeed coloniality has its inherent dark side. And from this point the epistemic stand point emphasizes that a strong implication of post colonialism is that the current modern and colonial global order is not a so called ‘‘fellowship’’ with past empires. Instead it is an ongoing manifestation that presents a struggle, fight to break from the colonial past (Adams et al., 2016). It is a fight to find an own way of being, of existing and thinking. It is also a struggle to create an own Caribbean image loose from constraints and stereotypes based on the belief that because everybody is not exactly the same (Guruprasad, 2014).

2.4 Concluding Remarks

The theory presented gives a basis to understand the Caribbean context and its characteristics, with historical background and possible influencing factors of its culture. Furthermore, it explains the perspective of which the analysis of the discourse will be in order to understand the formation of the Caribbean discourse considering the powerful actors (international health

organizations, national health organizations, government and experts in the medical field) that are involved in the medical sector globally as well as in the Caribbean region. All these actors contribute to the construction of diabetes globally. Theory has shown a contrast between the global discourse and the Caribbean discourse showing differences in culture and tradition in the Caribbean context. But it has also presented a form of domination and imposition of power on people that are quite voiceless or powerless. From the 1850's to the 1900's discourses have transformed until present day. In the 1850's theory has shown how this disease was discoursed by possible powerful actors in the community on higher scales of the society. Describing diabetes as for example "disease from the rich" then "disease from the poor" showing that class differences and especially those who were poor struggled to live while others have been "dying from overeating". This shows the contrast of discourses during the same time from different perspectives. At the same time, it gave a powerful image that there was a struggle of power between the working class and non-working class. It emphasized on the difference of classes and the knowledge gap which was typically used to label the working class and the poor (Adejumo et al., 2015). Discourses moved in the 1900's from blaming social circumstances and focussing on social class to focusing on movement to stimulate individuals to "change" and make lifestyle choices. Still using some past blaming by more or less insinuating that health is the responsibility of the individual. While in the Caribbean, the factors to be blamed for and stigma are culturally and traditionally embedded where culture forms perceptions that still result in negative social judgement insulting with certain terms such as "obese" or "fat". Moreover, this negativity is accompanied with the stigmatization of the other, as inalienably different (Browne et al., 2016). Lastly, theory has shown that media and family and friends frequently and negatively stigmatize individuals who have diabetes however, theory has failed to explain who influences the media and family and friends negatively (Balfe et al., 2013). It is not clear from what root this negativity derives from. The theory gives a basis to understand how discourses through time themselves contradict each other drastically and that many actors from different perspectives have different views and ways of constructing certain realities resulting in constructing many.

3 Methodology

The aim of the Methodology chapter is to delineate the methods used in this research. This chapter also explains the steps taken to obtain the relevant information and data in order to be able to answer the sub questions and the main research question. This chapter includes three main sections including the research design, the data collection, and the data analysis method. In the first section the design of the research is explained . The main point of this section is to explain what kind of research was conducted and in what type of analysis was used for the data collected and it what aim. In the second part, the data collection method is explained, and this section elaborates on the strategies used to collect data. This section will explain what sort of data was collected, the amount of data collected and why and the details of this data. The third section explains the data analysis method. Finally, a section summarizes all the important points of the complete chapter.

3.1 Research Design

The aim of this research is to analyse the Caribbean diabetes discourse by analysing three Caribbean islands as cases; Jamaica, Trinidad and Tobago and Haiti. The features of analysis approach support the analysis of discourse which will lead to a full analyses starting from a broad global discourse to a more specified analysis focused on the context of the Caribbean. The analysis will only be based on discourses in written form, thus policy documents and text in media releases. The analysis method that will be used is critical discourse analysis. This type of discourse analysis allows the researcher to study discourses concerned with among other power and that is rooted in ‘‘constructivism’’. This method also allows the researcher to seek formulations that present discourses on the global and Caribbean context. As the aim of this research is to reveal and unmask the conflict between the global and Caribbean context, this method fits the purpose. Different researchers in sociology and philosophy have used this method to study different topics and to find in a way statements that sate what is supposedly ‘‘true’’. Thus, this type of analysis attempts to construct versions of the social world in systematic ways. This analysis involves the studying and examination of text and the social uses of language (Hodges, Kuper & Reeves, 2008). The discourse analysis not only involves the use of language but also ways in which different powers, actors and institutions and how their ways of thinking and speaking are translated in text.

The focus of discourse analysis according to the Foucauldian type of analysis is to use

sources of data in the written form or oral language texts that are used in social settings and the data may also be from the institutions or individuals that produce these texts. The analysis aims at constructing what is possible or not possible for individuals and institutions to say or think about a respective situation (Hodges, Kuper & Reeves, 2008). There is no pre-established or specific succession of how a discourse analysis should be conducted. Therefore, this research will follow the principles of the sociological constructivism perspective in combination with specifications based on the theory discussed in this research. The research is designed in two stages. The first part is dedicated at analysing data to construct a global discourse analysis and the second part is dedicated at construct a Caribbean discourse of diabetes both with using the same data analysis methods however with different choices of data. The specificities of the research design will be explained in the following paragraphs.

3.2 Data Collection Method

The sample of global context of this research is 43 documents and media releases. For the Caribbean discourse in total 30 media releases were analyzed and 9 scientific articles analyzed as secondary data. Thus, in total 82 items were analyzed as data in this research. The data collection process searching for policy documents and media release in general took place from October 25, 2017 to December 13, 2017.

3.2.1 Data Selection Criteria

Global Context

The data was chosen via specific criteria which are explained in this paragraph. For specifically the policy documents selected for the global context analysis, the documents were retrieved from the international organizations World Health Organization and International Diabetes Federation and Pan American Health Organization websites. These three influential and known global organizations on health and therefore this choice was made. Additionally, the policy documents were policy reports, evaluation of programs, research reports with recommendations or policy applications or evaluation of policies applied to the global sphere. The documents are least containing 15 pages of textual content. The documents contain a problem statement about diabetes, background data and research and a recommendations section for a solution to monitor and or decrease or solve diabetes' prevalence. The documents are published between the years

1990 and 2017 or the documents are based on events or research occurred during the period of 1990 and 2017. Additionally, the intention was to include five media releases for each organization chosen for the global context which are World Health Organization, International Diabetes Federation and Pan American Health Organization. However, due to the criteria set not precisely five media releases were included for each organization.

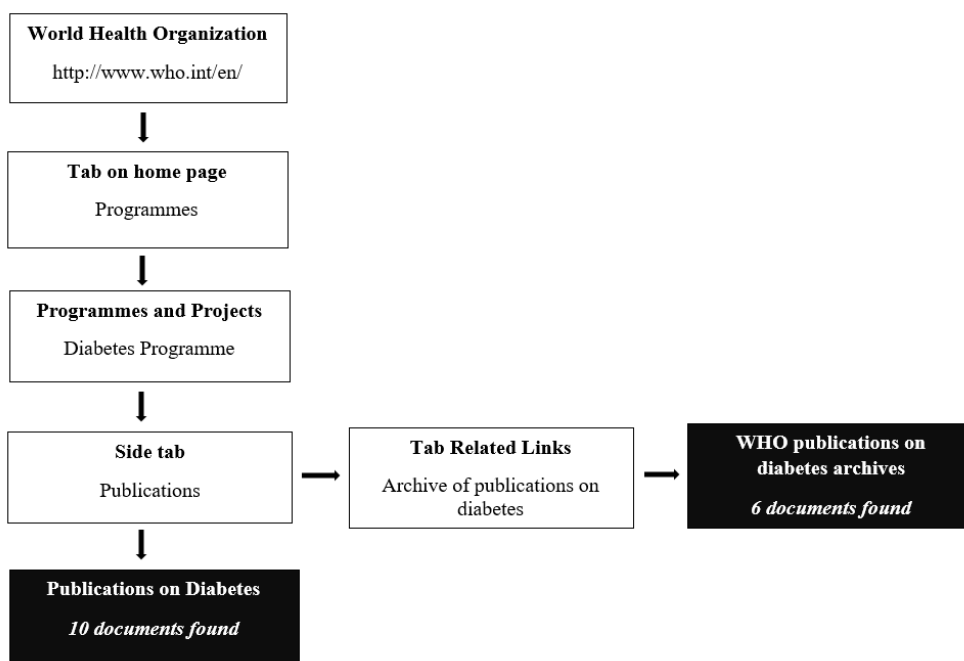


Figure 1 Data World Health Organization Website

To avoid limitations while searching for documents published by World Health Organization there was chosen to search within the archives of the organizations official website. All documents that were included and excluded were listed with the title, size of the document and year of publication (Appendix 1) to make clear which ones did comply the set criteria and which ones did not comply. Nine documents from the website were selected and the other seven documents were not included because they did not comply with the criteria. Furthermore, five media releases from World Health Organization. The steps taken to select media releases were the following. The first there was a search was an attempt to collect releases from the website however, this did not function systematically. The attempt was as follows; on the website itself in the ‘media centre’ option followed by ‘news releases’, ‘statements’, ‘notes for media’, ‘news releases, ‘previous years’ from 2001 to 20017. Thus, the decision was made to search more openly. The strategy used to collect media releases was to google with the keywords

‘world health organization diabetes news release’. The search was sorted by relevance; thus, the most relevant releases would show up first. The search was divided into here time frames to avoid that the years are too far apart in the results and to have more balance between the items found in each search. The first search was specified throughout the ‘tools’ option for the years 1990-1998 and there were in total 4340 results however, to find results in this time frame was problematic. The results were irrelevant meaning that whether the topic was not about diabetes, was not released by World Health Organization or it was not a media release at all. The second-time frame was from 1999-2007 with 72500 results. In this search the result was somewhat better. From this search three releases were chosen. The method was to choose the first releases that complied with the criteria. The releases that did not comply were skipped. For the time frame 2008-2017 exactly the three releases where chosen out of 1630000 results.

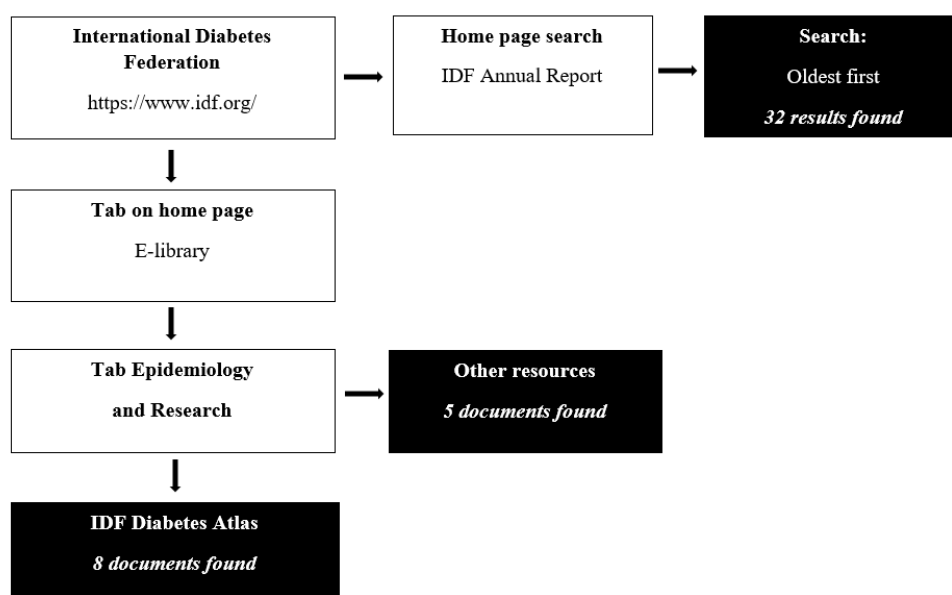


Figure 2 Data International Diabetes Federation Website

The same strategy was used for the documents on International Diabetes Federation’s website. During the search for the time frame 1990-1998 the results were not successful. With the keywords ‘international diabetes federation news releases’ there were 1140 results however no relevant results were found. With the keywords ‘international diabetes federation media centre’ there were also 954 results yet there were no relevant results either. Thus, there was googled ‘international diabetes federation media centre’ for all three-time frames and the keywords were not successful. In the search from time frame 1999-2007 there were 12600 with

no documents selected thus the search was not successful. The successful search was with keywords “international diabetes federation news releases” out of 187000 two releases were selected which were the fifth and the sixth results.

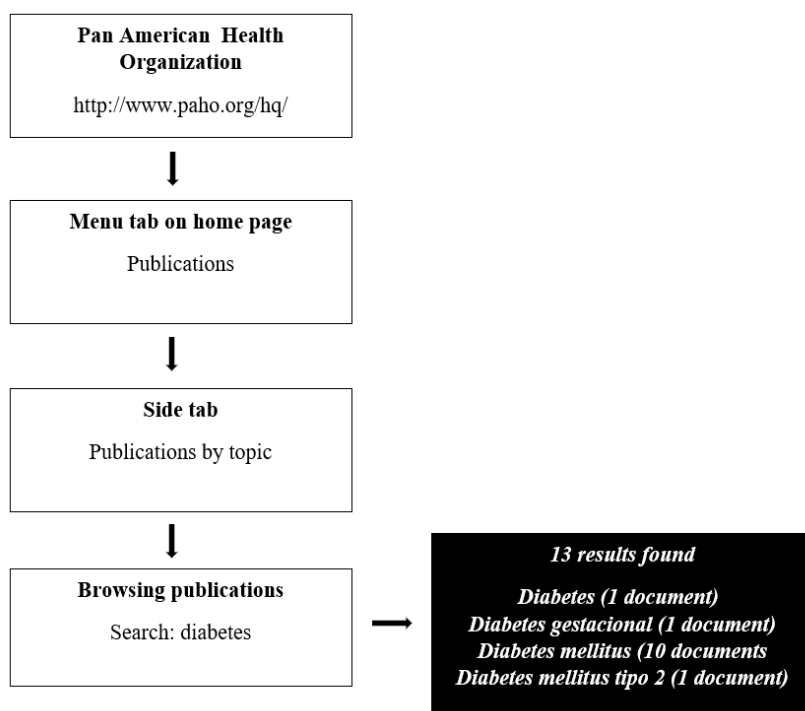


Figure 3 Data Pan American Health Organization Website

The last organization was Pan American Health Organization. Between 1990 and 1998 there were no releases where selected out of 5526 results with the keywords “pan American health organization diabetes news”. In the time frame 1999 to 2007 out of 7240 results there were no release selected. Only in the last time frame search from 2008 to 2017 there were two releases selected. Because not all had media on website the decision was made to search globally on google systematically to avoid searching differently for the media releases part of the data.

Caribbean Context

Three islands in the Caribbean namely; Haiti, Jamaica and Trinidad and Tobago. The constructivist approach was used by focusing on how the policy actors perceive the problem and based on what underlying factors they make certain assumptions, define ways in which the problem is referred to and how people respond to the problem (Rubington & Weinberg, 2011).

These three countries are categorized as part of the region 'North America and Caribbean' according to the International Diabetes Federation. From the categorized countries these countries are geographically located in the Caribbean and have the highest prevalence's of geographically located countries in this region (IDF, 2015). Moreover, all three countries or Caribbean islands have a population that are at least a million since 2015. The qualitative research design allows an analysis of the discourse of diabetes through text that is relevant and suitable. Thus, a discourse analysis will help lead to conclusions on the main research aim. For the most part, the actual discipline of discourse analyses dates back to structural and post-structural linguists and sociologists such as Jacques Derrida, Ferdinand de Saussure and Michel Foucault theorizing discourses (Meyer et al, 2008). Their theoretical foundations had subsequently been methodologies by numerous discourse analysts, ranging from Wodak's discourse-historical approach to van Dijk's multidisciplinary critical discourse analysis. This study will follow a three stages social discourse analysis method (Ruiz, 2009).

The data collected for the Caribbean context was collected differently. The initial aim for the data collection of this section was to collect relevant policy documents, reports and evaluations among other for the analysis. The idea was that these documents were published by professionals in the field of diabetes, ministers of health, and government. However, it was challenging to find relevant or a minimum quantity of documents to be analysed through both searches on the web and through websites of the Caribbean associations of diabetes. Therefore, considering these obstacles the choice was made to instead of collecting the few policy documents available to collect media releases by different actors. The releases in the media that were selected search settings the choice was made to limit the search to the region of each case namely; Jamaica, Trinidad and Tobago and Haiti. For each search and case, keywords were used to search broadly within the scope of diabetes in the respective country. Within the tools specifications were made to the timeline and country for the search. The results were sorted by relevance and all results were included in the selection process instead of choosing for 'verbatim' which means that the search would be focused on finding results the closest to the keywords of the search. The selection process is crucial for the reliability of the research. Therefore, criteria were developed to carefully select out of the big pools of results online. The system chosen to select the releases was simple. The first 15 releases found on newspapers and online news websites and websites in general were chosen as data. The searches were done with specific keywords for each case. The first 15 releases that complied with the criteria were chosen. The selection started from the first page of results, to the second one and on until the goal amount was reached. Releases that did not comply with the criteria were skipped and then

the next release was screened with the criteria. All searches for all cases were divided in three years' time frames. The reason why this was done was because the time frame 1990 to 2017 is broad and thus the results would not show up as equally as if they are divided in order to select equally in each time frame. Thus, the goal was to select 15 items in each time frame for each case. Each search of the cases was different and showed different results. All these steps will be explained in the following paragraphs.

Jamaica was the case chosen to do the first searches online. Different sets of keywords were tested before starting the search itself for collection. Many keyword sets did not function and did not show results within the criteria. The keyword sets are as follows; 'Jamaica diabetes online magazine', 'Jamaica diabetes online newspaper', 'Jamaica diabetes news', 'Jamaica diabetes opinions', 'Jamaica diabetes newspaper', 'Jamaica diabetes'. Other keywords that possibly could have been used but the decision was made to not use them because they could limit the results and be very leading to a specific direction or specific actor were; 'Jamaica diabetes association government newspaper', 'Jamaica diabetes association', 'Jamaica diabetes government'. The official search for data for Jamaica as a case was done using the keywords 'Jamaica diabetes newspaper'. In the search settings under settings the region was set to 'Jamaica'. Under the tools option the country was also set to 'Jamaica'. In the search of the first time frame which is from 1990 to 1998 there were selected because none complied with the set criteria. Because of the search setting to the most relevant results, all most relevant results showed up first yet, none were selected. In the search of the second time frame from 1999 to 2007 there were in total 110 results. Only two newspaper articles were selected the first result was not selected. The second and third result were selected, and the following results were also irrelevant and were thus not selected. The last time frame search was for 2008 to 2017. There were in total 16000 results with this search. The exact first thirteen results were all selected. The results that were not selected were results 14 to 53 with exception of result 40 and 53.

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‘‘Jamaica diabetes government’’. The official search for data for Jamaica as a case was done using the keywords ‘‘Jamaica diabetes newspaper’’. In the search settings under settings the region was set to ‘‘Jamaica’’. Under the tools option the country was also set to ‘‘Jamaica’’. In the search of the first time frame which is from 1990 to 1998 there were selected because none complied with the set criteria. Because of the search setting to the most relevant results, all most relevant results showed up first yet, none were selected. In the search of the second time frame from 1999 to 2007 there were in total 110 results. Only two newspaper articles were selected the first result was not selected. The second and third result were selected, and the following results were also irrelevant and were thus not selected. The last time frame search was for 2008 to 2017. This search was limited to the date 13 December 2017. There were in total 16000 results with this search. The exact first thirteen results were all selected. The results that were not selected were results 14 to 53 with exception of result 40 and 53.

The second case chosen for the searches online was Trinidad and Tobago. The keywords use for the searches of Jamaica were also used for Trinidad and Tobago as well as Haiti. The keywords were ‘‘Trinidad and Tobago diabetes newspaper’’. In the search settings under settings the region was set to ‘‘Trinidad and Tobago’’. In the search of 1990 to 1998 there were no selected items out of the total of 500 results. In the search of 1999 to 2007 there were a total of 12800 results. Selection in this search was more challenging for the reason that there were many results that were irrelevant and not complying with the criteria. From the first 20 results that were revised for selection only the 7th result complied and was selected. From the 20th results and further the results became more and more irrelevant. In the search of 2008 to December 13th, 2017 there were 1.800.000 results in total. From the first 33 results revised for selection eight were selected and passed the criteria. From the 33rd result and further the results were irrelevant. The most difficult case was of Haiti’s. The search online was very difficult and limited, barely any newspaper articles or releases were found. However, there was observed that the few releases found explained about circumstances that formed a certain reality according to them of diabetes in the respective country. In the search of 1990 to 1998 no releases were selected out of 542 results. In the search of 1999 to 2007 there were 14900 results and only one result was selected. For the last time frame 2009 to 2017 three releases were selected. An exception was made for the criteria of selection for different reasons. The first reason is because the criteria limited the selection of Haiti as a case completely. Secondly, Haiti is a special case. There were barely any releases by national actors published however, the releases that were selected were published by whether international newspaper or organizations or individuals giving aid to Haiti. These releases focused on the economic, financial and social

status of the island which one way or the other was considered as a factor influencing the diabetes situation and how they view it. For this reason, the decision was made to be more flexible with the selection when this observation was made.

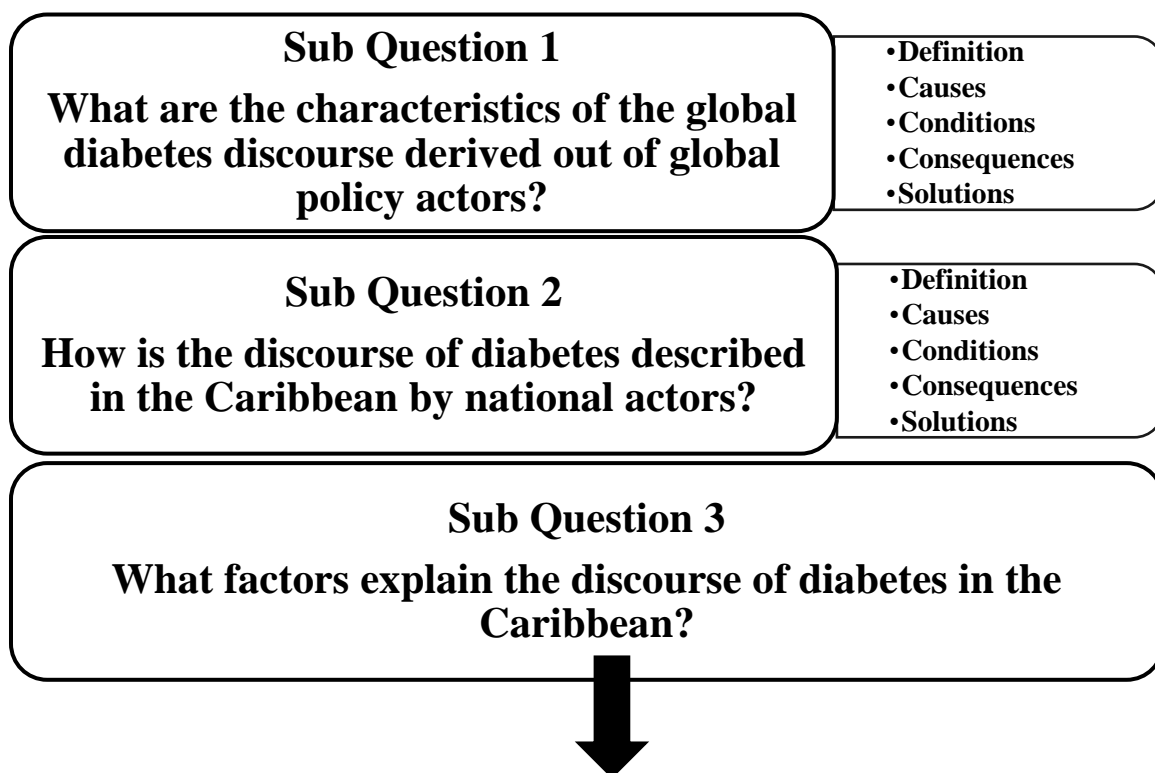
An additional part of this research was including scientific articles about diabetes as secondary data to each case. The first search was done for the Jamaica case in the University of Twente Digital Library via Scopus as well as for the other two cases Trinidad and Tobago and Haiti. The criteria for choosing these scientific articles remained the same as for the policy documents however, the focus was on specifically and only collecting scientific articles with empirical data. The aim was to collect the first five scientific articles that complied with the criteria. The Scopus search for Jamaica was as follows in the entry query string of advanced search ‘TITLE-ABS-KEY (diabetes in jamaica) AND PUBYEAR > 2008 AND (LIMIT-TO (AFFILCOUNTRY,"Jamaica ")) AND (LIMIT-TO (DOCTYPE,"ar "))’. There were 80 results and all results were sorted on relevance. Results 1, 5 and 59 were selected as data. The other results did not comply with the criteria. The Scopus search for Trinidad and Tobago was as follows PUBYEAR > 2008 AND diabetes in trinidad and tobago AND (LIMIT-TO (AFFILCOUNTRY,"Trinidad and Tobago ")) AND (LIMIT-TO (DOCTYPE,"ar "))’. The sequence of coordinates for the search look different but are the same specifications within the advanced search, this is because during the search the search have failed and therefore, the specification’s sequence were changed. There were 192 results and the results were also sorted on relevance. The results 6, 7, 9, 10 and 15 were selected as data. The last search and the least successful was of Haiti’s. The first search with; TITLE-ABS-KEY(diabetes in haiti) AND AFFILCOUNTRY(Haiti) AND DOCTYPE(ar) AND PUBYEAR > 2008 only delivered four results. For this reason, another search was done with diabetes in haiti AND AFFILCOUNTRY(Haiti) AND DOCTYPE(ar) AND PUBYEAR > 2008 and then there were 22 results. Only the fourth result was selected.

The data collections were not an easy task. There was a range of trial and error attempts. All steps were specifically written and indicated to make sure the data can be found specifically as it was done. All decisions and processes were also described in order to make sure that the research can be replicated and to strengthen the reliability. This counts for the whole data collections process. The selection of documents was key for validity. The documents and data were chosen via a specific criteria of selection. There was a structured way of searching for data after different attempts and trial and error seeing that there was first trial and error to identify the search keywords to and systems to find the documents aimed to be found according to the criteria. Furthermore, a list of all the names of the policy documents, reports and releases and

scientific article included in this research as data were listed with their specifications. The releases or documents that were still omitted before the analysis process as items that were selected by mistake are also specified in Appendix 1 for the Global context and Appendix 2 for the Caribbean context.

3.3 Data Analysis Method

This section will explain all the steps taken to analyse the content of the policy documents as chosen data. The data analysis will follow a structure that is focused on answering each sub question with the three stages explained in the previous section of the methodology. The following illustration shows an overview of how the research questions will answer the main research questions.



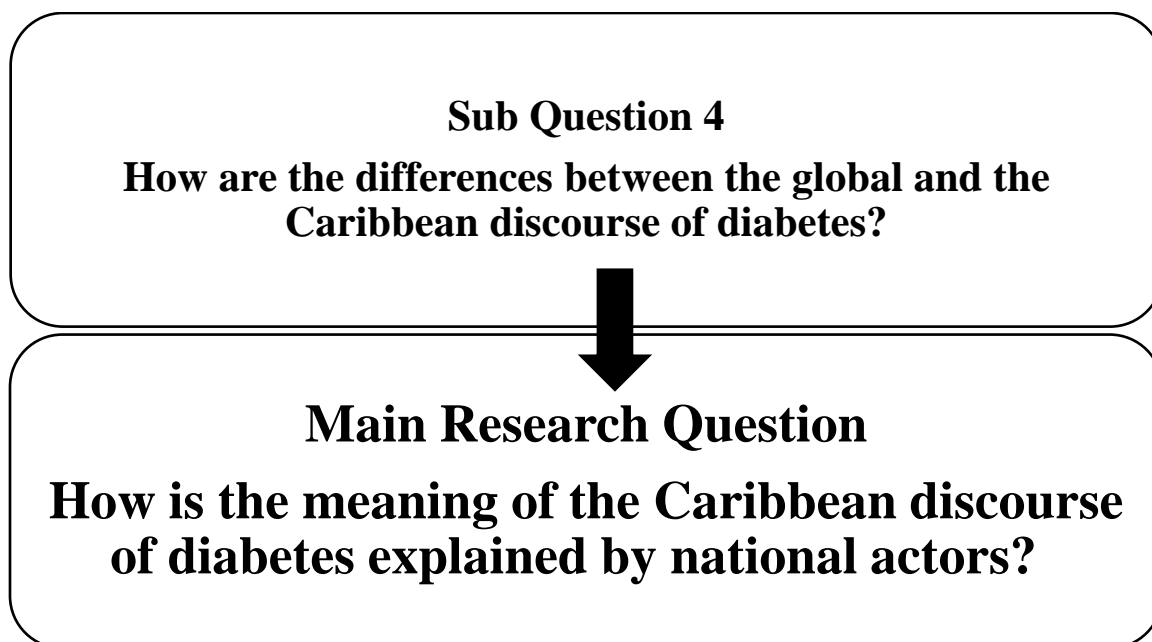


Figure 4 Data Analysis Scheme

The first sub question ‘How is diabetes discourses globally by policy actors?’ will purely describe how government and policy actors define and describe diabetes globally. This question is aimed at giving a general and broad idea of diabetes as a problem by explaining the definition, description, metaphors and assumptions made through discourses. This question will be answered by analysing the policy documents through the categories; causes, conditions, consequences, and solutions. These analysis categories were derived out of Rubington & Weinberg’s theory of constructivism perspective on social problems. The categories under each constructivist characteristic were derived out of theoretical section. The causes will be categorized by searching for problem defining activities and engagement of people in certain activities that are referred to as troublesome. The conditions will be searched by focusing on the interaction that is described between complainants and the demands for redress or change. The consequences will be searched by emphasizing the innovation in diabetic treatment approach, change in social interaction for example stigma and perception. Lastly, the solutions will be searched by explaining the described activities followed by the previous characteristics mentioned thus, patient engagement, healthy lifestyle adoption, innovation within health care systems and research in the health sphere. There is no specific solution given in the theoretical perspective of constructionism however, according to theory derived from the scientific articles and policy documents studied, several solutions were suggested which are the solution specificities illustrated in Figure 5.

The analysis will include descriptions, metaphors assumptions and paradoxes found in the documents. The second sub question ‘How is the discourse of diabetes described in the Caribbean by government and policy actors?’ will give a more specific view of diabetes but from the perspective of government and policy actors in the Caribbean. The analysis of this sub question will follow the same structure as the analysis for the first sub question with the exception that in this case policy documents of the selected cases were used. The third sub question ‘What factors explain the discourse of diabetes in the Caribbean?’ will explain the factors that contribute and lead to the discourse of diabetes in the Caribbean. On the basis of the analysis of the second sub question this question will be answered accordingly through the categories used from the analysis. The analysis of the second and third sub question will be based on theories about the Caribbean culture, tradition and post-colonial history found in the theoretical framework. This means that in the analysis chapter there can be expected that there is a discussion between theory and data that was analysed. The last and fourth sub question ‘How are the differences between the global and the Caribbean discourse of diabetes?’ will make a comparison between the global discourse and the Caribbean discourse of diabetes based on these same categories. Through the categories defined the differences and similarities between the global and Caribbean discourse of diabetes will be explained. These sub questions will form an up building manner to answer the main research question; ‘What is the meaning of the Caribbean discourse of diabetes?’ by providing a general description of the discourse globally with a contrast of the Caribbean discourse. This will contribute to explaining the meaning of the Caribbean discourse in the light of the global and international discourse formed by the actors in the health sector.

Theory have showed that there is a difference between the global context and the Caribbean context for diabetes. For the Caribbean in particular, the colonials and domination past have arisen in theory suggesting that there exists a relationship of manifestation against colonial global order (Adams et al., 2016). This is crucial to analyse these differences and struggles described in theory in the collected data. It is a departing point from the theoretical perspective to envision these differences between these two groups. Therefore, the data analysis consists of a contrast between the global and the Caribbean context based on the belief that these struggles and differences also in culture, mentality, and theory of the ‘other’ are existent (Quatromoni et al., 1994).

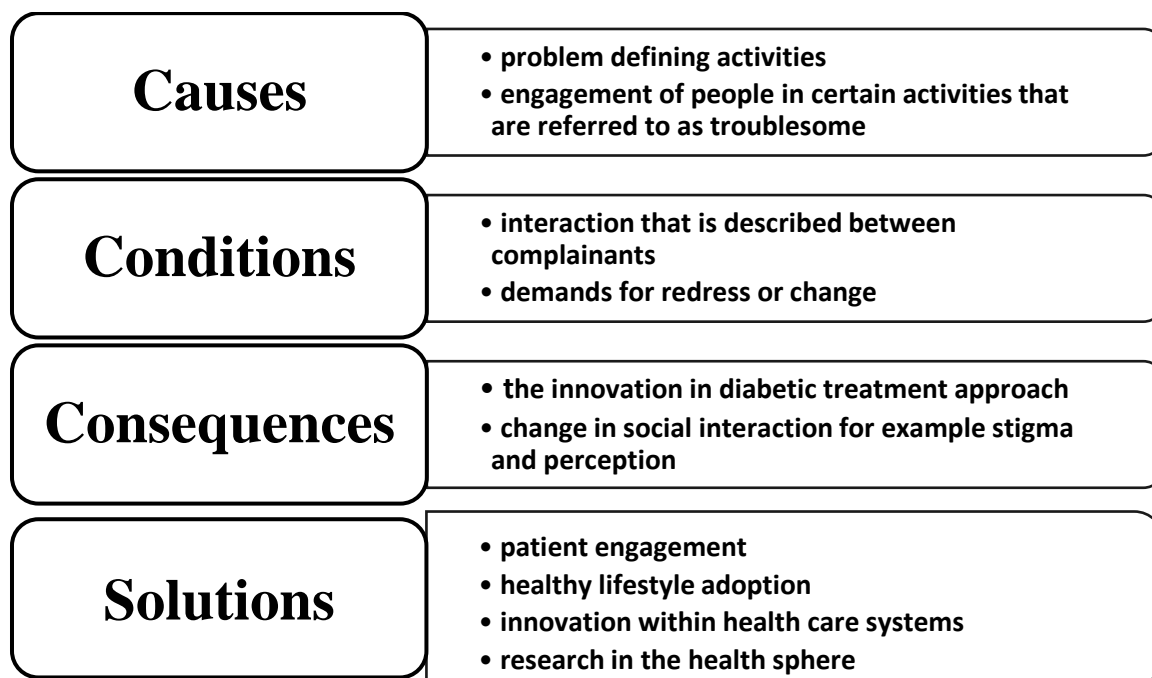


Figure 5 Data Analysis Categories and Specificities

The data was collected through a range of policy documents and reports from the global context and news releases and empirical studies from the Caribbean context. All documents and news releases that were read and they were analyzed using a coding frame. All codes are derived out of the documents, news releases and were all coded in the same frame. The frame contained of the five characteristics of social constructivism definition, causes, conditions, consequences and solutions. The search of discourse on the definition focuses on finding expressions, metaphors and ways of explaining through wording and language how diabetes is perceived. This is the same aim with search for these discourses that describe the causes of diabetes that are not always explained in facts but in specific words that point out what there is desired to be expressed because of among other powerlessness. As pluralism in the Caribbean is a characteristic of destruction structure of domination built with the West (McLennan, 2006). These expressions are not always voiced over because of powerlessness or inability to break from domination and this this research focuses on pick pointing those discourses in text. This counts as well for the conditions, consequences and solutions. These five main categories were categorized in sub codes. For each category there is space for more discourses found that do not specifically are interpreted as part of one of the sub codes. After all data is collected and analyzed in the coding frame, patterns, paradoxes, metaphors, contradictions could be clearly

seen. The most striking discourses could be identified. The decision was made to focus on finding mostly ‘‘wording’’ and ‘‘formulations’’ that describe certain situations rather than facts. Even though many facts are used to describe the situation of diabetes this does not mean that this was the focus for the discourse analysis.

Definition					
Social	Cultural	Medical	Habitual	Educational	Economic
Causes					
Habits/ Lifestyle	Social circumstances	Medical/ Biological	Culture/ Ethnicity		
Conditions					
Complain	Initiator of change	Statistical numbers			
Consequences					
Social Interaction Change	Illness (including morbidity and mortality)	Innovation in Health Care	Cultural Shift		
Solution					
Habits / Lifestyle changes	Cultural changes	Awareness	Medical Intervention	Education	

Figure 6 Coding Framework

3.4 Concluding Remarks

This research will answer four sub questions and a main research question by making use of the discourse analysis as research method. The data used is broad. A systematic strategy was developed to collect policy documents and reports from the website of global actors or organizations; World Health Organization, International Diabetes Federation and Pan American Health Organization. Forty four documents and reports were collected from the global actors website. Moreover, ten news releases were collected with a specific systematic search on Google for the global discourse. For the Caribbean discourse, a systematic search was conducted on Google to collect news releases by national actors as well as scientific articles were systematically collected through Scopus search via the University of Twente digital library. A coding frame was used to analyse the media releases and the content of the policy documents and reports. The coding consisted of five characteristics from social constructivism namely; definition, causes, conditions, consequences and solutions. These characteristics were sub categorized through codes derived out of theory. All content was analysed and coded in the coding scheme (Appendix 2).

The aim is to explain the Caribbean discourse of diabetes. However, the differences between the global discourse and the Caribbean discourse will also be explained. Therefore, the global discourse will be explained first in order to understand what characteristics explain its discourse derived from the global policy actors. The next step is to analyse data for the Caribbean discourse of diabetes in order to explain what its characteristics are. Then it is possible to explain the differences between the global discourse and the Caribbean discourse. Then an answer can be given to the main research question about how the meaning of the Caribbean discourse is explained. The ultimate purpose of this research is to contribute to understanding of the perceptions of diabetes in the Caribbean and what implications this may have on policy making in its respective region.

4 Data Analysis

This thesis seeks to analyse discourses formed and constructed by policy actors involved in diabetes. How discourses are formed in the global context, what their characteristics are and how discourses are formed in the Caribbean context. Also, what the differences are between the global and the Caribbean context and what factors mark these differences. This chapter consists of the answers to the sub questions of this research. It is divided in two sections which are the Global diabetes discourse and the Caribbean diabetes discourse analysed per case. The reason why the Caribbean analysis was divided per case is because each case data was collected separately, and this analysed separately as well. Both paragraphs aim at explaining the global discourse and Caribbean discourse of diabetes separately and according to the coding scheme used for the analysis. The data is analysed in relation to and concerning the theoretical framework. The chapter concludes with giving an answer on each sub-question.

4.1 Global Diabetes Discourse

'The social scientific framing of health has long since problematized understandings of "healthy," the notions of "choice" and "lifestyle"' (as cited in Bunton, Nettleton, and Burrows, 1995). Thus, it is a problem that requires a solution and change of attitudes. Diabetes has been considered as one of the most emerging diseases. Currently national governments consider diabetes as one of the most important agenda points in relation to health. Global actors form opinions and perceptions about diabetes and its implications. These are expressed in among other policy documents, policy reports, programmes and evaluations and many other sources for example in the media through press releases. The point is to describe how these global actors perceive diabetes by emphasizing on the way they narrate diabetes, use metaphors, expressions and definitions to describe the disease. In order to be able to realize this, different documents, reports, programs focused globally on diabetes were analysed. This section consists of five parts which are the five characteristics of the constructivist perspective used as categories for the analysis. The five characteristics are as follows and in this specific sequence; definitions, causes, conditions, consequences and solutions.

Diabetes is a 'medical growing public health concern' (WHO, 1991). This is the least the global actors World Health Organization had expressed about this disease. It has known a 'dramatic rise' (WHO/ IDF, 2016, p. 1). Global actors like International Diabetes Federation have not only identified diabetes as a problem but has pushed to build progress in the political

arena globally to gain recognition for diabetes and other non-communicable diseases to be on global health agendas. As it is observed in the data, international organizations WHO and IDF are concerned to the point of pushing for action to be taken globally. One scientist has also pointed out in a study that indeed it seems as if diabetes is a concern globally because of the persistence of stimulating policies and the constant research reports about (Keval, 2015). An example of political efforts is the Political Declaration adopted at the United Nations level in 2011 on non-communicable diseases. At UN conference on Sustainable Development countries agreed that diabetes and other non-communicable diseases are a threat to 21st century development and that these diseases needed to be addressed (IDF, 2013). Theory has shown that knowledge is considered as a weapon to make changes for diabetes. Diabetes is a problem that requires change and experts in the field have dedicated themselves to raise awareness and influence diabetes management in a positive way as diabetes is continuing to grow as a burden for many economies (Shetty, Jena & Kadithi, 2013). It can be interpreted that actors like these organizations that are known globally are aware of their knowledge and also influence and therefore use these characteristics to push for global action on diabetes not only through policies but also as awareness to individuals.

Diabetes is defined as a medical problem that is a force that has been prevailing for years and has concerned not only health care professionals but also the community on different levels namely; the economic, social and health level. The current situation of diabetes is as concerning as a “burden of disease and death” (WHO, 1991). In other words, this disease is something to be feared of in public health because not only it consumes the health care sector but also the community economically leading to the maximal exhaustion of its workers and available resources to treat patients. As observed in the terms used by the WHO to define diabetes, the words used are words that do not describe a bad situation but a situation that is a trouble or a situation that is not desired at all. As in the theory it is explained that it is a “huge” burden indeed and that it keeps growing and needs to be stopped which give another reason to why programs and knowledge diffused within communities is crucial. The problem requires a solution and also a change of attitudes in order for individuals themselves can become “change agents” for better knowledge of diabetes (Shetty, Jean & Kadithi, 2013).

A striking statement was that diabetes is no longer considered an “industrialised” or “Western” disease as in especially the 90’s (WHO, 2003). It is a problem attacking many countries whether developed or developing country. Even though, on the other hand it recently has manifested itself greatly in developed nations, suggesting that it is a disease of “developed nations” (WHO, 2004). Meaning that people under these circumstances are lead to diabetes.

According to theory diabetes is considered and defined as a ‘lifestyle problem’. And accordingly, with theory ‘The social scientific framing of health has long since problematized understandings of “healthy,” the notions of “choice” and “lifestyle”’ (as cited in Bunton, Nettleton, and Burrows, 1995). The observation made is that there are different reasons to this expression because this disease is also referred to as a lifestyle problem currently when referring to specifically diabetes type 2. It is the eating habits and lack of physical activity as these are explained to be essential to avoid diabetes. What there can be interpreted is that how diabetes has been problematized have had different directions to specific groups and categories especially in the year 90’s. For example, diabetes as a ‘Western disease’, ‘industrialised disease’ or ‘developed nation disease’. Indeed, it is clear how these international actors have problematized diabetes with the aim to stimulate solutions and actions, but this has been done by associating the disease with certain terms that describe whether eras, communities or even deeper, social groups in certain points in time. These associations link to the social and economic status, cultural background of individuals.

Diabetes is a ‘global burden’ creating another ‘burden’ (WHO, 2003). Thus, “social problems are conditions that have to become culturally defined as troublesome, widespread, changeable and in need of change” (Rubington & Weinberg, 2011, p. 297). Diabetes is already an economic burden that puts pressure on all the involving actors such as specialists and insurers. According to these global actors it is a burden because it requires a lot of effort to prevent and treat this disease and is especially very costly as medical expenses. As this ‘epidemic’ accelerates and grows every year different actors focus on informing and explaining the severity and gravity of diabetes and its impact on the community in general (WHO, 2003). Still, diabetes is not defined as a health problem alone, other non-communicable diseases are also defined as part of the problem that follows or is of contributing influence on diabetes (IDF, 2009). And even though diabetes is a ‘rampant global epidemic’ and is one of the biggest health emergencies of this century many government were still unaware of its magnitude and serious complications (IDF, 2016, p. 2 & IDF, 2009).

There was recognized in the data that individuals with overweight or obesity are more or less blamed for their own lifestyle decisions and inability to keep a balanced life by complying with the necessary for example physical activity and healthy eating. Thus, one of the factors to be blamed for the concerning and huge burden is environmental and lifestyle factor (WHO, 1991). Scientists argue that negative perceptions in the environment influence how individuals perceive their own condition. Diabetes type 2 is often perceived as a ‘lifestyle related’ diseases by the population in general, these stigmas and negative perceptions are

internalized by individuals (Kato et al., 2017). There can be assumed out of the data analysed and the theory that the perceptions of diabetes could become or could be definitions that are common or universally accepted as “lifestyle problem” because the perceptions are heard in the environment and these perceptions can be internalized as individuals own perceptions. Furthermore, the choices about food, physical activity and a balanced life are the biggest factors and mostly enemies considered of this disease. This blaming tendency arises out of the perception that diabetes type 2 can be completely avoided. This finding is supported by authors that stated that there is stigma that perceived the condition specifically diabetes type 2 as a lifestyle problem and that it is often related to negative perceptions of the individuals that suffer from the condition (Keto et al., 2017). However, what is striking is that individuals that participated in a study themselves stated that according to them diabetes type 2 in particular receives attention that is out of proportion from media, policy makers and also charities (Balfe et al., 2013). Yet, the claim is not only that all attention is drawn on type 2 diabetes and what is necessary to change lifestyle for the sake of health but that this leads to few attention left for type 1 diabetes. There can be interpreted that diabetes type 2 receives not only negative attention but a lot of attention in general from different actors which are not completely specified. There is no theoretical explanation to why these participants believe that these actors pay more attention to type 2 diabetes. However, the interpretation of this situation is that because diabetes type 2 is stigmatized negatively it receives a lot of attention because it is perceived as an issue that can be solved by the individual himself. Another reason to interpret as of why more attention could be drawn to diabetes type 2 is because of the fact that diabetes type 2 is perceived as a lifestyle problem and needs change attention has to be drawn to it in order to efficiently raise awareness and diffuse knowledge about treating diabetes.

There are many other contributing factors to develop diabetes yet, it is complex to identify causal effects seeing that there are multiple effects that influence or contribute to the development of diabetes. One exemplary situation is that individuals moving from rural areas to urban cities and areas tend to drastically change their lifestyle because of the environment they live in. Long working hours, malnutrition, multiple jobs and or a sedentary life with few physical activity are all contributing factors. Without disregarding the education level and economic circumstances of individuals. Knowledge is an influencing factor to how people make decisions for themselves and their body but, these decisions are often lead by economic circumstances that may be limiting forcing individuals to make not the best choices for themselves.

In hindsight, diabetes as a disease of ‘‘developed countries’’ is defined as such because of this same economic factor (WHO, 2004). In this context it is different, because those with more resources financially and economically have more opportunities for nutrition yet, this does not mean they choose the healthier options. This factors goes both ways because those with the resources may also choose the unhealthy lifestyle. Besides, obesity, family history and unhealthy lifestyles habits diabetes is related to many risk factors. It is associated with rapid cultural and social changes, increasing urbanization, ageing populations, dietary changes, reduce physical activity and more patterns that are considered unhealthy (IDF, 2009). "Cultural myths are deeply ingrained among the border population, where expressions such as 'diabetes is inevitable; my parents and/or grandparents had DM2 [diabetes type 2] and now I have it' are frequently heard," by Dr. Cerqueira (PAHO/WHO, 2010, p. 2-3).

Straight forward statements were made in a report of the International Diabetes Federation. Different factors were identified as influencing factors to diabetes namely, economic status, urbanization, industrialization and social stratification. However, what was striking was the term used to refer to environments that influence the development of for example diabetes. As an example, the poor are most likely exposed to ‘‘obesogenic environments’’ (IDF, 2013). Theory points out that individuals may be exposed to an environment where there is not a lot of physical activity for example because of their jobs or like in USA individuals are exposed to unhealthy foods which could lead to dying of overeating (O’Donnell, 2015 as cited by Emerson 1924: 24). Thus, as an interpretation because the poor are disadvantaged and have less access to maintain a healthy lifestyle they may be less healthy than others not exposed in these environments. Yet this does not mean that necessarily those making certain unhealth choices are necessary not able to make a healthier choice.

Medical experts and powerful actors complaint and claim that diabetes is a problem . All actors through the different analysed documents agree with this. According to theory, these medical experts and powerful actors are not only complaints or influencers but also sources of these stigmas (Browne, 2013). This emphasizes attention on the severity of the problem that can worsen not only because of patients that can develop further complications but also for those who are at risk of developing the condition, apparently because of their choices. The claim is as big it goes further to complaint about the extremely high costs of treatment and their complications which were referred to as a waste of scarce resources, therefore diabetes and complications should be prevented (WHO/IDF, 2005, p. 1). As there is interpreted how WHO refers to the conditions of diabetes it is outstanding how the conditions under which it is claimed that the problem is atrocious is that these actors complain about all the factors leading to high

costs in the medical field. Diabetes has fatal consequences is consuming and is undesired without doubt. The way the problem is presented is by high statistical numbers that are presented as extreme prevalence's of millions and millions of diagnosed patients and non-diagnosed patients.

Unanimously global actors point out that the consequences of diabetes are serious, fatal, disabling and mortal for patients and consuming and challenging for professionals causing low productivity as well. It is a medical burden that as a consequence creates more and heavier burdens. Many patients develop other complications that are dangerous such as kidney and heart failure, cardio vascular disease and loss of eye sight. The consequences are extended to premature disability and a possible low quality of life. On the other hand, it is another burden because it is costly for the medical field to afford the consumption of their workers to treat and work to prevent further growth. Moreover, there is a growing concern for the socioeconomic status of patients that may not be in the position to afford the treatment and lifestyle that this disease requires. Diabetes not only leads to the evident medical complications. The consequences go much further than physical and medical aspects. It causes a lot of suffering for the families and also the patients especially in poor circumstances (IDF News, 2017). Theory showed that industrial workers for example where people that almost had it impossible to have a specific eating regimen (O'Donnell, 2015). What is interpreted is that from certain social situations arise health issues indeed however, global actors have referred to in particular diabetes as a disease related to specific environments and situations.

With diabetes comes also depression which is a common condition in people who have diabetes (IDF, 2009). It is not an easy task to cope with the emotional aspect of diabetes. It interferes and may intervene in social relationships exposing patients to discrimination or feelings of embarrassment and even family functioning (IDF, 2009). A range of solutions are suggested on different levels, medical, habitual, awareness, innovation. The systematic and medical solutions include screening of individuals at risk and diagnosed patients. There is constant insistence on driving people to change their lifestyle if they are at risk to avoid developing the disease in the first place. Yet as theory showed the way individuals treat the disease does not only depend on eating habits, more factors contribute because eating habits are often based upon among other religion, beliefs, economic status, influence of family members and psychological and personal factors (Tripp-Reimer et al., 2001). Patient screening, consequent blood sugar controls and lifestyle intervention are all part of the intervention. Intervention on the community level such as awareness programmes, physical activities in groups also were suggested as solutions. The central point of the solutions is that the

interventions are focused on culture considering that lifestyle may be embedded in traditions and habits from cultural background that are more profound than only choices. The focus is on changing the situation that is evidently considered troublesome (Rubington & Weinberg, 2011). However, culture has been used to explain diabetes for a long time. Some of the formulations of diabetes lead to ‘pathologization of culture’ (as cited in Sheldon and Parker 1992; Ahmad 1993; Ahmad and Bradby 2007). In other words culture has been seen as a factor that sickens individuals, a factor that is not healthy in itself. Here there can be recognized that the cultural environment in which individuals live is targeted as the nest of diabetes development as at the same time theory explains how culture is put in apposition in which it is considered as pathological. Yet, focus of change is mostly focused on the prevention sector due to the idea that preventing the development of diabetes is a key to fight its prevalence. It is necessary to build environments that promote healthy lifestyle choices next to systems to support this (IDF, 2016, p. 10). Apparently and according to WHO, the easiest choice to make is the healthiest choice (PAHO/WHO, 2016).

This paragraph is an additional paragraph to the findings of the global perspective analysis. The analysis is primarily categorized into the five characteristics of social constructivism however, many other lines of discourses were found and were believed to be important to be included in to the analysis as observations. The global actors have the power to send messages to the world about emerging and urgent health problems. Many of their statements are strong and have a clear direction. What was observed is that these global actors do not refer to diabetes as a single problem. They refer to it as a collective problem or a chain reaction more or less. According to observations this clarifies why there is often not talked about specific causes of diabetes but of risk factors (IDF, 2008). A very bold way of to draw attention to the problem is by describing the problem in a dramatic way "Unless urgent action is taken, the world will not reverse this epidemic," said Alberto Barceló, PAHO regional advisor on diabetes” (PAHO/WHO, 2016, p. 2). Participants in a research have claimed that they are not satisfied with how diabetes type 1 is presented in the media, articles and news reports. According to these participants there are no representation of positive sides of diabetes (Browne et al., 2016).

The responsibility of the problem on anyone and everyone “If we are to make any headway in halting the rise in diabetes, we need to rethink our daily lives: to eat healthily, be physically active, and avoid excessive weight gain,” these were statements made by Dr Margaret Chan, WHO Director-General (WHO/IDF, 2016, p.1). That is not all because at the same time that the responsibility is pushed on everyone to take responsibility of their health and

the problem in the bigger context, it is also mentioned that governments also have to take responsibility for their respective countries “Even in the poorest settings, governments must ensure that people are able to make these healthy choices and that health systems are able to diagnose and treat people with diabetes” (WHO/IDF, 2016, p. 1). Thus, people need to act yet need to be supported by an appropriate health care system. Focus is greatly on prevention, insinuating that it is completely undesired almost showing that people in general are to blame for this problem because of the way it is insisted to prevent it and specially to avoid for example to focus on eating healthy foods and avoiding overweight. “Many cases of diabetes can be prevented, and measures exist to detect and manage the condition, improving the odds that people with diabetes live long and healthy lives,” according to Dr. Oleg Chestnov, WHO’s Assistant Director-General for NCDs and Mental Health (WHO/IDF, 2016, p. 2). This does only mean commitment from individuals but also global commitment to address the problem, act and to stimulate further research and preventive programmes (IDF, 2009). Attention should be drawn to diabetes and non-communicable diseases related to it, because it is not accepted to be ignored as bystanders (IDF, 2009). According to theory diabetes type 2 has received disproportionate attention in comparison to type 1 diabetes (Balfe et al., 2013, p. 5). Clearly, type 2 diabetes is marked as a disease of which individuals are very responsible of while statements about the insulin usage and necessity for type 1 diabetes patients are made (IDF, 2016). What is striking is how different type 1 and type 2 diabetes are referred to. Mostly, type 2 diabetes is mentioned in reports and publications as the main focus of diabetes mellitus. While type 2 diabetes is perceived as negative for the individual because of the lifestyle factor, type 1 diabetes is perceived as an illness that is loose from lifestyle choices from individuals. Even though there are two different types of diabetes and are of different nature.

Another striking observation was the role of gender in diabetes. Other factors arose when mentioning gender such as, power dynamics and vulnerability (IDF News, 2017). Many women do not have the power nor access to proper health services (IDF News, 2017). There is more and profound basis of the gender factors because women carry a double burden of discrimination, thus the burden of facing diabetes and the burden of being women in societies that are male dominated. They face double stigmatisation and discrimination. This has negative impact on women seeing that it will discourage them of seeking proper treatment for their health (IDF News, 2017). This bring another dimension to the global discourse of diabetes because it is not only about the condition itself but also about social and cultural environments that are in some cases hostile. “Women and girls are key agents in the adoption of healthy lifestyles to prevent the further rise of diabetes and so it is important that they are given affordable and

equitable access to the medicines, technologies, education and information they require to achieve optimal diabetes outcomes and strengthen their capacity to promote healthy behaviours” stated by Dr. Shaukat Sadikot, IDF President (IDF News 2017, 2014, p. 2).

The following are the key points that have emerged from this part of the analysis:

- Global actors; World Health Organization, International Diabetes Federation and Pan American Health Organization have taken the role of knowledge and change agents to stimulate and contribute to the prevention and treatment of diabetes globally. They use their power to push change on political and governmental level
- These global actors that are also policy actors focus a lot on the lifestyle factor and environment and choices that individuals make. They strongly suggest or shift a lot of focus on diabetes type 2 which is perceived as a lifestyle issue with less focus on diabetes type 1 which is perceived as an immune system disorder.
- Diabetes is clearly stated to be undesirable and needing of change urgently especially in the lifestyle of individuals because of its economic, health and social implications that are purely negative on individuals, families, communities, medical professionals and governments.

4.2 Caribbean Diabetes Discourse: Jamaica

Many Jamaicans believe that they only have a ‘‘a touch of sugar’’. Yet, A Jamaican Professor who is also co-founder and Honorary President of the Diabetes Association went against this supposition stating in Jamaica Information Service that there is no such a thing as a touch of sugar, because it is a misconception of what it means to have diabetes. Diabetes is a serious disease and is life threatening (Morrison, 2016). But this was not surprising because scholars have explained that culture and tradition have a lot of influence on the health and behaviour of individuals (Adejumo et al., 2015). Another relation that is observed with the theory is that theory shows that the way individuals treat diabetes not only depends on their eating habits but also factors including their beliefs (Tripp-Reiner et al., 2001). It is observed that people have their own belief or perception of the disease and that in this case a national actor completely disagrees with the statement. There could be interpreted according to the statement of Morrison (2016) that these individuals create an erroneous way of thinking as a result of lack of knowledge about the disease. However, theory has not emphasized the level of knowledge of individuals as an influencing factor but has clearly emphasized that culture and beliefs as

possible reasons why Caribbean individuals act and express themselves as such as a result of their thoughts regarding the disease. The interpretation is that Morrison obviously desires to point out that individuals believe that instead of having diabetes they have a ‘‘touch of sugar’’ have a wrong and mistaken mind set of the disease.

On the other hand, diabetes is considered a ‘‘nutritional disorder’’ according to PHD, nutritionist and lifestyle consultant, Mrs. Little White. In accordance with scientific research it is believed that diabetes is caused by eating unhealthily, especially sweets (sugar) and stress (Tripp-Reimer et al., 2001). The fact that the body is not able to produce enough insulin is this nutritional disorder. This possibly ‘‘reversible’’ disease thus, diabetes type 2 is preventable and is lifestyle related and is considered as probably the most expensive disease of the world (Little White, 2008). Diabetes is known as ‘‘sugar’’ in the Jamaican community even though it is a disorder that is known by the body not being able to utilise glucose according to Dr. Claudine Lewis statement to Jamaica Observer. The two types of diabetes are distinguished as type 1 and type 2. A diabetic type 1 does not produce enough insulin and a diabetic type 2 has resistance problems to insulin. Still this disease is referred to as ‘‘sugar’’ which is a name far from the actual medical problem of the disease (Lewis, 2016). Type 2 diabetes is apparently curable because it is a lifestyle disease says Dr. Vendryes, 2010 in Jamaica Gleaner. Type 1 diabetes is an auto immune disorder where the pancreas is damaged. Instead of being called diabetes it should be called ‘‘insulin deficiency disease’’ (Dr. Vendryes, 2010). Accordingly, as Vendryes stated, there is no argument or point to use certain terms to refer to the diseases if the names mislead from the characteristics of the disease. Theory have showed that the perception and behaviour of individuals depend on a number of factors, to mention them, religion, beliefs, economic status, influence of family members and psychological and personal factors (Tripp-Reimer et al., 2001). There can be observed how both doctors Vendryes and Lewis struggle with the name or metaphors for diabetes for example ‘‘sugar’’. Both point out that actually diabetes should not be named after other metaphors other than there given medical name, claiming that it is misleading of what the disease actually means. Thus, there can be interpreted that they do not accept how diabetes is viewed in the Jamaican community, showing that they are concerned on how individuals understand what diabetes is.

This lifestyle disease is a ‘‘silent killer’’ according to Mrs. Less the Executive Director of Diabetes Association of Jamaica in 2013. It has not only been defined as a problem and called by a lot of names but there are historical factors to be ‘‘blamed’’ for this diseases prevalence. Here blaming factors becomes evident. Scientists found in their study that there is social stigma in relation to diabetes Browne et al. (2013). They defined it as ‘‘ a negative social judgement

based on a feature of a condition or its management that may lead to perceived or experienced exclusion, rejection, blame, stereotyping and/or status loss” (p. 2). Other scientists claimed that Caribbean Latinos perceived diabetes as a negative social impact that hindered them of continue their normal daily activities, they perceived themselves as the ‘other’ as diabetics (Quatromoni et al., 1994). As observed this actor from the national diabetes association has no hesitation in pointing fingers on the supposedly cause to be blamed for diabetes prevalence in Jamaica. Different theorists emphasize how negative blaming and stigma impact is and how it negatively impacts diabetes patients. What can be interpreted is that this particular actor paradoxically gives a statement of diabetes because firstly there is recognized by her how diabetes has been called by different names yet at the same time she expressed herself with blame by blaming historical factors of Jamaica. Yet, these historical factors are not specified. There is assumed that what is meant is the post-colonial past of Jamaica. Here the interpretation after analysing the statements and the theory what shows is that within own expressions the national actor uses blame in a negative way while trying to run away from stigma. It seems that while doing this it may seem that she moves away from stigma but without realizing or like second nature turns to blame factors for the problem.

Vice-chancellor of the University of the West Indies Mr. Beckles has made strong statements about diabetes and its possible history. Historians would focus on the plantation society that has created certain habits that have been passed years after years instead of going after causes of diet and inactivity (Beckles, 2016). Still, diabetes is a disease of ‘high burden of complications. It is problematic and has an alarming prevalence constantly increasing. ‘Slave diet point to pandemic’, as a result of circumstances of plantation community that learned to ingest what they produced (Beckles, 2016). These meals they know are not considered the healthiest ones for example sugar canes and salt pork, routine foods these individuals eat, and which is part of them because it is what they learned. What is suggested is that the ‘sugar gene’ is inherited. Because of this history babies are born with propensities, thus stressors were accumulated from ‘slavery and colonisation’ and brought to present day habits (Beckles, 2016). The statements of Beckles certainly were not surprising. Ethnic groups such as African Caribbean’s value tradition, food and it can be difficult to change their dietary habits (Carr, 2012). Once again, the discourse used to describe diabetes from cause to effect has characteristics of blame emphasizing how negatively history has impacted the health of Jamaicans. It seems that Beckles attempts to normalize and accept diabetes prevalence in the community by insinuating that diabetes is something that is carried from generations to generations practically bringing this over as an issue that is circumstantial from the past and

that under the stress of slavery and colonisation was brought over. As it is brought forward it is interpreted that Beckles practically communicates that it is not Jamaicans fault and that the fault is on slavery and colonisation circumstances of the past. At the same time his statements are very striking and special because it points out the mentality of slavery which can be interpreted in relation to the past colonial history. The slavery period has passed from Jamaica however, the slavery mentality has stayed and still prevails in Jamaica. A sort of peasant mentality that is carried on (Adams et al., 2016).

At the same time the North Health Fund focuses attention on the problem by emphasizing that the prevalence in Jamaica is about over 180 thousand according to International Diabetes Federation but according to North Health Fund, over 220 thousand individuals have diabetes. A lot of factors are mentioned as risks or contributing factors to the development of diabetes. What has not been brought forward before is the factor of triggers like viruses, or toxins in dietary components which possibly play a role. Yet still the most important risk factor of specifically diabetes type 2 remains "overweight" and "obesity" as leading causes or factors. Because it is part of "poor life choices" and "physical inactivity" which contribute to obesity and eventually diabetes (Lewis, 2016). Additionally, research has given more indications to the prevalence of diabetes. The National Health and Lifestyle Survey in 2008 also gave indications of higher prevalence of diabetes or being obese having a significant association with lower levels of education (Cunningham-Myrie, 2013). Approximately 300 million people around the world have been living with it since 2013. But, in Jamaica itself 12.000 children suffer from the disease (Less, 2013). There is a high rate not only in Jamaica but in the Caribbean and continues to increase as well (Beckles, 2016). It is a big problem that should be "alleviated" because diabetes is responsible for many other complications stated by (Morrison, 2016). According to observations made, national actors in Jamaica show concern, feel a load and burden by the prevalence of diabetes. It is clear how these actors identify different factors as causes and also risk factors to the development of diabetes but what there is common ground in how diabetes impact is felt as burdensome through different expressions used such as "alleviated" and "suffer". This is done without omitting the factor and putting fingers on exactly what the issue is which until now has pointed to "lifestyle choices" in a way showing it is responsibility of the individual.

Diabetes leads to many health complications and diabetes can also lead to mortality. Cardiovascular disease is a leading cause of mortality for diabetics. This is not the only complication as diabetics are also prone to heart attacks (Lewis, 2016). The result of diabetes in Jamaica is sever, because it is responsible for 56% of death on the island since 2013 (Less,

2013). The consequences of diabetes go beyond medicals can explain consequences such as kidney failure or amputations. It is strongly stated that more education is needed. The consequences are costing a lot of capital while the disease of kidney failure can be prevented (Less, 2015). Dramatic numbers predict that within 10 to 15 years of ‘‘suffering’’ from diabetes 85% of diabetics of whether type 1 or type 2 diabetes will have more complications such as nerve damage which is also a difficult disease to treat (Morrison, 2016). In a research study there was shown that type 2 diabetes patients are judged harshly while type 1 diabetes patients are not judged harshly because supposedly diabetes type 2 is something developed through poor choices (Browne et al., 2013). Diabetes is the second cause of death of Jamaicans under the age of 70 (Morrison, 2016). Next to these consequences, diabetes causes loss of productivity, suffering, decreases quality of life (Vendryes, 2010). Furthermore, it is an economic burden caused by an already existing burden claimed Dr. Tufton of the Ministry of Health in 2016. Actors have made clear how diabetes is the ‘‘worst’’ for the Jamaican community in the most negative possible way referring to the situation as ‘‘severe’’, ‘‘dramatic increase’’. Besides the negativity around diabetes the actors made it clear that it is something not desired and that it is not simply classified as bad but as the worst regardless of the type of diabetes in this case.

Diabetes is referred to as a lifestyle problem and therefore there is claimed that weight loss and healthy lifestyle is crucial to improve diabetes (Lewis, 2016). In contradiction it is a lifestyle disease that cannot be cured but it can be managed instead. Therefore, there should be proper lifestyle habit changes to contribute to its prevention and to help manage it. ‘‘Until there is a cure, let us give it care’’ (Less, 2013). Once again in contradiction, people should know and learn about the disease type 2 diabetes and how it can be prevented or ‘‘reversed’’ (Wildwood Medical Institute, 2011). Dr. Lowe believes in the usage of natural remedies such as bitter melon, hook plant and Siberian ginseng along with essential minerals and vitamins. Besides these remedies a healthy lifestyle and enough physical activity is recommended as published by the Scientific Research Council (Lowe, 2013). More professionals have recommended more or less the same, but in particular one actor pointed out that there should be believed that diabetes is ‘‘curable’’ and abandon limiting beliefs next to more practical things such as losing excess fat and taking appropriate supplements to also help lower blood sugar (Vendryes, 2010).

Treatment by health care professionals such as doctors, pharmacists suggest being involved in the process of treatment (Less, 2015). A diet that is proper and exercise are also factors that can contribute to debilitating the possible complications of diabetes (Less, 2015). Thus, according to data found diabetes type 2 can be not only solved but also eliminated because

it is a result of ‘poor choices’ (Ministry of Health, 2016). ‘Each November, we are bombarded with the ‘facts’ about the growing diabetes epidemic. Experts spread the bad news: half a million Jamaican citizens are now diabetic, and many may not even know. That is true. However, at the same time, these experts mislead the public with the terrible lie that there is no cure for diabetes. I call this the diabetes deception’ (Vendryes, 2010). What was discovered is that in Jamaica there is space for alternative medicine for example using herbs as medicine or natural remedies. Ganja was suggested by the Diabetes Association Jamaica as a possible way to protect beta cells which help the pancreas produce insulin (Less, 2015). Certain members of the African Caribbean ethnic do not believe in among other the treatment of diabetes, but they do believe in healing and prayers (Noakes, 2010). As observed, this is an example of how the beliefs of Caribbean’s may differ from what is as common as treatment with insulin or medicine. But as much research there exists and as many professionals study the disease there is huge contradictions and conflict in the perception on the disease and how it can be supposedly solved, cured or reversed. The national actors such as the Ministry of Health did not have a challenge saying that diabetes type 2 can be solved nor did the representative of Wildwood Medical Institute hesitate to confidently state that there is a cure or way to reverse diabetes type 2. What is striking is that different actors in Jamaica have discoursed diabetes as a challenging and complex disease that is influenced by many factors by directly pointing fingers at circumstantial factors. Yet, actors did not hesitate to simplify the approach to whether cure, reverse, prevent or better the condition. According to own interpretation for the national actors it is easier to find reasons to blame for the disease and because of its complexity there are many directions to look at and mane relations can be made among the risk factors of diabetes, yet it is much simpler to move its causes circumstances that are not current or are not events in the present day.

The following are the key points that have emerged from this part of the analysis:

- According to an actors there is no clear understanding in Jamaica of the meaning of diabetes. Individuals in Jamaica refer to the disease as ‘touch of sugar’ (Morrison, 2016). What is problematic about this is how it is referred to as if it is not a serious or real disease with dangerous complications.
- Diabetes in Jamaica is perceived as a killer of their population. It has a high prevalence and change is needed to halt the rise of diabetes and it is considered as a burden for the whole Jamaican community.

- There prevails negative stigma around diabetes in Jamaica. Individuals with diabetes are perceived as the other which has negative impact on patients.
- There is a mentality of slavery around health lifestyle choices and diabetes. Individuals enslave themselves to the point they grow the pandemic of diabetes (Beckles, 2016). The mentality of colonisation and ‘peasantry’ (Adams et al., 2016). This is an issue that Jamaicans carry this mentality with them in their choices which are considered poor for their health.

4.3 Caribbean Discourse of Diabetes: Trinidad and Tobago

According to Diabetes Association of Trinidad and Tobago diabetes is a serious problem and above that is costly for public health (2006). Yet, the disease, diabetes is ‘entirely manageable’. With proper measures like a proper diet and exercise it can lead to healthy and normal lives (Diabetes Association of Trinidad and Tobago, 2006). According to scientists, diabetes type 2 in particular is considered a lifestyle disease and argue that negative stigma is related to it (Kato et al., 2017). The diabetes problem is considered as serious in Trinidad and Tobago. Over 200 thousand individuals in the country have diabetes and a great part are not aware of having the disease. Additionally, another reason the problem is worrying is because a third of children in primary and secondary school are diabetics or overweight, declares the first Vice President of the Diabetes association of Trinidad and Tobago Mr. Dhanoo. Thus, the problem already starts at a young age. This is a ‘rising epidemic’. Not only described as such in Trinidad and Tobago but also in the medical world (Dhanoo, 2017). Diabetes not only has attacked the Caribbean but also the world to the point that many developing countries gave it the term of being a pandemic. There can be said that many actors involved in diabetes consider diabetes as a ‘burden’. A burden that puts pressure on the economy and is mentioned as a burden alongside with other diseases such as hypertension and cancer, Mr. Deyalsingh of the Ministry of Health to Daily Express (Deyalsingh, 2017). What can be observed is that in the case of Trinidad and Tobago a powerful actor of the country namely the Minister of Health clarified that diabetes has attacked the Caribbean and the world. This is a description that presents diabetes as a force difficult to stop or fight. There can be concluded that diabetes is viewed as the force to be reckoned with. The complex problem that individuals are aware of but struggle to solve.

In Trinidad and Tobago, it is an “explosion” as well as in the Caribbean. What is meant is that it has been growing and is the second leading cause of death, reportedly. On top of this, more or less 500 children in Trinidad and Tobago have type 1 diabetes and need insulin to survive (Diabetes Association Trinidad and Tobago, 2016). In 1980 it did not pose a threat like now. It used to be the 7th leading cause of death in Trinidad and Tobago. Nowadays it is the second leading cause of death with more or less 140 thousand individuals between 20 and 69 years of age having diabetes. The number has grown with 350% of the population (Deyalsingh, 2016). One in eight if not one in five individuals have diabetes according to the Ministry of Health in 2010. Today this ratio has changed. Awareness has to be created about this “serious threat” that diabetes poses to individuals and communities in order to prevent it or delay its complications, Tobago Regional Health Authority (2017). Yet, a study showed that there is a lot of exposure about diabetes type 2 and not of diabetes type 1 in the media and reports drawing attention to the disease but negatively by associating it with “laziness”, “fatness” and “too much candy” (Balfe et al., 2013). The two most frequent negative stigma sources are the media and family and friends (Browne et al., 2016). Accordingly, there is stated that “we no longer talk about a diabetic diet”. According to a diabetologist Dr. Claude Khan. He also states that “We talk about healthy eating”. He states this because apparently food portions are very important, and this is a problem in Trinidad and Tobago, eating too much “roti and rice on the plate” (Dhanoo, 2017). As expected from theory, it is difficult for certain ethnic groups to change their dietary habits away from their value and tradition (Carr, 2012). Suppositions and inculcation may arise from the influence of social and cultural values according to a research study (O’Donnell, 2015). Dr. Khan touched upon culture and eating habits in a sneaky way. He tries to move away from stigma by rejecting the term “diabetic diet” but he fails to clarify who are “we”, who are the individuals that no longer talk about the “diabetic diet”. This raises a question of who created the discourse of “health eating” around diabetic diet. Even though scientists have presented three source of stigma, Dr. Khan does not make it clear where his statements come from, whether this is the diabetic community or the medical experts. Trinidad and Tobago identify two ethnicity groups; Afro and Indo Trinidadians as a group that was hit and affected by diabetes because of genetic predispositions which makes them more vulnerable to the disease (Ragbirsingh, 2016). According to scientists explaining the culture differences explain the dynamic of diabetes prevalence for a long time already but it leads to “pathologization of culture” as cited in (Sheldon and Parker, 1992; Ahmad, 1993; Ahmad and Bradby, 2007). But certain uncertainties about factors regarding culture are also moderated with genetic arguments (Keval, 2015). In another scientific research there resulted that there were

differences in diabetes rates based on ethnicity. According to results, individuals of East Indians of Trinidad and Tobago had higher diabetes rates compared to North and South Trinidad individuals (Nayak et al., 2016). In contradiction, a growing number of children with type 2 diabetes has hit Trinidad and Tobago. But this is connected to a sedentary lifestyle and a bad diet. Specifically, the children ‘‘always seen in a corner hunched over their cell phones or computers, their fingers getting the most amount of exercise’’, (Ragbirsingh, 2016). Consequently, strong links are made between diabetes and obesity (Ragbirsingh, 2016). The genetic predispositions may lead to increased chances of developing diabetes alongside with lifestyle choices, obesity, hypertension and lack of physical activity (Ministry of Health, 2016). As the data is analysed what is observed is that culture is framed together with genetic predispositions to explain the dynamic of diabetes as different factors are mentioned. However, the strongest observation is of the theory and in particular ‘‘pathologization of culture’’ related to the statement of Ragbirsingh pointing at the culture of few exercise. But here there can be con assumed that this culture may be sickening and leading, but it is not expressed aggressively, it is framed in a slight and polite way.

A research conducted with participants from primary and secondary school showed that the prevalence of obesity in children of primary school is higher than in secondary school. In primary school the prevalence of obesity is 22.9% in 2009 versus 11% in 2010 and in secondary school 20% versus 15.6%. This implies that the risk factors of type 2 diabetes among children are more prevalent in children than in adolescents (Batson et al., 2014). From a study for a Trinidad Risk Assessment Questionnaire, the objective was to design a risk questionnaire that is culturally appropriate to determine its effectiveness to be used as a tool to detect type 2 diabetes on an early stage. The results of this study showed that among different risk factors like exercise, weight, history of hypertension, cholesterol, polycystic ovarian syndrome, history of gestational diabetes and macrosomia, the most significant non modifiable risk factors were family history of diabetes, ‘‘7.93, 95% CI 5.00–12.57, $p < 0.005$ ’’ (Latchan et al., 2010, p.188).

The costs of treatment for diabetes patients are high. It costs ‘‘millions and millions’’. Approximately 10% of the three billion dollar health budget, more or less 200 million dollars was spent of drugs and blood testing for diabetes (Diabetes Association Trinidad and Tobago, 2016). As a consequence of this costly ‘‘burden’’ there are productivity losses relation to diabetes, hypertension and also mortality (Ministry of Health, 2017). Diabetes Association Trinidad and Tobago focuses on changing the ‘‘mindset, the culture of people just by educating them’’ because they believe education empowers people (Diabetes Association Trinidad and Tobago, 2017). But theory diverges from education of the community on itself and includes

social economic factors and it explains that it is a challenge to educate individuals but in particular the poor or the working class (O'Donnell, 2015). Besides educating and preparing medical experts to manage diabetes; strengthen programmes, to address screening and self-management education and lifestyle, school based and community based programmes (Ministry of Health, 2016). Nevertheless, the "good news" is that diabetes is preventable and that a "low cost lifestyle" measure prevents and delays the development of type 2 diabetes (Ministry of Health, 2016). Still, actors keep promoting a change in lifestyle choices. Since an early time, the medical world, individuals who suffered from other conditions for example cancer and heart disease were held responsible for their disease by leading unhealthy lifestyles (O'Donnell, 2015, as cited by Crawford, 1980, Galvin, 2002, Lupton, 1995, Petersen et al., 2010). An example is switching from white flour to whole wheat and eating more vegetable and salads. According to Dr. Khan other measures such as gastric bypass has also helped "reverse" diabetes type 2, losing weight and almost disappearing their diabetes. However, another dimension to diabetes is that individuals are not aware that they are at risk and sometimes a large number of individuals seek for help too late not being aware at all. The Regional Health Authority urges people to pay more attention to their health (Tobago Regional Health Authority, 2017). What is extremely controversial according to observations is the fact that on one side diabetes for the medical world is considered as very expensive and an economic burden. On the other hand, it is considered as a "low cost lifestyle", "reversible" and solvable by a "gastric bypass" for diabetics. What is understood out of this observation is that the national actors of Trinidad and Tobago more or less push the responsibility of solving the problem of diabetes on individuals and without hesitating to mention or point out what factors such a culture or socio economic status may complexify the process of individuals actually implementing these suggestions the national actors make.

The following are the key points that have emerged from this part of the analysis:

- Diabetes is a burden and pressure for the economy. It is a difficult force to stop which implies a lot of capital is invested in preventing diabetes and treating diabetes.
- Diabetes is a killer in Trinidad and Tobago, it has been causing a lot of deaths during the past years.
- There is negative stigma around diabetes with labels such as "lazy" and "fat". However, the media has been giving a lot of attention to diabetes but more to diabetes type 2 which is considered a disease of poor lifestyle choices, than to diabetes type 1

which is not considered a disease of poor lifestyle choices. The media is also considered as a source of negative stigma.

- There is attempt in Trinidad and Tobago by national actors to change the perception of how diabetes is perceived to a more serious and positive way.
- There is suggested that culture of Trinidadians is leading to diabetes and health problems.

4.4 Caribbean Discourse of Diabetes: Haiti

A tragic story of a 12 year old diabetic child made it to news in New York Times in (2013). A child named Jean Paul died under bad circumstances which apparently are common in rural areas of Haiti. This case is an example to theory that the worst cases of diabetes receive attention and are representing diabetes in the media (Balfe et al., 2013). He had lack of resources and suffered from malnutrition and because of lack of test strips that were not available for his glucometer that were accessible at a district hospital. On top of that, often glucose test strips would be out of stock and arrival of test strips constantly and without knowledge of when test strips would arrive next. Furthermore, purchasing test strips is costly and those who are less fortunate financially may not be able to afford purchasing them. And in accordance with theory diabetes is costly and puts pressure on countries' economies (Shetty, Jean & Kadithi, 2013). In other words, lack of resources or as far as poverty lead to the death of this boy (Babaria & Riordan, 2013). The parents of the 12 year old child were forced to wait and see what would happen with their child due to incapability of making an expensive and time consuming trip to a hospital. Theory described how difficult it was to manage diabetes as industrial workers however, this case presents more or less the same circumstances and characteristics of what is described as a challenge of the poor and working class. It is almost impossible to follow a regimen with limited food (O'Donnell, 2015). Without a choice left it was too late to help him (Babaria & Riordan, 2013). Accordingly, in Eyewitness News Mr. Lautrup Nielsen from World Economic Forum published as a title "Diabetes is a fast growing disease of the "poor". Here's how we can turn the tide" (Lautrup Nielsen, 2017).

Organizations and media internationally and nationally show that their countries including Haiti is consider a disease of the poor after many years of being considered a disease of the "rich" and mostly in developed countries. Clearly, the way individuals treat the disease does not only depend on eating habits, more factors contribute because eating habits are often based upon among other religion, beliefs, economic status, influence of family members and

psychological and personal factors (Tripp-Reimer et al., 2001). There are reasons why this was stated is because the chances of getting treatment for diabetes in Haiti are low, increasing the chances of being severely affected (Lautrup Nielsen, 2017). On the other hand, The Crudem Foundation stated that specifically diabetes type 1 is “incurable” and “inevitable”. Because it is a “deadly” disease some patients find it difficult to assimilate their disease and psychologically it is a diagnosis that is extremely difficult for young girls (The Crudem Foundation, 2014). As theory explained, diabetes appears to be a taboo and individuals might find it difficult to accept their condition (Noakes, 2010).

Diabetes is too costly for the “poor” even if the care was available. This disease needs long term medication and if not medicated may lead to many complications. Therefore, it is a big problem for the poor. Mr. Lautrup Nielsen went as far as stating that diabetes leads to poverty and that this will pass on to the next generation (Lautrup Nielsen, 2017). Diabetes is indeed described as a disease of the poor by scientist (O’Donnell, 2015). Yet, theory has not stated whether diabetes leads to poverty. This statement made by Mr. Lautrup Nielsen challenged what theory has explained about poverty in relation to diabetes. It turned a reality explained by different actors like organizations and of scientists around by identifying a strict cause effect relationship between diabetes and poverty with a specific direction. This statement was not clarified nor explained but it raises a question as to how a representative of the World Economic Forum state would such a relation but without clarifying how this relation was created.

Diabetes can count with many complications including deadly ones. However, an appropriate treatment of diabetes may slow down development of complications (Thompson Eye Clinic, 2013). Working with specialists may help reduce the risk of among other vision loss. Different solutions are suggested to reduce diabetes in poor countries according to the guidelines of World Health Organization. One solution is reducing sugar consumption, administering basic diabetes care, providing food care for diabetics and support people with diabetes to do better blood sugar monitoring (Lautrup- Nielsen, 2017). “This has to change if the burden from diabetes is to be stopped from slowing economic growth and keeping people stuck in poverty” is what The Crudem Foundation stated (2014). The Foundation is willing to tackle the issue of poverty by creating a clinic to provide service to kids in need as an action to the financial and economic situation (The Crudem Foundation, 2014). On the other hand, back on the situation of Jean Paul the 12 year old child, there was suggested that manufacturer could create universal test strips to avoid the repetition of that boys story (Babaria & Riordan, 2013). It is observed how solutions are given in contrast. On one hand Lautrup Nielsen suggests

monitoring blood sugars better and to reduce sugar consumption. In contrast, The Crudem Foundation delves in to the economic situation and poverty in Haiti reflected in the story of the 12 year old boy that passed away. There can be concluded that the factor of poverty is severe in Haiti and that not all actors respond to that factor of poverty the same way. It is clear how The Crudem Foundation reacted to Haiti's situation by planning to contribute to the problem by tackling poverty and the current economic situation before diabetes itself.

The following are the key points that have emerged from this part of the analysis:

- The case of Haiti is a special case because, they are experiencing a lot of economic challenges. In this case it has been obvious that the lack of resources has had a huge impact on how diabetes is viewed in Haiti by outsiders thus actors outside of Haiti.
- Haiti is in a position of powerlessness, not specifically because of domination of post-colonial history but because of their current financial and economic situation that is poor and has negative influence on health care on the island.
- Their situation creates a lot of space for outsiders to create discourses on their behalf. It is difficult to interpret what Haitians themselves perceive of diabetes other than their current challenges.

4.5 Factors that explain the Caribbean Discourse of Diabetes

As theory has explained, the way individuals treat the disease does not only depend on eating habits, more factors contribute because eating habits are often based upon among other; religion, beliefs, economic status, influence of family members and psychological and personal factors (Tripp-Reimer et al., 2001). This is the case in the Caribbean discourse. All three cases were collected and analysed separately. Even though all three cases are Caribbean cases. The findings were also found different from each other. In Jamaica, it has been made clear that national actors are active to tackle and solve the issue of diabetes in the country. Many discourses are used to describe diabetes for example "touch of sugar" or "silent killer" (Less, 2013). These are two examples of contradictions of expressions. Even though there are many paradoxes it is clear that Jamaican actors desire to solve the issue and find a way to have a grip on this issue, starting at understanding the choices individuals make. It seems clear that what is necessary are lifestyle changes however at the same time many metaphors are used to draw attention to the issue such as "silent killer" in order to point out how important and urgent it is. Without forgetting that there are factors mentioned that influence the behaviour of Jamaicans

namely slavery and colonisation habits that individuals have not grown out of. And that therefore, people have kept certain habits that are referred to as “poor choices” in their own responsibility (Ministry of Health, 2016). The mentality and behaviour of Jamaicans have shown that the factor of post colonialism prevails in their country. Theory have showed that this culture may lead to attitudes that could be observed through the analysis. These attitudes include ‘‘culture of poverty’’, ‘‘peasant mentality’’ and the ‘‘idea of limited good’’ (Adams et al., 2016). The peasant mentality showed during the analysis even though not very clear through the discourses but, national actors in Jamaica and in Trinidad and Tobago have expressed a struggle or fight of individuals that more or less fight against change. Change that is imposed to them by medical experts, the media and national health organizations in general. The refusal to change or adapt shows how they are enslaved in their own mentality of how they know how to do things and have known to live. The most important findings of Jamaica as a case is that the national actors for example the Ministry of Health and doctors use expressions and metaphors that indicate lack of acceptance from the community of Jamaica. They attack misconceptions made by individuals however they themselves used negative stigma to move away from these misconceptions of diabetes that are also negative. This is certainly surprising but has showed how these actors have accepted and internalized Western or Eurocentric views of how diabetes should be treated and perceived. The fact that they have attacked the misconceptions of individuals have shown how they are not on the same page as them, on the contrary they do not agree with them and try to drag them out of their mentality.

The ‘‘stigma blame factor’’ is strong from the side of the national actors but according to theory this is also the case within the communities themselves. A good example of the use of stigma and blame is the following statement ‘‘Slave diet point to pandemic’’, as a result of circumstances of plantation community that learned to ingest what they produced (Beckles, 2016). This gave a clear indication of how specifically Jamaicans struggle with power from national actors trying to push them out of their own mentality. A mentality of peasantry in their old ways of knowing things and deciding for their own lives just as a slave (Adams et al., 2016). On the contrary these actors jump easily to conclusions expressing in a way that gives indication that solving diabetes is not challenging yet when describing the problem different complexities are included such as lifestyle and physical activity (Vendryes, 2010). Culture is also an important factor that was prominent in the analysis of Jamaica as culture is considered in influencing factor to individuals (Diabetes Association Jamaica, 2017). In Trinidad and Tobago, the conditions under which diabetes is described is more drastic. Diabetes is described as the 2nd leading death of cause in Trinidad and Tobago. As one of the worst that conditions

prevailing in the country. Consequently, actors state that Trinidad people have to ‘‘walk the talk’’ and to what they should in order to have a healthy lifestyle and comply with the standards to avoid the disease suggesting that habits are difficult to change. The most important finding of Trinidad and Tobago is that there is persistent emphasize on how big the problem is in terms of the mortality rate and severity. There is a strong clash where there is a contrast between actors framing diabetes as completely manageable with the frame of a change of lifestyle that will be a ‘‘low cost lifestyle’’ (Ministry of Health, 2017). Furthermore, there seems to be no common ground as to who exactly are involved in a new way of perceiving eating for diabetes. It is not clear who have formed the particular discourse about diabetes diet and that culture specifically the statement of Dr. Khan ‘‘we no longer talk about a diabetic diet’’, ‘‘We talk about healthy eating’’ (Khan, 2016). On the other hand, Haiti’s situation is clear, and it is striking and obvious how social and economic circumstances formed the discourse only for this country. Haiti’s case is unique. Drastic case of poverty, hunger and lack of access to medicine has put this in light. Because, diabetes is still too costly even if care was available and it needs long term medication (Lautrup Nielsen, 2017).

Thus, even though each case has different context which is a primary factors that determines how discourses are formed, there are three prevailing factors that influence the creation of discourse of diabetes. The first one is social economic circumstances and lifestyle and culture and stigma and blame. Even though Caribbean’s have their own history and traditions which they appreciate and value, the difference is whether they are willing to change their culture and habits to address their own health even though this means giving up on cultural backgrounds. The other factors were more evident in Haiti’s case showing that whether there are resources or not leads to forming of discourses whether for example diabetes is a disease of the ‘‘rich’’, those who constantly make not the best decisions for their health or of the ‘‘poor’’, those who do not have access to better health conditions or medicine. Still stigma is present in all cases shining light and labelling groups who are vulnerable and groups who already have a past in certain behaviours such as food tradition and past social economic status of certain ethnic or working groups. Shortly the patterns of the factors found in the Caribbean are the following; Lifestyle and behaviour are viewed as results of culture that whether is learned, passed from generation to generation but derived from culture and also nature. In the Caribbean there is suggested that diabetes is something inherited culturally and that it is carried from generation to generation. Blame theory and stigma go hand in hand and in the Caribbean as analysed it is common to push responsibility on past factors or factors that are considered as part of their culture as something normal for example eating tradition and ‘‘slavery’’. Yet, these are factors

that are possible accepted but are not seen as positive stigma's, they are related to negative behaviour and lifestyle.

The following are the key points that have emerged from this part of the analysis:

- Post colonialism and slavery have influenced the mentality of Caribbean's and still has an influence on their health choices, behaviour and ways of thinking.
- There are many contradictions among national actors in the Caribbean region. These contradictions show a conflict among themselves. Among national actors themselves there are different beliefs, perceptions and ways of thinking.
- It is clear that the most important characteristic of the Caribbean is that the Caribbean's are resisting to change according to what national actors belief is better for their health. They are stubborn to keep their behaviour and customs.

4.6 Differences and Similarities between the Global and the Caribbean Discourse of Diabetes

The global discourse of diabetes is merely formed by those who form a higher position such as WHO, IDF and PAHO seek to monitor health from an outside perspective and analysing the situation globally and generally. The global discourse focuses on the condition of diabetes as how far it affects individuals health and what should be done to address the issue and to lower the "burden" especially economically and socially on countries, especially developing countries. This already suggested that discourse of diabetes is formed around the social and economic circumstances prevailing globally. But what is evident is that the global actors thus the organizations analysed on the international level pushed their influence knowing their power to influence national associations and organs for policy change or creation. These actors also discourse diabetes around categories of individuals referring to socioeconomic status and cultural background in a slight and superficial way. At the same time the global actors focus more on addressing diabetes type 2 then addressing diabetes type 1 in the sense of attention to the problem.

The Caribbean context differs from the global context because, it is focused on certain contexts that have a history specifically post colonialism that is carried as culture and tradition for years already. This brings a contrast where in the Caribbean there is a struggle between the international pressures of for example the PAHO organization to tackle the issue itself and the individuals of the Caribbean that apparently are not completely aware of what diabetes means

and what it implies to avoid developing it according to medical experts. This in similarity the global and Caribbean context both are aware of the implications of diabetes, its complications and consequences however, differs greatly in embedding in the idea of a struggle between culture, tradition, history, social classes and poverty which shows in the analysis of the Caribbean. The most important similarity between the global and the Caribbean context is the categorization used to refer to different groups from culture and socioeconomic status. The other important similarity is how it is evident that there is more attention drawn to diabetes type 2 instead of diabetes type 1. However, the biggest difference is how in the Caribbean context diabetes was formed often around negative stigma and blaming theory. It is true that the global actors do move responsibility to individuals for their own disease for type 2 diabetes by emphasizing the lifestyle factor. However, in the case of the Caribbean the stigma and blame factors becomes stronger and is supported by historical events and characteristics that are referred to as still present issues that influence diabetes.

It is very important to mention that it was striking to observe how even though the global context and Caribbean context do have major differences, they also have similarities that have presented themselves as struggles and conflicts. The global context can be seen as the global organizations in the position of empires (Western) that use their power, knowledge and resources to influence and stimulate change in different parts of the world. They have the power and they use this power to influence the countries. It is very clear that these global actors perceive diabetes as a burden in different dimensions and for different reasons. For the Caribbean context this also counts. The Caribbean national actors also believe that diabetes is a burden, but they also struggle with negative stigma within their country. The among themselves are fighting each other due to differences in beliefs and opinions. At the same time national actors in the Caribbean fight to change the mentality of stubborn Caribbean's that resist to change. The point is that there is a conflict between the global context and Caribbean context indeed. However, there is also a struggle within the Caribbean that seems to be a conflict between those who feel powerless and try to hang on to their mentality that is often 'peasant mentality' and national actors that are more aligned with the global actors perceptions of diabetes.

The following are the key points that have emerged from this part of the analysis:

- The global context and Caribbean context agree that diabetes is a burden in different dimensions for many communities around the world.

- The global context and Caribbean context are completely different due to especially the historical and cultural background of the Caribbean.
- There are still traits of global actors influence on the Caribbean's observed through the statements and perceptions of a part of national actors analysed in the Caribbean context. National actors in the Caribbean themselves fight among each other between the peasant mentality and the Western mentality of diabetes.

4.7 Concluding Remarks

The aim was to explain the discourse of diabetes in the global sphere as well as in the Caribbean. The first aim was to explain the global and Caribbean discourse of diabetes and its characteristics as well as their contradictions and paradoxes. This section will sum up the analysis all findings in the analysis chapter. The first section analysed the global discourse of diabetes through the characteristics of social constructivism. The prevalence of diabetes is serious and increasing every year and global actors urge communities to promote healthy lifestyle and lifestyle changes in order to address the issue and avoid further complications that cause especially economic burden to many countries. Global actors put an extra emphasis on the socioeconomic and cultural factors globally. They focus and exercise their power on influence different communities including the Caribbean region. The following section is the Caribbean discourse which just as in the global context the cases analysed have shown interest and action to change situations and to reduce the prevalence of diabetes. However, it struggles with the factors of culture and mentality where apparently individuals are not fully aware of what diabetes implies and there are many contradictions in how diabetes is perceived without discarding the factor of social economic struggles. The post-colonial history is still in influence on the mentality of Caribbean's. One strong factor of the Caribbean context is that blame, and negative stigma prevail strongly in the Caribbean context and negatively affects diabetes. Thus, factors that influence the construction of diabetes are purely based on the national context meaning that it depends on the points of views of individuals, their culture, stigma and access to education and also medicine to either treat themselves or try to change their lifestyle. Thus, the similarity between the global and Caribbean context is that on the global level organizations keep a position to generally and globally tackle the issue by promoting and guiding towards what should be done to tackle the issue with a focus on certain vulnerable groups categorized in among other culture and socioeconomic status by using their power and influence. While in

the Caribbean action is also being taken however the difference is that on the national level factors such as culture, lifestyle, history, stigma and even poverty influences the extent to which and how diabetes can be addressed. A very important factor in the Caribbean is the mentality that is still present in Caribbean's. A mentality influenced by post-colonial times that still dominates how Caribbean's think and feel about their health and diabetes in particular.

5 Conclusion and Discussion

This chapter will give a brief overview of key insights of the research and will give an answer to the main research question. The following section will be a discussion evaluate what further research can be done to explore this topic. The limitations of this study will also be explained. The last section is on the implications for policy experts.

5.1 Conclusion

The primary aim of this research has been to unmask the conflicts between the global and the Caribbean discourse of diabetes and what this implies for policy makers. The aim was on focussing not on facts of diabetes prevalence but on discourses. How discourses are constructed, what these discourses mean and what language is used. The goal is to focus attention on understanding meaning rather than just explaining or describing them even though different factors come in play. The main research question is; How is the meaning of the Caribbean discourse of diabetes explained by national actors? According to theory ‘‘the way individuals treat the disease does not only depend on eating habits, more factors contribute because eating habits are often based upon among other religion, beliefs, economic status, influence of family members and psychological and personal factors (Tripp-Reimer et al., 2001). Indeed, and in accordance with the theory. The Caribbean discourse of diabetes is explained in such a way that it shows that different factors lead to its discourse. For example, ‘‘This has to change if the burden from diabetes is to be stopped from slowing economic growth and keeping people stuck in poverty’’ is what The Crudem Foundation stated (2014). The Foundation is willing to tackle the issue of poverty by creating a clinic to provide service to kids in need as an action to the financial and economic situation (The Crudem Foundation, 2014). It is clear how severe diabetes may be not only for health but also economics. However, a strong point that stood out in the analysis is the factor of blame and negative stigma. According to theory negative stigma is related to negative associations to diabetes be it lifestyle or historical factors. And according to theory, these medical experts and powerful actors are not only complaints or influencers but also sources of these stigmas (Browne, 2013). The state of art of diabetes in the Caribbean has been improved because in the data there was observed how these powerful actors in each Caribbean country themselves use stigma and blame to defend their point, but this does not mean that it is done intentionally. This topic has been researched by scientists and studies have showed how stigma influences individuals and what are their sources however, no study has

explained whether national actors involved of diabetes use stigma themselves. Thus, this research has contributed by starting a scientific discussion on how stigma in the broad sense is used by national actors in relation to research already done.

There are many factors contributing to the formation of the Caribbean discourse of diabetes that all in all include culture, beliefs, stigma and social economic status. However, it became very clear that firstly the historic background of the Caribbean is a starting element of the Caribbean discourse. All cases analysed are former colonies. To explain better, these countries have been struggling with their own challenges which include their beliefs and own economic capacities to create their own identity and world. This on its own is already an internal conflict. What has been observed is that the Caribbean battles with the Western world, to keep its own identity and beliefs.

The Caribbean context has recognized that diabetes is a burden that national actors of Caribbean countries are willing to address however as it is a burden and needs action. This means that even though diabetes is a lifestyle choice issue still, it is very obvious how the meaning of this discourse is embedded in the social economic circumstances and culture and beliefs of individuals. This does not mean that the discourse of the Caribbean means that diabetes is a disease of specifically ‘poor’ or the ‘rich’. It means that the Caribbean discourse means that the individual is not only subject to his own choices but also to his personal circumstances, capabilities, background and opportunities to go beyond what is desired based on a world that they do not perceive as their own and practically refuse to choose namely, the Western way as if trying to break away from colonial history and traits (McLennan, 2016). Thus, to answer the main research question the Caribbean ‘How is the meaning of the Caribbean discourse of diabetes explained by national actors?’. The discourse of diabetes in the Caribbean means a lot in the broad sense. The Caribbean discourse is formed based on strong stigma that is mostly negative but related to not only present day factors influencing diabetes but also past factors or Caribbean history of colonialism and slavery that are perceived as characteristics embedded in the being of the Caribbean’s as a part of them that cannot be eliminated at all. This discourse is formed based on the perception that no matter how long time ago they have lived in for example under slavery circumstances these habits and traditions still prevail in present day and are still related to diabetes not necessarily consciously. Thus, to answer the main research question the meaning of the Caribbean discourse of diabetes is explained by a constant challenge, battle, struggle. This struggle is not only a struggle between two worlds namely the Western (European) world and the Caribbean but also in the Caribbean itself. It is a battle of power and struggle of identify, beliefs, past and historical background that

is passed over in to health choices and treatment. This is believed because as observed in the analysis in relation to theory Caribbean's still have the peasant mentality and refuse to change or adapt changes to their lifestyle as it is suggested to them by national actors including medical experts. These suggestions that are imposed to them based on their feel creates resistant and are often based on Western ideologies of health. However, the Caribbean still keeps its own identity which constantly struggles with the Western ideology. The Caribbean context itself has not found consensus on what to believe on treatment of diabetes. There is in the Caribbean also a conflict of power and domination among national actors and the Caribbean's. In short, the meaning of the Caribbean discourse is a discourse of constant battle, domination and power. This is an eye opener to show how complex it is to define an illness such as diabetes. The complexity and challenge with factors such as history and post colonialism and how these factors are undermined when approaching individuals. It unmask how especially the Caribbean is not clear on its common base on diabetes and how external influence finds its way to impact the individual mentality and behaviours.

5.2 Discussion and Limitations

This research contributed to the understanding of the Caribbean discourse of diabetes pointing out that there are differences through different context on how diabetes is perceived. The Caribbean has not been studied extensively as a discourse. This research showed that it is complex to even find a certain strategy to firstly, conduct a discourse analysis which is something that depends upon the researcher's own judgement and decisions. First, the contribution of this research will be discussed followed by challenges and limitations found during the process. This research contributed at exploring Caribbean discourses of diabetes as well as pointing out factors that construct these discourses by comparing to the global context which are also actors that are of important influence. In theory "The social scientific framing of health has long since problematized understandings of "healthy," the notions of "choice" and "lifestyle"" (as cited in Bunton, Nettleton, and Burrows, 1995). Yet, only understanding the issues of health and lifestyle are not enough for the understanding of certain discourses. In this research it was shown how discourses revolved around what set certain basis for circumstances of individuals that suffer from diabetes. Showing that global actors pass global goals to the Caribbean context which shows that many descriptions, discourses and expressions are similar yet what differs them from each other are national contexts. It is difficult to find one way of

describing how an issue is perceived but these different factors contribute to multiple views. This research most important contribution is in the field of stigma and blame theory in the Caribbean. According to theory the most frequent sources of stigma are media and family and friends (Browne et al., 2016). Seeing that this research used media releases as data for the study this theoretical statement gives an overview to discuss this better. This research used media releases as data and during the analysis one of the biggest findings is the fact that in the Caribbean stigma and blame is strongly used by national actors involved in diabetes. Theory have shown what the sources of stigma are. However, theory have not deepened in who these individuals believe are those stigmatizing the disease. Yet, in the data analysis it came to attention that national actors of the Caribbean themselves create negative stigma by using terms in an attacking mode. But what is more intriguing and controversial is how these actors' management to move blame and stigma from the definitions of diabetes while using stigma and blame. This is important because theory have showed that stigma together with blame have a negative impact on individuals with diabetes. The management of diabetes type 2 is harsh and may cause social emotional burden due to negative judgements (Browne et al., 2016). With this said new insights are created as of that stigma can go different directions but what has not been researched yet is how global actors like global organizations and national actors in each country express themselves and use language to refer to diabetes. In this research there was observed how these actors, Caribbean national actors have themselves used the approach of stigma and blame, not necessarily consciously. Research has not been extensively done on how these actors closely involved with diabetes may use and influence diabetes through stigma as it has already been shown through theory that stigma does have negative impact on patients. Furthermore, how do historical background of countries settle a basis for stigma to be used to explain current problems in this case diabetes. Not only stigma from historical events but also stigma by categorizing individuals in economic, cultural and social categories.

This study has also contributed to showing how powerful global actors have influenced many countries to tackle diabetes even though opinions and perceptions may vary. Central goals and perceptions of especially the severity of the issue and call for action are similar. However, in the case of Haiti, it seems according to the data analyzed that the country is flat because of its current economic situation. Organizations and individuals that not necessarily are directly involved in diabetes have shown how 'poverty' and social economic status, lack of resources has hurt and impacted the treatment of diabetes which is reflected in the story of the 12-year-old boy that passed away in Haiti.

Theory on Eurocentrism and post-colonial theory have joined different factors of the Caribbean context for example culture and beliefs of Caribbean's which have a big influence on health choices (Adejumo et al., 2015). Theory on Eurocentrism have shown that post colonialism has impact on diabetes in the present day. Theory have shown how individuals feel constraints of freedom because of colonial violence (Adams et al., 2016). It was striking to notice that this was not observed in the analysis in this way yet what was observed was the fact that Caribbean's were prone to keep a culture of peasant mentality. Theories on negative stigma and blame came together and came hand in hand with theory on post colonialism on the fact that individuals resist and fight back on change. They feel powerless but still fight back to keep their own identity and make decisions how they think is better.

One of the biggest challenges and limitations of this research was to collect data systematically and in a reliable way. Therefore, all steps were specified to protect the replicability principles. This research is broad and has a method formed based on the judgement of the researcher, this is no replication of other methods and has been practically invented. There are differences between the data used for the global context and the Caribbean context however, the decision was made to make the data documents as alike as possible by incorporating types of data purely in the Caribbean discourse in the Global context as well. Some cases were less challenging to find data than others. The case of Haiti was difficult because there were almost no results that could comply with the criteria of selection. Even though this was a challenge the decision was made to be more flexible with this case after noticing the fact that there were specific criteria. The results for the case of Haiti emphasized factors that would contribute to the understanding of diabetes in the country specifically with the situation of poverty in Haiti. It required extra time and attention to think of new strategies along the way to collect data appropriate for discourse analysis. The specific challenges were finding out that not all cases had a national website of their national diabetes foundation making it difficult to collect policy documents and reports as for the global context. The second challenge was coping with time issues because of the surprising changes along the way which was time consuming. At the end the researcher decided to combine different types of data and using secondary data for the research.

5.3 Implications for Policy Makers

Even though there are differences in perceptions of diabetes in the Caribbean itself it is clear that it is known what diabetes implies and how severe diabetes is. In the Caribbean action has been taken to reduce diabetes prevalence and to promote approaches to tackle this issue nationally. However, actors are well aware that it takes effort and time to realize such goals. Still, there is lack of willingness somewhat to change certain habits and lifestyles to one's own health. In theory an author pointed out that social stigma in relation to diabetes. They defined it as "a negative social judgement based on a feature of a condition or its management that may lead to perceived or experienced exclusion, rejection, blame, stereotyping and/or status loss" (Browne et al., 2013, p. 2). This has not been explored as being an influencing factor directly of certain perceptions. As at the same time Keval found that some research focus on the social context and life experimental themes of diabetes within ethnicity but there is a discourse which location the main concern of diabetes as cultural and lifestyle issue (2015). This indeed came forward in the Caribbean context showing that diabetes discourse goes beyond the culture and lifestyle "choices" of willingness of a person but is embedded in personal circumstances, capabilities, background and opportunities. An addition to research and lead for policy makers is to research how the factors; personal circumstances, capabilities, background and opportunities influence the perceptions of diabetes patients and individuals in general on how they perceive the disease. One thing is understanding what the disease means but the other is internalizing what it implies to make changes for own health. Moreover, a research to measure how personal circumstances and not only for example ethnical background but also how social economic circumstances and poverty slows down the willingness and possibility for individuals to act and take control of their condition (Tripp-Reiner et al., 2001). This is advisable to do by academia in collaboration with the national diabetes associations in order to form a common ground and consensus on how to present diabetes to the public. There are differences in opinion and these national actors should put attention on the source of truth they present and that this certain truth they create has influence on the thinking and behaviour of individuals.

Another point for policy making is in the case of the Caribbean as well, strong statements were made by national actors which were recognized in the analysis. According to the analysis of the data negative stigma has a negative impact on individuals of the Caribbean possibly causing social emotional burden. However, what was extremely interesting is that it seems that while national actors used a certain language to move away from stigma they themselves use this approach to communicate via the media releases analysed. Thus, an

implication is to study why these actors use stigma in their language and expressions but also if they are aware or believe whether they stigmatize. This is important to raise awareness among the actors of their own behaviour and how this influences the community as their role is powerful and they are exposed in the media which is accessible to many citizens is one of the main sources of stigma as (Browne et al., 2016).

The case of Haiti in particular and separated from the Caribbean in general was striking due to how it has been shown that there are a lot of lack of resources. The global actors can be more involved in such cases like Haiti besides acting as an overarching organization currently. There was suggested that manufacturer could create universal test strips to avoid the repetition of that boys story (Babaria & Riordan, 2013). This is an example on implications for policy makers. One of the causes why the little boy had trouble with his disease is because in Haiti he lived in a rural area besides being from a very poor family. It takes a long time before material can be accessed by him. Thus, the point is that each test strip is different and not all fit in all glucose monitors which is another issue. In the case of for example countries really struggling like Haiti it is advisable that international organizations or actors in their knowledge about the social economic factor act. What this said it means that for example measures can be taken to help avoid situations like the test strips. As there was suggested these global actors such as International Diabetes Federation have power to lobby in benefit of people who are less fortunate with the industry of diabetes material production by lobbying for universal products that can be used with any other product focussed on these countries struggling with short resources. A mechanism that is in charge of delivering these materials to Haiti on a frequent bases. This can be done in collaboration with other national organizations to facilitate the process of for example transport and accessibility like Red Cross. However, still considering the interests of the industries in material production.

The most important policy implication is to focus on Eurocentrism and its peasant mentality (Adams et al., 2016). Alongside with the attitudes of violence and aggressiveness of individuals to fight against Western ideologies (Guruprasad, 2014). However, even though it is clear there is a struggle of power between the Caribbean and the Western ideologies, the Caribbean context does not have a common ground on diabetes and health. The negativity and social stigma around this issue is also a huge contributing factor to this ordeal. This means that the most important point for policy actors especially the government, national associations in the Caribbean and medical experts is to focus on finding a common ground on diabetes type 1 and type 2 without differentiation and which is more negative than the other. This is highly important because Caribbean's already have a negative view of especially diabetes type 2 and

feel stigmatized especially by the media, family and friends. It is not clear what the sources are from these negative stigmas from these two groups, but policy actors play a powerful and dominant role in changing the perception of individuals. The second part is to create a feel on an environment that is safe for Caribbean's to create their own perception of diabetes without feeling that they are being dominated by Western ideologies that are not in aligned with their beliefs and history. Lastly, it is important for national associations and government to recognize that there is a post-colonial history that has been influencing the behaviours and attitudes of Caribbean's which has made them resist and act aggressively in resistance. Therefore, the government and associations and actors must monitor and moderate the way in which there is communicated especially in the media seeing that the media has impact on the perception of individuals especially negative impact. The behaviours and attitudes of Caribbean's may be a result or reaction of what is perceived through the media by national actors.

Bibliography

- Adams, G., Estrada-Villarte, S. & Gomez Ordonez, H. L. (2017). The modernity/coloniality of being: Hegemonic psychology as intercultural relations. *International Journal of Relations*. <http://dx.doi.org/10.1016/j.ijintrel.2017.06.006>.
- Adejumo, H., Odusan, O., Sogbein, O., Laiteerapong, N., Dauda, M. & Ahmed, O. (2015). The impact of religion and culture on diabetes care in Nigeria *African Journal of Diabetes Medicine*, 23, 2, 17-19.
- American Diabetes Association (2014). History of Diabetes. Retrieved from <http://www.diabetes.org/research-and-practice/student-resources/history-of-diabetes.html> on June 28, 2017.
- Balfe, M., Doyle, F. Smith, D., Sreenan, S., Brugha, R., Hevey, D. & Conroy, R. (2013). What's distressing about having type 1 diabetes? A qualitative study of young adults' perspectives. *BMS Endocrine Disorders*.
- Becker, S. Howard. (1966). *Social Problems: A modern approach*. New York: John Wiley.
- Blackburn, L. G. (2011). Medicalizing Obesity: Individual, Economic, and Medical Consequences. *American Medical Association Journal of Ethics*, 13, 12, 890-895.
- Browne, J.L., Ventura, A.D., Mosely, K. & Speight, J. (2016). Measuring the stigma surrounding type 2 diabetes: Development and validation of the Type 2 Diabetes Stigma Assessment Scale (DSAS-2). *Diabetes Care*; 39: 2141–2148.
- Brown, K., Avis, M. & Hubbard, M. (2007). Health beliefs of African–Caribbean people with type 2 diabetes: a qualitative study. *British Journal of General Practice*.
- Brown, P. (1995). Naming and Framing: The Social Construction of Diagnosis and Illness. *Journal of Health and Social Behavior*, pp. 34-52. Retrieved from <http://www.jstor.org/stable/2626956>.
- Bunton, R., Nettleton, S., and Burrows, R. (1995). *The Sociology of Health Promotion*. London: Routledge.
- Carr, V. Chantelle. (2012). Minority ethnic groups with type 2 diabetes: The importance of effective dietary advice. *Journal of Diabetes Nursing*, 16, 3, 88-96.
- Clark, J. (2014). Medicalization of global health, Medicalization of global health 3: the medicalization of the non-communicable diseases agenda. *Global Health Action*. Retrieved from <http://dx.doi.org/10.3402/gha.v7.24002>.
- Conrad, P. & Barker, K., K. (2010). The Social Construction of Illness: Key Insights and Policy Implications. *Journal of Health and Social Behavior*, 51, 67-79. DOI:

- 10.1177/0022146510383495. Retrieved from <http://jhsb.sagepub.com>.
- Cooper Brathwaite, A. & Lemonde, M. (2015). Perceptions of a Culturally Tailored Adapted Program to Prevent Type 2 Diabetes *International Journal of Diabetes and Clinical Research*, 2, 5, 2-7.I.
- Guruprasad, Y. S. (2014). The Creole Identity in the Caribbean Postcolonial Society: A Study of Selvon's A Brighter Sun. *International Journal of Interdisciplinary and Multidisciplinary Studies*.
- International Diabetes Federation (2016). *International Diabetes Federation Annual Report*. Retrieved from www.idf.org.
- International Diabetes Federation (2015). *International Diabetes Federation Atlas* (6th ed.). Retrieved from <https://www.idf.org/si>.
- International Diabetes Federation (2015). Across the globe. Retrieved from <http://www.diabetesatlas.org/across-the-globe.html> on June 28.
- Kato, A. et al., (2017). Psychological and behavioural patterns of stigma among patients with type 2 diabetes: a cross-sectional study. *BMJ Open*, 7. DOI:10.1136/bmjopen-2016-013425.
- Keval, H. (2015). Risky cultures to risky genes: The racialised discursive construction of South Asian genetic diabetes risk. *New Genetics and Society*, 34, 3, 274-293. [Http://dx.doi.org/10.1080/14636778.2015.1036155](http://dx.doi.org/10.1080/14636778.2015.1036155).
- McLennan, G. (2006). *Sociological Cultural Studies Reflexivity and Positivity in the Human Sciences*. Palgrave Macmillan.
- Noakes, Helen. (2010). Perceptions of black African and African Caribbean people regarding insulin. *Journal of Diabetes Nursing*, 14, 4, 148-156.
- O'Donnell, S. (2015). Changing social and scientific discourses on type 2 diabetes between 1800 and 1950: a socio-historical analysis. *Sociology of Health & Illness*, 37, 7, pp. 1102- 1121. DOI: 10.1111/1467-9566.12292.
- Quatromoni, P. et al., (1994). The use of focus groups to explore nutrition practices and health beliefs or Urban Caribbean Latinos with Diabetes. *Diabetes Care*, 17, (8).
- Rubington, E. & Weinberg, M. S. (2011). *The Study of Social Problems: Seven Perspectives* 7th ed., NY: Oxford University Press.
- Rubington, Earl. & Weinberg, S. Martin. (Eds.). (2003). *The study of social problems: Seven Perspectives*. New York: Oxford.
- Ruiz, J. (2009). Sociological Discourse Analysis: Methods and Logic. *Forum Social Research Sozialforschung*, 11, 2. Retrieved from <http://www.qualitative->

research.net/index.php/fqs/article/view/1298/2882.

- Sheldon, T., & Parker, H. (1992). Race and Ethnicity in Health Research. *Journal of Public Health Medicine* 14, 2, 104–110.
- Shetty, R., Jena, B. & Kadhiti, A. (2013). Can social scientists be the change agents for diabetes prevention? Diabetes-related knowledge, attitude, and practice among social scientists. *Journal of Social Health and Diabetes*, 1. Retrieved from <http://www.joshd.net>.
- Tripp-Reimer, Toni., Choi, Eunice., Kelley, Skemp, & Enslein, Janet. (2001). Cultural Barriers to Care: Inverting the Problem. *Diabetes Spectrum*, 14, 1, 13-22.
- Weigner, K., de Groot, M. & Cefalu, T. (2016). Psychosocial Research and Care in Diabetes: Altering Lives by Understanding Attitudes. *Diabetes Care*, 39, 2122-2125. DOI: 10.2337/dc16-2056.

Appendices

Appendix 1 List of Data Analyzed Global Context

World Health Organization: Global Documents, Reports and Media Releases					
	<i>Documents and Reports</i>	<i>Author (s)</i>	<i>Date</i>	<i>Pages</i>	
1	Guidelines for the Development of a national programme for diabetes mellitus	G. E. Reiber & H. King	1991	78	
2	Screening for Type 2 Diabetes Report of a World Health Organization and International Diabetes Federation meeting	D. Yach & G. Alberti	2003	54	
3	Diabetes action now; an initiative of the World Health Organization and the International Diabetes Federation	R. Beaglehole & P. Lefebvre	2004	20	
4	Prevention of blindness from diabetes mellitus	WHO Consultation	2005	48	
5	Definition and diagnosis of diabetes mellitus and intermediate hyperglycaemia	Report of a WHO/IDF Consultation	2006	50	
6	Collaborative framework for care and control of tuberculosis and diabetes	Stop TB Department and Department of Chronic Diseases and Health Promotion World Health Organization, Geneva, Switzerland and The International Union Against Tuberculosis and Lung Disease, Paris, France	2011	53	
7	Use of Glycated Haemoglobin (HbA1c) in the Diagnosis of Diabetes Mellitus	Abbreviated Report of a WHO Consultation	2011	25	

8	Diagnostic Criteria and Classification of Hyperglycaemia First Detected in Pregnancy	-	2013	62	
9	Global Report on Diabetes	-	2016	88	
	<i>Name media release</i>	<i>Author (s)</i>	<i>Date</i>	<i>Pages</i>	<i>Website (Section)</i>
10	Diabetes Action Now: WHO and IDF working together to raise awareness worldwide	N. Unwin & A. Marlin	June 2004	5	Diabetes in Society in Diabetes Voice Magazine
11	Fight childhood obesity to help prevent diabetes, say WHO & IDF	A. Marlin & A. Pierson	November 11, 2014	3	Media Centre
12	New data highlight increases in hypertension, diabetes incidence	F. Chaib	May 16, 2012	2	Media Centre
13	WHO urges global action to curtail consumption and health impacts of sugary drinks	P. Garwood	October 11, 2016	3	Media Centre
14	World Diabetes Day: too many people are losing lower limbs unnecessarily to diabetes	S. Suri, N. Urwin & A. Pierson	November 11, 2005	3	Media Centre
15	World Health Day 2016: WHO calls for global action to halt rise in and improve care for people with diabetes First WHO Global report on diabetes: 422 million adults live with diabetes, mainly in developing countries	P. Garwood & L. Sminkey	April 6, 2016	4	Media Centre

International Diabetes Federation: Global Documents, Reports and Media Releases					
	Documents and Reports	Author (s)	Date	Pages	
1	The IDF Consensus Statement on Sleep Apnoea and Type 2 Diabetes	-	2008	24	
2	Diabetes and cardiovascular disease	-	2016	14	

3	IDF Diabetes Atlas Fourth edition	-	2009	104	
4	Access to Medicines and Supplies for People with Diabetes A Global Survey on patients' and health professionals perspective	-	2016	33	
5	The IDF consensus worldwide definition of the metabolic syndrome	-	2006	24	
6	IDF Diabetes Atlas fifth edition	-	2011	144	
7	Diabetes Atlas 2000	-	2000	306	
8	Cost-effective solutions for the prevention of type 2 diabetes	-	2016	68	
9	Diabetes Atlas second edition	-	2003	297	
10	World Guide to Bridges 2015	-	2015	52	
11	IDF Diabetes Atlas eighth edition 2017	-	2017	150	
12	IDF Diabetes Atlas seventh Edition 2015	-	2015	140	
13	IDF Diabetes Atlas sixth edition	-	2013	160	
14	The Diabetic Retinopathy Barometer Report Global Findings	-		108	
15	Diabetes Atlas: The mission of the International Diabetes Federation is to promote diabetes care, prevention and a cure worldwide. Third edition	-	2006	387	
16	Diabetes and cardiovascular disease	-	2016	144	
	<i>Name media release</i>	<i>Author (s)</i>	<i>Date</i>	<i>Pages</i>	<i>Website (Section)</i>
17	World Diabetes Day 2017 to focus on women and diabetes	-	March 8, 2017	2	IDF News
18	New IDF figures show continued increase in diabetes across the	-	November 14, 2017	3	IDF News

	globe, reiterating the need for urgent action				
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Pan American Health Organization: Global Documents, Reports and Media Releases					
	<i>Documents and Reports</i>	<i>Author (s)</i>	<i>Date</i>	<i>Pages</i>	
1	Nutrición Prevención de riesgos y tratamiento dietético	S. Olivares, D. Soto & I. Zacarias	1991	232	
2	Métodos poblaciones e individuales para la prevención y el tratamiento de la diabetes y la obesidad	-	June 27, 2008	53	
3	Hiper glucemia y embarazo en las Américas: Informe final de la Conferencia Panamericana sobre diabetes y embarazo	-	2016	76	
4	Criterios diagnósticos y clasificación de la hiper glucemia detectada por primera vez en el embarazo	-	2013	45	
5	Innovative Care for Chronic Conditions: Organizing and Delivering High Quality Care for Chronic Noncommunicable Diseases in the Americas	-	2013	106	Omitted from analysis
6	Encuesta de Diabetes Hipertensión y Factores de Riesgo de Enfermedades Crónicas	-	2006	85	
7	Experiencia de México en el establecimiento de impuestos a las bebidas azucaradas como estrategia de salud pública	-	2015	106	
	<i>Name media release</i>	<i>Author (s)</i>	<i>Date</i>	<i>Pages</i>	<i>Website (Section)</i>
8	Along U.S. - Mexico Border, Diabetes Cases	-	October 21, 2010	7	PAHO

	Are the "Tip of the Iceberg"				
9	The number of people with diabetes in the Americas has tripled since 1980	-	April 6, 2016	4	PAHO
10	Obesity, a key driver of diabetes	-	November 10, 2017	4	PAHO

Appendix 2 List of Data Analyzed Caribbean Context

Jamaica: Media Releases and Secondary Data (Articles)						
	<i>Name Media Release</i>	<i>News Website</i>	<i>Author (s)</i>	<i>Date</i>	<i>Pages</i>	
1	Cerasee cured my eczema	Jamaica Gleaner	D. Robertson	May 30, 2007	2	Omitted from Analysis
2	NHF Funds Comprehensive Training Plan Valued at \$200 Million for the Ministry of Health	The National Health Fund - News & Features		December 16, 2017	7	Omitted from Analysis
3	Diabetes What is Diabetes?	The National Health Fund				
4	Diabetes and the heart	Jamaica Observer	C. Lewis	July 16, 2016	6	
5	Diabetes Association Shows It Cares	Diabetes Association of Jamaica		September 10, 2013	2	
6	North Adventists Participate in Wildwood Medical Training	Seventh-day Adventist Church - News: North Adventists Participate in Wildwood Medical Training	D. Buddoo-Fletcher	May 12, 2011	3	
7	Diabetic Jamaicans not managing condition — Diabetes Association	Jamaica Observer		November 3, 2015	4	
8	High Rate Of Diabetes And Hypertension In Caribbean Linked To History Of Slavery And Colonisation - Beckles	Jamaica Gleaner	A. Poyser	May 16, 2016	5	

9	Hypertension, Diabetes On The Rise	Jamaica Gleaner		May 18, 2012	3	
10	Is Ganja The Cure For Diabetes?	Jamaica Gleaner	E. Morrison	April 20, 2016	3	
11	Jamaican Scientist Dr. Henry Lower launches new diabetes formula	Scientific Research Council		March 26, 2013	2	
12	Expert Reveals Over 200,000 Persons In Jamaica Are Diabetic	Northern Caribbean University		November 9, 2015	2	
13	The Diabetes Deception	Jamaica Gleaner	T. Vendryes	November 16, 2010	5	
14	Jamaicans Must Take Diabetes Seriously – Professor Morrisson	Jamaica Information Service	T. Gunn	April 26, 2016	2	
15	Protect Yourself From Diabetes	Jamaica Gleaner	T. Vendryes	February 9, 2010	4	
16	Jamaicans Urged to Put a Stop to Diabetes	The Jamaican Blogs		April 25, 2016	4	
17	Natural remedies for diabetes	Jamaica Gleaner	H. Little-White	December 6, 2008	4	
	<i>Article</i>	<i>Journal</i>	<i>Author (s)</i>	<i>Date</i>	<i>Pages</i>	
18	Do current standards of primary care of diabetes meet with guideline recommendations in Trinidad, West Indies?	Primary Care Diabetes	Pereira et al.	February 13, 2009	6	
19	“She’s Trying Her Best, Even Though She Gets on My Nerves”: Diabetes and the Caregiver-Child Relationship in Jamaica	Lifestyle and Behaviour	Anderson et al.	2013	6	
20	A cross-sectional study of Jamaican adolescents’ risk for type 2 diabetes and cardiovascular diseases	BMJ Open	Barrett et al.	April 25, 2013	10	

21	Diabetes mellitus in Jamaica: sex differences in burden, risk factors, awareness, treatment and control in a developing country	Tropical Medicine and International Health	Cunningham-Myrie et al.	November 2013	14	
Trinidad and Tobago: Media Releases and Secondary Data (Articles)						
	<i>Name Media Release</i>	<i>News Website</i>	<i>Author (s)</i>	<i>Date</i>	<i>Pages</i>	
1	TSTT Sponsors 7 th Annual Camp for children with diabetes	Telecommunications Services of Trinidad & Tobago News		August 2006	2	
2	200,000 Trininis with diabetes, rising epidemic	Trinidad and Tobago News Day	M. Augustine	September 19, 2017	5	
3	Diabetes in T&T ranked No 2 killer	The Trinidad Guardian Newspaper	Y. Baboolal	March 13, 2012	2	
4	Local association says: 175,000 in T&T have diabetes	The Trinidad Guardian Newspaper	Y. Baboolal	November 15, 2016	3	
5	World Health Day 2016: "Beat Diabetes"	The Ministry of Health - Trinidad and Tobago		April 1, 2016	2	
6	World Diabetes Day	Government of the Republic of Trinidad and Tobago		November 14, 2016	2	
7	Media Release TRHA Supports Bovell Cancer Diabetes Foundation	Tobago Regional Health Authority		November 6, 2017	2	
8	Deyalsingh: \$8 billion lost every year to diabetes, cancer	Daily Express	R. Taitt	April 28, 2017	21	
9	Address – The first parent skills training programmes for children with disabilities	The office of the President Republic of Trinidad and Tobago		August 21, 2017	4	Omitted from analysis
	<i>Article</i>	<i>Journal</i>	<i>Author (s)</i>	<i>Date</i>	<i>Pages</i>	
10	Do current standards of primary care of	Primary Care Diabetes	Pereira et al.	April 24, 2009	6	

	diabetes meet with guideline recommendations in Trinidad, West Indies?					
11	TRAQ-D (Trinidad Risk Assessment Questionnaire for Type 2 Diabetes Mellitus): a cheap, reliable, non-invasive screening tool for diabetes	Achieving Best Practice	Latchan et al.	2010	6	
12	Prevalence of Diabetes, Obesity and Dyslipidaemia in Persons within High and Low Income Groups Living in North and South Trinidad	Journal of Clinical and Diagnostic Research	Nayak et al.	May 2016	6	
13	A cross-sectional study to determine the prevalence of obesity and other risk factors for type 2 diabetes among school children in Trinidad, West Indies	Paediatrics and International Child Health	Batson et al.	2014	9	

Haiti: Media Releases and Secondary Data (Articles)

	<i>Name Media Release</i>	<i>News Website</i>	<i>Author (s)</i>	<i>Date</i>	<i>Pages</i>	
1	Diabetes and Your Eyes	Thompson Eye Clinic		2013	2	
2	A Haitian Boy's Needless Death From Diabetes	The New York Times	Palav et al.	November 14, 2013	3	
3	Diabetes is a fast growing disease of the poor. Here is how we can turn the tide. Prevention, early diagnosis and low-cost care are the solutions to the spread of diabetes,	Eye Witness News	B. Lautrup-Nielsen	2015	2	

	but more resources are needed to deliver them.					
4	Diabetic Challenges at Hospital Sacre Coeur – Tufts in Haiti 2014	The Crudem Foundation	Tishberg et al.	2014	6	
	<i>Article</i>	<i>Journal</i>	<i>Author (s)</i>	<i>Date</i>	<i>Pages</i>	
5	Chikungunya Virus Infection and Diabetes Mellitus: A Double Negative Impact	The American Society of Tropical Medicine and Hygiene	Jean-Baptiste et al.	2016	6	