

**PERCEIVED KNOWLEDGE, ATTITUDE AND PRACTICE OF DIABETES AMONG
UNIFORM MEN IN BENIN CITY.**

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**A RESEARCH PROJECT SUMMITTED TO THE DEPARTMENT OF HEALTH,
SAFETY AND ENVIRONMENTAL EDUCATION, FACULTY OF EDUCATION,
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**REQUIREMENTS FOR THE AWARD OF THE DEGREE BSC.(ED) IN HEALTH
EDUCATION**

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CERTIFICATION

This is to certify that this project work was carried out by **OWIE ODION MARY** with Matriculation Number **EDU1703697** in the Department of Health, Safety and Environmental Education, Faculty of Education, University of Benin.

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DEDICATION

This Project is dedicated to God Almighty who in His infinite mercy and unfailing love has seen me through to the successful end of this work.

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It is truly impossible to acknowledge everyone who has helped me in this study, but I must first and foremost profound my gratitude to God Almighty, who has been my Guide, strength and inspiration and also His sustenance, mercy, good health and his protection over me throughout the years and the turbulent period, and also for making my project a success.

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ABSTRACT

This study is to examine the perceived Knowledge, Attitude and Practice of Diabetes among uniform men in Benin city. The finding of this study will help uniform officers/ men, health worker(health educator)and government to understand the importance of having the right knowledge, attitude and preventive measures against Diabetes Mellitus (A case study of uniform men in Benin city) with the view of improving the attitude, knowledge among uniform officers/ men and planning preventive and control measures by providing information regarding the knowledge of Diabetes Mellitus among uniform officers/ men in order to helps uniform officers/ men to cultivate a positive view of Diabetes Mellitus particularly those officers/ men with negative view. This work is divided into five chapters.

Chapter one contains background to the study, statement of the problem of uniform men towards Diabetes, to suggest healthful preventive practices of Diabetes in helping uniform men facing the dilemma of Diabetes Mellitus as well as avoiding the effects and complications of having Diabetes Mellitus. Chapter two deals on review of literature, types, symptoms, risk factors, prevention and effects associated with Diabetes on uniform men. Chapter three deals on the methods which was a descriptive survey research and a total a hundred questionnaires administered to uniform men to fill and analysis were made and discussions were being made, in chapter four. In the last chapter, it deals with summary, conclusion, recommendation. Based on the findings it is advisable that uniform men practice healthful preventive methods in avoiding the effects and complications of Diabetes.

CHAPTER ONE

Background of the Study

Diabetes Mellitus (DM) is a chronic non-communicable metabolic disease characterized by a rise in blood plasma glucose level. It has an important public concern nowadays due to a dramatic increase in incidence and prevalence. Diabetes Mellitus is a chronic, progressive, systemic disease characterized by dysfunction in the metabolic of fats, carbohydrates and proteins as a result of insulin deficiency with resultant high level of glucose in the blood. Diabetes Mellitus also disrupts the functions and structure of blood vessels and nerves. Diabetes Mellitus (DM) is one of the major fast growing Non-Communicable Disease (NCD) threats to global public health. Trends in the incidence of diabetes indicate disproportionate increase in developing countries due to current rapid demographic transitions from traditional to more westernized and urbanized lifestyles. A United Nations (UN) resolution in 2007 confirmed diabetes mellitus as a significant global public health issue.

Diabetes Mellitus is a chronic health condition which has a lifetime management needs as it affects vital organs in the body such as the eyes, heart, kidneys, brain, and the nerves World Health Organization (WHO 2018). The long-term effect of diabetes on these organs

is the development of blindness, heart failure, kidney failure, stroke, and foot diseases, respectively (ADA 2010). These complications arise when the disease is not adequately managed. The effect of sustained elevation of blood sugar results in damage to the small and large blood vessels in the body. Injury to the small blood vessels is more common results in affectation of the eyes (diabetes retinopathy), kidneys (diabetes nephropathy), and limbs (from diabetes neuropathy). Damage to the large vessels causes heart attack (myocardial infarction) and stroke (Cerebrovascular Disease). Diabetic complications could be prevented or delayed, which are the whole aim of managing the diabetes mellitus. It also saves cost and reduces mortality and morbidity associated with the health condition. However, management of diabetes requires a more significant commitment of the patients suffering from the condition in addition to the one provided by the health workers and caregivers(Deshpande, Harris-Hayes, Schootman 2008). One of the challenges facing the management of patients with this condition is the misconception and inadequate knowledge about the disease regarding its etiology and outcome from the patients' perspective. Therefore, the prevention of these complications could not be achieved if diabetic patients do not play their role regarding managing their situation concerning lifestyle modification and use of medication(Otekelwebia, Oyeyinka 2015).Diabetes mellitus being a chronic disorder needs continuous medical care to prevent Long-term complications. More than 135 million people worldwide have Diabetes Mellitus and their numbers expected to reach

approximately 300 million people by 2025. 10% of them having Type 1 Diabetes with 1.7 children per 1000 afflicted with the disease, diabetes is second only to asthma in the Prevalence of chronic illness in the United States (Ammari 2014).

In Nigeria, the national Prevalence is put at about 2.2% and this continues to be on the increase many factors are responsible for this increase, with increasing Urbanization, many people are adopting unhealthy western lifestyle with reduced intake of calories. This contributes to obesity which is a risk factor for the development of Diabetes (Unadike & Chinese, 2009). Hence Type 1 and Type 2 Diabetes Mellitus (T1D, T2D) have in common high blood glucose levels (Hyperglycemia) that can cause serious health complications including Ketoacidosis, kidneys failure, Heart disease, stroke and blindness. Patients are often diagnosed with diabetes when they see a physician for clinical signs such as excessive thirst, urination and hunger. These symptoms results from the underlying Hyperglycemia that is in turn caused by insufficient insulin functionality. T2D, which is usually associate with obesity or older age, this is the result of insulin resistance; the muscle or adipose cells do not respond adequately to normal levels of insulin produced by intact beta-cells. T1D on the other hand usually starts in people younger than 30 although it can occur at any age (Van Belle, Coppleters & Von Herreth 2011).

According to Worlds Health Organization (WHO 2012) the global increase in Diabetes Mellitus is associated with many factors including ageing population, unhealthy diets, lack

of regular exercise and sedentary lifestyle that heightens the individual's propensity towards obesity. World Health Organization (2014) alerted that 8.5% of adult age 18 years and above have diabetes Mellitus. According to Center for Disease and Control (CDC, 2009) with the study on Diabetes Mellitus was the direct cause of 1.5 million deaths and 48% of all the deaths are due to Diabetes Mellitus occurred before the age of 70 years. In fact that one person dies from diabetes Mellitus every six seconds International Diabetes Fund Control (IDF 2013) makes the chronic illness alarming. Unfortunately, several hundred of adults go undiagnosed with diabetes, knowledge of Diabetes among uniform officers /men can lead to early diagnosis when individuals recognize any symptoms, which can delay the onset of Diabetes complications and possibly reduces diabetes related deaths. Having the knowledge and awareness about the illness is also important for behavior change. One of the challenges facing the management of diabetes is the misconception and inadequate knowledge about the disease. So therefore there is every need to assess the level of diabetes-related Knowledge, Attitude, and Practice (KAP) among individual's especially uniform men in Benin City, Edo State.

Statement of Problem

Diabetes Mellitus is the condition in which the body does not properly process the food for the use as energy. Most of the food we eat is turned into glucose or sugar for our bodies to use for energy. The pancreas, an organ that lies near the stomach makes a hormone called

insulin to help glucose get into the cells of our bodies Center for Disease and Control (CDC 2015). Acute complications of Diabetes may develop and are mainly arising from severe insulin insufficient, they are hypoglycemia, diabetic acidosis and coma, chronic complications is associated with long term damage, dysfunction and failure of various organs, especially diabetes neuropathy, cardiovascular disease, Diabetic foot. So therefore there is every need to prevent or treatment of the disease to avoid future complications. Diabetes Mellitus has being a major cause of death in our society today and this death rate is increasing rapidly on daily basis. This has really posed a sense of threat among individual's especially uniform officers/ men in the workplace. As everyone have roles and responsibilities of their own to meet, not only does diabetes leads to death but also can reduces the performance of duties among uniform officers/ men as a result of deformity of body parts due to the effect of Diabetic. Another concerned problem is the Dismissal from employment (job loss) due to Diabetes Mellitus as a result can lead to the poor standard of living for such family as its source of income is being jeopardized. It can also lead to a case of low self-esteem as well as depression.

To the increase rate of uniform office men suffering from diabetes Mellitus in Nigeria and individuals tends to lack basic knowledge and have poor attitude towards the cause of this deadly disease, which could be inherent trait or through sedentary lifestyle in which uniform officers/ men possessed. So there is need to study uniform officers/ men

knowledge, attitude and practice of Diabetes Mellitus in order to make the world a better place.

Research Questions

The following research questions were raised to guide the study:

1. Does uniform men have the Knowledge of Diabetes Mellitus
2. What is the Attitude of uniform men towards Diabetes Mellitus
3. To what extent do uniform men engage in practice leading to Diabetes

Purpose of the Study

The main purpose of the study is to examine the knowledge, attitude and practice of uniform officers/men as regards diabetes mellitus.

Significant of the Study

The finding of this study will help uniform officers/ men, health worker(health educator)and government to understand the importance of having the right knowledge, attitude and preventive measures against Diabetes Mellitus a case study of uniform men in Benin city with the view of improving the attitude, knowledge among uniform officers/ men and planning preventive and control measures. The study there aim to Determine the level of knowledge and awareness of Diabetes Mellitus among uniform officers/ men, providing information regarding the knowledge of Diabetes Mellitus Among uniform officers/ men. It helps uniform officers/ men to cultivate a positive view of

Diabetes Mellitus particularly those officers/ men with negative view. It will also be useful to health educator, health sector and all interested in passing out information based on diabetes mellitus.

The study will be of immense benefit to other researchers who intend to know more in this topic and a basis for further studies.

Scope/ Delimitation of the Study

The scope of this study is the knowledge, attitude and prevention of Diabetes Mellitus among uniform officers/ men. The study is delimited to uniform officers/ men in Benin City.

Operational Definition of Terms

- **Diabetes Mellitus (DM):** It is a non- contagious disease that occurs as a result reduction of insulin production or inability for the body to absorb the insulin produce by the body.
- **Insulin:** Insulin is a hormone that is responsible for allowing glucose in the blood to enter cells, providing them with the energy to function.
- **Uniform Officers/ Men:** A person licensed to take full responsibility, which holds position or rank, authority in Army, Navy, Air force or any similar organization.

CHAPTER TWO

LITERATURE REVIEW

- Concept of diabetes
- Knowledge of diabetes
- Types of Diabetes Mellitus
- Symptoms of Diabetes
- Preventive practice of Diabetes Mellitus
- Prevention of Diabetes Mellitus
- Complications of Diabetes
- Risk Factors Associated with Diabetes Mellitus
- Effect of Diabetes Mellitus
- Attitude towards Diabetes Mellitus

Concept of Diabetes Mellitus

Diabetes Mellitus (DM) is a disorder in which the amount of sugar in the blood is elevated. Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin produces. Insulin is a hormone that regulates blood sugar. Hyperglycemia, or raised blood sugar, is a common effect of uncontrolled diabetes and over time leads to serious damage to many of the body's systems, especially the nerves and blood vessels. According to WHO In 2014, 8.5% of adults aged 18 years and older

had diabetes. In 2019, diabetes was the direct cause of 1.5 million deaths and 48% of all deaths due to diabetes occurred before the age of 70 years. Between 2000 and 2016, there was a 5% increase in premature mortality rates (i.e. before the age of 70) from diabetes. In high-income countries the premature mortality rate due to diabetes decreased from 2000 to 2010 but then increased in 2010-2016. In lower-middle-income countries, the premature mortality rate due to diabetes increased across both periods. By contrast, the probability of dying from any one of the four main Non-Communicable Diseases (cardiovascular diseases, cancer, chronic respiratory diseases or diabetes) between the ages of 30 and 70 decreased by 18% globally between 2000 and 2016.

Diabetes is due to either the pancreas not producing enough insulin, or the cells of the body not responding properly to the insulin produced. Diabetes is the condition in which the body does not properly process the food being consumed for use as energy. Most of the food we eat is turned into glucose or sugar for our bodies to use for energy. The pancreas, an organ that lies near the stomach, makes a hormone called the insulin to help glucose get into the cells of our bodies (CDC 2016). When a person has diabetes, the body either doesn't make enough insulin or can't use its own insulin as well as it should, this causes sugar to build up in the blood. There are some acute complications of diabetes that may develop and are mainly arising from severe insulin insufficiency; they are hypoglycemia, diabetes acidosis and coma. The chronic complications are associated with long term damage, dysfunction and failure of various organs, especially diabetic

neuropathy, cardiovascular disease, the diabetic foot. Prevention and treatment involve maintaining a healthy diet, regular physical exercise, a normal body weight and avoiding the use of tobacco (WHO, Diabetes fact sheet, October 2013). In 2015, an estimation of 415 million people had diabetes worldwide (International Diabetes Federation, IDF, 2015). Various studies show that In 2017, 425 million people had diabetes worldwide, up from an estimated 382 million people in 2013 and from 108 million in 1980. Accounting for the shifting age structure of the global population, the prevalence of diabetes is 8.8% among adults, nearly double the rate of 4.7% in 1980. Type 2 makes up about 90% of the cases. Some data indicate rates are roughly equal in women and men, but male excess in diabetes has been found in many populations with higher type 2 incidence, possibly due to sex-related differences in insulin sensitivity, consequences of obesity and regional body fat deposition, and other contributing factors such as high blood pressure, tobacco smoking, and alcohol intake. As of 2019, an estimated 463 million people had diabetes worldwide (8.8% of the adult population), with type 2 diabetes making up about 90% of the cases. Rates are similar in women and men. Trends suggest that rates will continue to rise. Diabetes at least doubles a person's risk of early death. In 2019, diabetes resulted in approximately 4.2 million deaths as it is the 7th leading cause of death globally.

Diabetes mellitus is a metabolic disease that causes high blood sugar. The hormone insulin moves sugar from the blood into your cells to be stored or used for energy. With diabetes, your body either doesn't make enough insulin or can't effectively use the insulin it does make. The

WHO estimates that diabetes resulted in 1.5 million deaths in 2012, making it the 8th leading cause of death. However another 2.2 million deaths worldwide were attributable to high blood glucose and the increased risks of cardiovascular disease and other associated complications (e.g. kidney failure), which often lead to premature death and are often listed as the underlying cause of death certificates rather than diabetes. For example, in 2017, the International Diabetes Federation (IDF) estimated that diabetes resulted in 4.0 million deaths worldwide, using modeling to estimate the total number of deaths that could be directly or indirectly attributed to diabetes. Diabetes occurs throughout the world but is more common (especially type 2) in more developed countries. The greatest increase in rates has however been seen in low- and middle-income countries, where more than 80% of diabetic deaths occur. The fastest prevalence increase is expected to occur in Asia and Africa, where most people with diabetes will probably live in 2030. The increase in rates in developing countries follows the trend of urbanization and lifestyle changes, including increasingly sedentary lifestyles, less physically demanding work and the global nutrition transition, marked by increased intake of foods that are high energy-dense but nutrient-poor (often high in sugar and saturated fats, sometimes referred to as the "Western-style" diet). The global number of diabetes cases might increase by 48% between 2017 and 2045. As at 2019, an estimated 463 million people had diabetes worldwide (8.8% of the adult population), with type 2 diabetes making up about 90% of the cases. Rates are similar in women and men. Trends suggest that rates will continue to rise. At least doubles a person's risk of early

death. In 2019, diabetes resulted in approximately 4.2 million deaths. It is the 7th leading cause of death globally. The global economic cost of diabetes-related health expenditure in 2017 was estimated at 727 billion. The WHO Global report on diabetes provides an overview of the diabetes burden, interventions available to prevent and manage diabetes, and recommendations for governments, individuals, the civil society and the private sector.

In April 2021 WHO launched the Global Diabetes Compact, a global initiative aiming for sustained improvements in diabetes prevention and care, with a particular focus on supporting low- and middle-income countries. The Compact is bringing together national governments, UN organizations, nongovernmental organizations, private sector entities, academic institutions, and philanthropic foundations, people living with diabetes, and international donors to work on a shared vision of reducing the risk of diabetes and ensuring that all people who are diagnosed with diabetes have access to equitable, comprehensive, affordable and quality treatment and care. In May 2021, the World Health Assembly(W H A) agreed a Resolution on strengthening prevention and control of diabetes. It recommends action in areas including increasing access to insulin; promoting convergence and harmonization of regulatory requirements for insulin and other medicines and health products for the treatment of diabetes and assessing the feasibility and potential value of establishing a web-based tool to share information relevant to the transparency of markets for diabetes medicines and health products

Insulin, a hormone released from the pancreas (an organ behind the stomach that also produces digestive enzymes), controls the amount of glucose in the blood. Glucose in the bloodstream stimulates the pancreas to produce insulin. Insulin helps glucose to move from the blood into the cells. Once inside the cells, glucose is converted to energy, which is used immediately, or the glucose is stored as fat or the starch glycogen until it is needed. The levels of glucose in the blood vary normally throughout the day. They rise after a meal and return to pre-meal levels within about 2 hours after eating. Once the levels of glucose in the blood return to pre-meal levels, insulin production decreases. The variation in blood glucose levels is usually within a narrow range, about 70 to 110 milligrams per deciliter (mg/dL), or 3.9 to 6.1 millimoles per liter (mmol/L) of blood in healthy people. If people eat a large amount of carbohydrates, the levels may increase more. People older than 65 years tend to have slightly higher levels, especially after eating.

Insulin is a hormone made by your pancreas, an organ located behind your stomach. Your pancreas releases insulin into your bloodstream. Insulin acts as the “key” that unlocks the cell wall “door,” which allows glucose to enter your body’s cells. Glucose provides the “fuel” or energy tissues and organs need to properly function. Diabetes tends to occur if the pancreas doesn’t make any insulin or enough insulin. Or your pancreas makes insulin but your body’s cells don’t respond to it and can’t use it as it normally should. If glucose can’t get into your body’s cells, it stays in your bloodstream and your blood glucose level rises. If the body does not

produce enough insulin to move the glucose into the cells, or if the cells stop responding normally to insulin (called insulin resistance), the resulting high levels of glucose in the blood and the inadequate amount of glucose in the cells together produce the symptoms and complications of diabetes.

The Knowledge of Diabetes Mellitus

The Knowledge of Diabetes Mellitus is very vital among individuals especially those who are susceptible to having this diseases. So many people lack of or fail to understand certain information regarding Diabetes Mellitus, and this poor Knowledge significantly affects the outcome of diabetes which leads to increase morbidity and mortality associated with the health condition. Nigeria like other developing countries is still battling with managing infectious diseases using limited resources. The additional burden of non-communicable long-term diseases such as stroke, kidney, and heart failure will further deplete the little resources directly from both direct and non-direct medical cost of illness and indirectly through the loss of workforce. These complications reduce the life span of those affected, and this leads to many individuals dying at their productive age which affects the economy of the country. This effect poses a challenge on public health practitioners in third world countries to give more emphasis on enlightenment and prevention of non-communicable diseases such as diabetes, hypertension, and cancers. Most of the public health practitioners in Nigeria are specialist in preventing infectious diseases, maternal, and child health. The finding from this study and other similar

ones in the country will pose a challenge for these health workers to seek a specialization on the prevention of non-communicable diseases.

Essential knowledge regarding the risk factors and preventive aspects of a particular disease in a group or community is mandatory for control and proper management and to control the further spread of this disease in a given setup (Oji 2013). In several studies, it is observed that percentage of people knowledge as regards DM is very low. In a study, Baig gwale (2015) revealed similar trends of having poor knowledge regarding diabetes. Alqahtani (2020) in Riyadh, KSA, revealed better knowledge scores among the adult population regarding DM (Alqahtani 2019). Alenazi (2020) mentioned relatively better (62.6%) knowledge scores in young school children regarding DM. Quite interestingly, it was observed that females had significantly better knowledge regarding DM general knowledge, risk factors, signs and symptoms, control and management, complications, and total knowledge scores. A Chinese study reported inadequate knowledge of diabetes and its related factors among college students. About less than half of the respondents have correct knowledge about the start of the DM, impacts of physical inactivity, and DM complications.

Diabetes Mellitus is a comparatively silent disease but has several dangerous long-term complications. The crucial aftereffects of this problem are not only on the individual's health but also on the country's economic status and the healthcare system. The uniform men are the backbone of Security in any country. Uniform men are public servant they should not be the

burden but the powerhouse for the country's growth. Therefore, it needs special attention from the policymakers to make them aware of their role in society and provide them such a conducive environment that improves their working skills, leadership qualities, and mental and physical health towards diabetes

Types of Diabetes Mellitus

Type 1 Diabetes: Type 1 Diabetes is characterized by deficient insulin production and requires daily administration of insulin. In 2017 there were 9 million people with type 1 diabetes; the majority of them live in high-income countries. Neither its cause nor the means to prevent it are known. In type 1 diabetes (formerly called insulin-dependent diabetes or juvenile-onset diabetes), the body's immune system attacks the insulin-producing cells of the pancreas, and more than 90% of them are permanently destroyed. The pancreas, therefore, produces little or no insulin. Only about 5 to 10% of all people with diabetes have type 1 disease. Most people who have type 1 diabetes develop the disease before age 30, although it can develop later in life. Scientists believe that an environmental factor—possibly a viral infection or a nutritional factor during childhood or early adulthood—causes the immune system to destroy the insulin-producing cells of the pancreas. A genetic predisposition makes some people more susceptible to an environmental factor. Symptoms include excessive excretion of urine (polyuria), thirst (polydipsia), constant hunger, weight loss, vision changes, and fatigue. These symptoms may occur suddenly. In people with type 1 diabetes, the symptoms often begin abruptly and dramatically. A serious condition called

diabetic ketoacidosis, a complication in which the body produces excess acid, may quickly develop. In addition to the usual diabetes symptoms of excessive thirst and urination, the initial symptoms of diabetic ketoacidosis also include nausea, vomiting, fatigue, and—particularly in children—abdominal pain. Breathing tends to become deep and rapid as the body attempts to correct the blood's acidity (see Acidosis), and the breath smells fruity and like nail polish remover. Without treatment, diabetic ketoacidosis can progress to coma and death, sometimes very quickly.

After type 1 diabetes has begun, some people have a long but temporary phase of near-normal glucose levels (honeymoon phase) due to partial recovery of insulin secretion. Type 1 diabetes is characterized by loss of the insulin-producing beta cells of the pancreatic islets, leading to insulin deficiency. This type can be further classified as immune-mediated or idiopathic. The majority of type 1 diabetes is of an immune-mediated nature, in which a T cell-mediated autoimmune attack leads to the loss of beta cells and thus insulin. It causes approximately 10% of diabetes mellitus cases in North America and Europe. Most affected people are otherwise healthy and of a healthy weight when onset occurs. Sensitivity and responsiveness to insulin are usually normal, especially in the early stages. Although it has been called "juvenile diabetes" due to the frequent onset in children, the majority of individuals living with type 1 diabetes are now adults. "Brittle" diabetes, also known as unstable diabetes or labile diabetes, is a term that was traditionally used to describe the dramatic and recurrent swings in glucose levels, often occurring for no apparent reason in insulin-dependent diabetes. This term, however, has no biologic basis and should not be used.

Still, type 1 diabetes can be accompanied by irregular and unpredictable high blood sugar levels, and the potential for diabetic ketoacidosis or serious low blood sugar levels. Other complications include an impaired counter regulatory response to low blood sugar, infection, gastroparesis (which leads to erratic absorption of dietary carbohydrates), and endocrinopathies (e.g., Addison's disease). These phenomena are believed to occur no more frequently than in 1% to 2% of persons with type 1 diabetes. Type 1 diabetes is partly inherited, with multiple genes, including certain HLA genotypes, known to influence the risk of diabetes. In genetically susceptible people, the onset of diabetes can be triggered by one or more environmental factors, such as a viral infection or diet. Several viruses have been implicated, but to date there is no stringent evidence to support this hypothesis in humans. Among dietary factors, data suggest that gliadin (a protein present in gluten) may play a role in the development of type 1 diabetes, but the mechanism is not fully understood. Type 1 diabetes can occur at any age, and a significant proportion is diagnosed during adulthood. Latent Autoimmune Diabetes of Adults (LADA) is the diagnostic term applied when type 1 diabetes develops in adults; it has a slower onset than the same condition in children. Given this difference, some use the unofficial term "type 1.5 diabetes" for this condition. Adults with LADA are frequently initially misdiagnosed as having type 2 diabetes, based on age rather than a cause.

Type 2 Diabetes: Type 2 Diabetes occurs when your body becomes resistant to insulin, and sugar builds up in your blood. Reduced insulin secretion and absorption leads to high glucose

content in the blood. Type 2 Diabetes is characterized by insulin resistance, which may be combined with relatively reduced insulin secretion. The defective responsiveness of body tissues to insulin is believed to involve the insulin receptor. However, the specific defects are not known. Diabetes mellitus cases due to a known defect are classified separately. Type 2 diabetes is the most common type of diabetes mellitus. Many people with type 2 diabetes have evidence of pre-diabetes (impaired fasting glucose and/or impaired glucose tolerance) before meeting the criteria for type 2 diabetes. The progression of pre-diabetes to overt Type 2 Diabetes can be slowed or reversed by lifestyle changes or medications that improve insulin sensitivity or reduce the liver's glucose production. More than 95% of people with diabetes have type 2 diabetes. This type of diabetes is largely the result of excess body weight and physical inactivity. In type 2 diabetes the pancreas often continues to produce insulin, sometimes even at higher-than-normal levels, especially early in the disease. However, the body develops resistance to the effects of insulin, so there is not enough insulin to meet the body's needs. As type 2 diabetes progresses, the insulin-producing ability of the pancreas decreases. Type 2 diabetes was once rare in children and adolescents but has become more common. However, it usually begins in people older than 30 and becomes progressively more common with age. About 26% of people older than 65 have type 2 diabetes. People of certain racial and ethnic backgrounds are at increased risk of developing type 2 diabetes: blacks, Asian Americans, American Indians, and people of Spanish or Latin American ancestry who live in the United States have a twofold to threefold increased

risk as compared with whites. Type 2 diabetes also tends to run in families. Obesity is the chief risk factor for developing type 2 diabetes, and 80 to 90% of people with this disorder are overweight or obese. Because obesity causes insulin resistance, obese people need very large amounts of insulin to maintain normal blood glucose levels. Symptoms may be similar to those of type 1 diabetes but are often less marked. As a result, the disease may be diagnosed several years after onset, after complications have risen. Until recently, this type of diabetes was seen only in adults but it is now also occurring increasingly frequently in children. Type 2 diabetes is primarily due to lifestyle factors and genetics. A number of lifestyle factors are known to be important to the development of type 2 diabetes, including obesity (defined by a body mass index of greater than 30), lack of physical activity, poor diet, stress, and urbanization. Excess body fat is associated with 30% of cases in people of Chinese and Japanese descent, 60–80% of cases in those of European and African descent, and 100% of Pima Indians and Pacific Islanders. Even those who are not obese may have a high waist–hip ratio. Dietary factors such as sugar-sweetened drinks are associated with an increased risk. The type of fats in the diet is also important, with saturated fat and trans fats increasing the risk and polyunsaturated and monounsaturated fat decreasing the risk. Eating white rice excessively may increase the risk of diabetes, especially in Chinese and Japanese people. Lack of physical activity may increase the risk of diabetes in some people. Adverse childhood experiences, including abuse, neglect, and household difficulties, increase the likelihood of type 2 diabetes later in life by 32%, with neglect

having the strongest effect. Antipsychotic medication side effects (specifically metabolic abnormalities, dyslipidemia and weight gain) and unhealthy lifestyles (including poor diet and decreased physical activity), are potential risk factors. Note: Pre-diabetes

Pre-diabetes is the term that's used when your blood sugar is higher than expected, but it's not high enough for a diagnosis of type 2 diabetes. It occurs when the cells in your body don't respond to insulin the way they should. This can lead to type 2 diabetes down the road. Pre-diabetes is a condition in which blood glucose levels are too high to be considered normal but not high enough to be labeled diabetes. People have pre-diabetes if their fasting blood glucose level is between 100 mg/dL (5.6 mmol/L) and 125 mg/dL (6.9 mmol/L) or if their blood glucose level 2 hours after a glucose tolerance test is between 140 mg/dL (7.8 mmol/L) and 199 mg/dL (11.0 mmol/L). Prediabetes carries a higher risk of future diabetes as well as heart disease. Decreasing body weight by 5 to 10% through diet and exercise can significantly reduce the risk of developing future diabetes.

Gestational Diabetes: Gestational diabetes is high blood sugar during pregnancy. Insulin-blocking hormones produced by the placenta cause this type of diabetes. Gestational diabetes is hyperglycemia with blood glucose values above normal but below those diagnostic of diabetes. Gestational diabetes occurs during pregnancy. Women with gestational diabetes are at an increased risk of complications during pregnancy and at delivery. These women and possibly their children are also at increased risk of type 2 diabetes in the future. Gestational diabetes is

diagnosed through prenatal screening, rather than through reported symptoms. Impaired glucose tolerance and impaired fasting glycaemia, Impaired glucose tolerance (IGT) and impaired fasting glycaemia (IFG) are intermediate conditions in the transition between normality and diabetes. People with IGT or IFG are at high risk of progressing to type 2 diabetes, although this is not inevitable. Gestational Diabetes resembles type 2 diabetes in several respects, involving a combination of relatively inadequate insulin secretion and responsiveness. It occurs in about 2–10% of all pregnancies and may improve or disappear after delivery. It is recommended that all pregnant women get tested starting around 24–28 weeks gestation. It is most often diagnosed in the second or third trimester because of the increase in insulin-antagonist hormone levels that occurs at this time. However, after pregnancy approximately 5–10% of women with gestational diabetes are found to have another form of diabetes, most commonly type 2. Gestational diabetes is fully treatable, but requires careful medical supervision throughout the pregnancy. Management may include dietary changes, blood glucose monitoring, and in some cases, insulin may be required. Though it may be transient, untreated gestational diabetes can damage the health of the fetus or mother. Risks to the baby include macrosomia (high birth weight), congenital heart and central nervous system abnormalities, and skeletal muscle malformations. Increased levels of insulin in a fetus's blood may inhibit fetal surfactant production and cause infant respiratory distress syndrome. A high blood bilirubin level may result from red blood cell destruction. In severe cases, prenatal death may occur, most commonly as a result of poor

placental perfusion due to vascular impairment. Labor induction may be indicated with decreased placental function. A caesarean section may be performed if there is marked fetal distress or an increased risk of injury associated with macrosomia. (ADA , 2012).

Symptoms of Diabetes Mellitus

According to CDC, Center for Disease and control(2022), People who have type 1 diabetes develop symptoms like, nausea, vomiting, or stomach pains. Type 1 diabetes symptoms can develop in just a few weeks or months and can be severe. Type 1 diabetes usually starts in children, or young adult but can happen at any age. While for Type 2 diabetes symptoms often take several years to develop. Some people don't notice any symptoms at all, because symptoms are hard to spot, and then for Gestational diabetes usually doesn't have any symptoms. It occurs at Pregnancy, and can be detected by test Gestational Diabetes between 24 and 28 weeks of pregnancy. This is needed in order to protect mothers health and as well as their baby's health.

The general symptoms of DM include:

- a. Increased thirst.
- b. Weak, tired feeling.
- c. Blurred vision.
- d. Numbness or tingling in the hands or feet.
- e. Slow-healing sores or cuts.
- f. Unplanned weight loss.

- g. Frequent urination.
- h. Frequent unexplained infections.
- i. Dry mouth or skin

Other symptoms in women may include dry and itchy skin, and frequent yeast infections or urinary tract infections, while in men may include, decreased sex drive, erectile dysfunction, decreased muscle strength.

Preventive practice of Diabetes Mellitus

People with Diabetes benefit greatly from learning about the disorder, understanding how diet and exercise affect their blood glucose levels, and knowing how to avoid complications. A nurse trained in diabetes education can provide information about managing diet, exercising, monitoring blood glucose levels, and taking drugs. The preventive practice include:

Diet: Diet management is very important in people with both types of diabetes mellitus, it is highly recommended for a healthy, balanced diet and efforts to maintain a healthy weight. People with diabetes can benefit from meeting with a dietitian or a diabetes educator to develop an optimal eating plan. Such a plan includes avoiding simple sugars and processed foods, increasing dietary fiber, limiting portions of carbohydrate-rich, and fatty foods (especially saturated fats). People who are taking insulin should avoid long periods between meals to prevent hypoglycemia. Although protein and fat in the diet contribute to the number of calories a person eats, only the number of carbohydrates has a direct effect on blood glucose levels. The American Diabetes

Association 2022, has many helpful tips on diet, including recipes. Even when people follow a proper diet, cholesterol-lowering drugs are needed to decrease the risk of heart disease. People with type 1 diabetes and certain people with type 2 diabetes may use carbohydrate counting or the carbohydrate exchange system to match their insulin dose to the carbohydrate content of their meal. "Counting" the amount of carbohydrate in a meal is used to calculate the amount of insulin the person takes before eating. However, the carbohydrate-to-insulin ratio (the amount of insulin taken for each gram of carbohydrate in the meal) varies for each person, and people with diabetes need to work closely with a dietician who has experience in working with people with diabetes to master the technique. Some experts have advised use of the glycemic index (a measure of the impact of an ingested carbohydrate-containing food on the blood glucose level) to delineate between rapid and slowly metabolized carbohydrates, although there is little evidence to support this approach.

Exercise: Exercise, in appropriate amounts (at least 150 minutes a week spread out over three days), can also help people control their weight and improve blood glucose levels. Because blood glucose levels go down during exercise, people must be alert for symptoms of hypoglycemia. Some people need to eat a small snack during prolonged exercise, decrease their insulin dose, or both. Many people, especially those with type 2 diabetes, are overweight or obese. Some people with type 2 diabetes may be able to avoid or delay the need to take drugs by achieving and maintaining a healthy weight. Weight loss is also important in these people because excess

weight contributes to complications of diabetes. When people with diabetes have trouble losing weight with diet and exercise alone, doctors may give weight-loss drugs or recommend bariatric surgery (surgery to cause weight loss).

Prevention of Diabetes Mellitus

Type 2 diabetes can be prevented with lifestyle changes. People who are overweight and lose as little as 7 percent of their body weight and who increase physical activity (for example, walking 30 minutes per day) can decrease their risk of diabetes mellitus by more than 50%. Metformin and acarbose, drugs that are used to treat diabetes, may reduce the risk of diabetes in people with impaired glucose regulation. Unlike type 1, there is no treatments prevent the onset of type 1 diabetes mellitus. Some drugs may induce remission of early type 1 diabetes in some people, possibly because they prevent the immune system from destroying the cells of the pancreas. However, these drugs cause side effects that limit their use. The major long-term complications relate to damage to blood vessels. Diabetes doubles the risk of cardiovascular disease and about 75% of deaths in diabetics are due to coronary artery disease. Other "macro vascular" diseases are stroke, and peripheral vascular disease.

The primary micro vascular complications of diabetes include damage to the eyes, kidneys, and nerves. Damage to the eyes, known as diabetic retinopathy, is caused by damage to the blood vessels in the retina of the eye, and can result in gradual vision loss and potentially blindness. Damage to the kidneys, known as diabetic nephropathy, can lead to tissue scarring, urine protein

loss, and eventually chronic kidney disease, sometimes requiring dialysis or kidney transplant. Damage to the nerves of the body, known as diabetic neuropathy, is the most common complication of diabetes. The symptoms can include numbness, tingling, pain, and altered pain sensation, which can lead to damage to the skin. Diabetes-related foot problems (such as diabetic foot ulcers) may occur, and can be difficult to treat, occasionally requiring amputation. Additionally, proximal diabetic neuropathy causes painful muscle wasting and weakness.

There is a link between cognitive deficit and diabetes. Compared to those without diabetes, those with the disease have a 1.2 to 1.5-fold greater rate of decline in cognitive function.

Complications of Diabetes

All forms of diabetes increase the risk of long develop after many years (10 otherwise not received a diagnosis before that time. Symptoms may develop rapidly (weeks or months) in type 1 diabetes, while they usually develop much more slowly and may be subtle or absent in type 2 diabetes. Several other signs and symptoms can mark the onset of diabetes, although they are not specific to the disease. In addition to the known ones above, they include blurry vision, headache, fatigue, slow healing of cuts, and itchy skin. Prolonged high blood glucose can cause glucose absorption in the lens of the eye, which leads to changes in its shape, resulting in vision changes. A number of skin rashes that can occur in diabetes are collectively known as diabetic dermadromes. 1 diabetes) may also experience episodes of diabetic, a type of metabolic

problems characterized by nausea, vomiting and, the smell of acetone on the breath, deep breathing known as, and in severe cases a decreased level of consciousness.

A rare but equally severe possibility is hyperosmolar non ketotic state, which is more type 2 diabetes and is mainly the result of dehydration. All forms of diabetes increase the risk of long-term complications. These typically lop after many years (10–20), but may be the first symptom in those who have otherwise not received a diagnosis before that time. 1 diabetes, while the 2 diabetes. Although they are not specific to the disease. In addition to the known ones above, they include blurry vision, headache, fatigue, slow healing of cuts, and itchy skin. Prolonged high blood leads to changes in its shape, resulting in vision changes.

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There is a link between cognitive deficit and diabetes. Compared to those without diabetes, those with the disease have a 1.2 to 1.5-fold greater rate of decline in cognitive function.

Long-term complications of diabetes develop gradually. The longer you have diabetes — and the less controlled your blood sugar — the higher the risk of complications. Eventually, diabetes complications may be disabling or even life-threatening. In fact, prediabetes can lead to type 2 diabetes. Possible complications include:

Heart and Blood vessel (cardiovascular) Disease: Diabetes majorly increases the risk of many heart problems. These can include coronary artery disease with chest pain (angina), heart attack, stroke and narrowing of arteries (atherosclerosis). If you have diabetes, you're more likely to have heart disease or stroke.

Nerve Damage (Neuropathy): Too much sugar can injure the walls of the tiny blood vessels (capillaries) that nourish the nerves, especially in the legs. This can cause tingling, numbness, burning or pain that usually begins at the tips of the toes or fingers and gradually spreads upward.

Damage to the nerves related to digestion can cause problems with nausea, vomiting, diarrhea or constipation. For men, it may lead to erectile dysfunction.

Kidney Damage (Nephropathy): The kidneys hold millions of tiny blood vessel clusters (glomeruli) that filter waste from the blood. Diabetes can damage this delicate filtering system.

Eye Damage (Retinopathy): Diabetes can damage the blood vessels of the eye (diabetic retinopathy). This could lead to blindness.

Foot Damage: Nerve damage in the feet or poor blood flow to the feet increases the risk of many foot complications.

Skin and Mouth Conditions: Diabetes may leave you more prone to skin problems, including bacterial and fungal infections.

Hearing Impairment: Hearing problems are more common in people with diabetes.

Alzheimer's Disease: Type 2 diabetes may increase the risk of dementia, such as Alzheimer's disease.

Depression: Depression symptoms are common in people with type 1 and type 2 diabetes.

RISK FACTORS

Type 1 diabetes is thought to be caused by an immune reaction (the body attacks itself by mistake). Risk factors for type 1 diabetes are not as clear as for pre-diabetes and type 2 diabetes.

Known risk factors include:

Family History: Having a parent, brother, or sister with type 1 diabetes.

Age: You can get type 1 diabetes at any age, but it usually develops in children, teens, or young adults.

Risk Factors for Type 2 Diabetes

- a. Have pre-diabetes.
- b. Are overweight.
- c. Are 45 years or older.
- d. Have a parent, brother, or sister with type 2 diabetes.
- e. Are physically active less than 3 times a week.

Have ever had gestational diabetes (diabetes during pregnancy) or given birth to a baby who weighed over 9 pounds.

If you have non-alcoholic fatty liver disease you may also be at risk for type 2 diabetes.

Risk Factors for Pre-Diabetes

- a. You're at risk for prediabetes if you:
- b. Are overweight.
- c. Are 45 years or older.
- d. Have a parent, brother, or sister with type 2 diabetes.
- e. Are physically active less than 3 times a week.

Have ever had gestational diabetes (diabetes during pregnancy) or given birth to a baby who weighed over 9 pounds.

EFFECTS OF DIABETES MELLITUS

Endocrine, excretory, and digestive systems

If your pancreas produces little or no insulin — or if your body can't use it other hormones are used to turn fat into energy. This can create high levels of toxic chemicals, including acids and ketone bodies, which may lead to a condition called diabetic ketoacidosis. Diabetic ketoacidosis is a serious complication of the disease.

The Effects of Diabetes on the Body, medically reviewed by Lauren Castiello, By Ann Pietrangelo — Updated on October 20, 2021

- Endocrine
- Kidney damage
- Circulatory system
- Integumentary system
- Central nervous system
- Reproductive system

Endocrine, Excretory, and Digestive Systems

If your pancreas produces little or no insulin — or if your body can't use it other hormones are used to turn fat into energy. This can create high levels of toxic chemicals, including acids and ketone bodies, which may lead to a condition called diabetic ketoacidosis.

Diabetic ketoacidosis is a serious complication of the disease. Symptoms include:

- Extreme thirst
- Excessive urination
- Fatigue

Your breath may have a sweet scent that's caused by the elevated levels of ketones in the blood. High blood sugar levels and excess ketones in your urine can confirm diabetic ketoacidosis. If untreated, this condition can lead to loss of consciousness or even death.

Diabetic hyperglycemic hyperosmolar syndrome (HHS) occurs in type 2 diabetes. It involves very high blood glucose levels but no ketones.

You might become dehydrated with this condition. You may even lose consciousness. HHS is most common in people whose diabetes is undiagnosed, or who haven't been able to manage their diabetes well. It can also be caused by a heart attack, stroke, or infection.

High blood glucose levels may cause gastroparesis. This is when it's hard for your stomach to completely empty. This delay can cause blood glucose levels to rise. As a result, you may also experience:

- Nausea
- Vomiting
- Bloating
- Heartburn

Kidney Damage

Diabetes can also damage your kidneys and affect their ability to filter waste products from your blood. If your doctor detects microalbuminuria, or elevated amounts of protein in your urine, it could be a sign that your kidneys aren't functioning properly.

Kidney disease related to diabetes is called diabetic nephropathy. This condition doesn't show symptoms until its later stages.

If you have diabetes, your doctor will evaluate you for nephropathy to help

Circulatory system

Diabetes raises your risk of developing high blood pressure, which puts further strain on your heart.

When there I high blood glucose levels, this can contribute to the formation of fatty deposits in blood vessel walls. Over time, it can restrict blood flow and increase the risk of atherosclerosis, or hardening of the blood vessels.

According to the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Trusted Source, diabetes doubles your risk of heart disease and stroke. In addition to monitoring and controlling your blood glucose, healthy eating habits and regular exercise can help lower the risk of high blood pressure and high cholesterol levels.

If you smoke, consider quitting if you're at risk of diabetes. Smoking increases your risk of cardiovascular problems and restricted blood flow. Your doctor can help you create a quit plan.

Lack of blood flow can eventually affect your hands and feet, and cause pain while you're walking. This is called intermittent claudication.

The narrowed blood vessels in your legs and feet may also cause problems in those areas. For example, your feet may be cold, or you may be unable to feel heat due to a lack of sensation.

This condition is known as peripheral neuropathy, which is a type of diabetic neuropathy that causes decreased sensation in the extremities. It's particularly dangerous because it may prevent you from noticing an injury or infection.

Diabetes also increases your risk of developing infections or ulcers of the foot. Poor blood flow and nerve damage increases the likelihood of having a foot or leg amputated.

If you have diabetes, it's critical that you take good care of your feet and inspect them often.

Integumentary system

Diabetes can also affect your skin, the largest organ of your body. Along with dehydration, your body's lack of moisture due to high blood sugar can cause the skin on your feet to dry and crack.

It's important to completely dry your feet after bathing or swimming. You can use petroleum jelly or gentle creams, but avoid letting these areas become too moist.

Moist, warm folds in the skin are susceptible to fungal, bacterial, or yeast infections. These tend to develop in the following areas:

- Between fingers and toes
- The groin
- Armpits
- Corners of the mouth

Eruptive xanthomatosis causes hard yellow bumps with a red ring.

Digital sclerosis causes thick skin, most often on the hands or feet.

Diabetic dermopathy can cause brown patches on the skin. There's no cause for concern and no treatment is necessary.

These skin conditions usually clear up when blood sugar gets under control.

Central Nervous System

Diabetes causes diabetic neuropathy, or damage to the nerves. This can affect your perception of heat, cold, and pain. It can also make you more susceptible to injury.

The chances that you won't notice these injuries and let them develop into serious infections or conditions increases, too.

Diabetes can also lead to swollen, leaky blood vessels in the eye, called diabetic retinopathy.

This can damage your vision. It may even lead to blindness. Symptoms of eye trouble can be mild at first, so it's important to see your eye doctor regularly.

Reproductive System

The changing hormones during pregnancy can cause gestational diabetes and, in turn, increases your risk of high blood pressure. There are two types of high blood pressure conditions to watch out for during pregnancy: preeclampsia and eclampsia.

In most cases, gestational diabetes is easily managed, and glucose levels return to normal after the baby is born.

ATTITUDES TOWARDS DIABETES MELLITUS

Attitude refers to individuals' feelings towards a particular subject if they have preconceived ideas about it and how they demonstrate their knowledge towards controlling that specific condition. In contrast, by practice, one refers to how the knowledge and attitudes are demonstrated in a practical approach to control a condition or a disease state (Andi N, Tefera S, et.al 2019). In a study, majority of the participants showed positive attitudes towards the preventive aspects of DM. Females demonstrated a relatively more positive attitude as compared to male counterparts. A small percentage of the students showed negative attitudes and practices towards preventive efforts against DM. It is unpredictably surprising that the knowledge score was not good, but the attitudes and practices were more positive and adequate, respectively. Two recent studies in KSA mentioned the easy-going or rather a careless attitude of young males and females, showing negative attitudes towards the preventive aspects of DM (Alqahtani M. et, al 2020; Nisar S. et.al 2019). significant

association of good knowledge scores was observed with female gender, high blood sugar levels, and students who had DM relatives. The female gender was also associated with a positive attitude. The participants who had hypertension were more likely to have good practices in preventing DM, while those with DM relatives were less likely to have good practices in preventing DM. A recent study reported that gender and family history of DM and education were the predictor of knowledge, attitudes, practices for DM.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter deals with the procedure and method that will be adopted for data collection and analysis in this study. It was organized under the following sub-heads:

- Research Design
- Population of the study
- Sample and sampling technique
- Research instrument
- Validity of the instrument
- Reliability of the instrument
- Administration of the instrument
- Method of data analysis

Research Design

For this study, the Descriptive survey research design was adopted. This research design provides a quickly efficient and accurate means of assessing information about a population of interest. It intends to assess the Knowledge, Attitude and Practice of Diabetes Mellitus among uniform men in Edo state, Nigeria.

Population of the Study

The Population for this study was One Hundred (100) uniform officers/ men selected randomly for this research purpose (Nigeria Immigration service, Benin City, Edo State)

Sample Size and Sampling Techniques

The sample for the study shall be One Hundred (100) Uniform Officer/men selected randomly at Nigeria Immigration Service, Edo State command, Benin city, Edo State. The sample random sampling technique will be used to select respondents for the study.

Research Instrument

The instrument that was used for the study was a questionnaire developed by the researcher after a careful study of the related works. This is divided into two sections, A and B. Section A is on the respondent's bio-data such as age, marital status, religion and Educational qualification while section B will be a short item question that will elicit information on the knowledge, attitudes and practice of Diabetes Mellitus among uniform officers/men in Edo state.

Validity of the Instrument

The questionnaire was validated by three experts in the Department of Health, safety and Environmental Education, including the Project Supervisor and their criticism, corrections, suggestions and recommendations was used for the final draft of the instrument.

Reliability of the Instrument

The reliability of the instrument was established using test-retest method. The instrument was administered to 20 respondents that were not part of the study. After an interval of two weeks, the same test was re-administered to the same group and a score obtained was analyzed using Pearson Product Moment Correlation Coefficient and a coefficient of 0.80 will be deemed appropriate.

Administration of the Instrument

The instrument was administered by the researcher with the aid of two research assistant after a careful explanation of the objective of the study. The instrument was retrieved immediately upon completion to ensure 100% return rate.

Method of Data Analysis

The data collected was analyzed using frequency counts and percentage.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

Introduction

This chapter present the analysis of the data collected from the respondent through questionnaire. This research work aims to examine the Knowledge Attitude and Practice of Diabetes Mellitus among uniform men in Edo state. The research question were answered using frequency and percentages and the findings were discussed.

Data Presentation and Analysis

A total of one hundred (100) questionnaire were administered to the respondents of which was properly filled and returned.

Research Question One: Does uniform officers/ men have the Knowledge of Diabetes Mellitus

Table 1: The Knowledge Of Diabetes Mellitus(n=100)

S/N	Knowledge	Freq(f)	Percent(%)
1.	Low	20	20%
2.	High	80	80%

Low 1 – 2; high 3 – 5.

From Table 1, It revealed that 20% of the respondents had low knowledge of diabetes based on the items being raised while 80% of the respondents have high knowledge of diabetes Mellitus as

they well understood what diabetes Mellitus is all about as well as it is an hereditary disease and that there are certain risk factors and complications of diabetes Mellitus.

Table 2: Attitude of uniform officers towards diabetes mellitus

No	Items (Attitude)	Agree F(%)	Disagree F(%)
1.	Regular exercise has an effect on diabetes	72(72%)	28(28%)
2.	Sugar has an effect on diabetes?	45(45%)	45(45%)
3.	Active/passive smoking causes diabetes?	10(10%)	90(90%)
4.	Lifestyle does not affect Diabetes	60(60%)	40(40%)
5.	Feeding habit (timing and food intake pattern, extra salt intake) can cause diabetes?	85(85%)	15(15%)
6.	Diabetes is a condition that can affect any one	75(75%)	25(25%)
7.	Diabetes is a life threatened disease	95(95%)	5(5%)
8.	Diabetes cannot be treated	75(75%)	25(25%)

From table 2, the results showed that 72(72%) of the respondents agreed, 28(28%) of the respondents Disagreed that regular exercise has an effect on Diabetes. Also, 45(45%) of the respondents agreed while 45(45%) of the respondents disagreed that sugar has an effect on diabetes. Also 10(10%) of the respondents agreed while 90(90%) of the respondents disagreed that active/passive smoking causes diabetes. Also 60(60%) of the respondents agreed 40(40%) of the respondents disagreed that lifestyle does not affect diabetes. Also,85(85%) of the respondents agreed while 15(15%) of the respondents disagreed that feeding habit can cause diabetes.75(75%)

of the respondents agreed while 25(25%) of the respondents disagreed that diabetes mellitus can affect anyone. Also 95(95%) of the respondents agreed while 5(5%) of the respondents disagreed that Diabetes Mellitus is a life threatened disease. Also 75(75%) of the respondents agreed while 25(25%) of the respondents disagreed that diabetes mellitus cannot be treated.

Research Question Three: 3. To what extent do uniform officers/ men practice positive behaviour/lifestyle in order to avoid Diabetes mellitus

Table 3: The Preventive practices to avoid Diabetes Mellitus

No.	Items (Practice)	Always F(%)	Sometimes F(%)	Never F(%)
1.	I control my weight to prevent Diabetes	7(7%)	82(82%)	11(11%)
2.	I do monitor my blood glucose and blood pressure?	22(22%)	64(64%)	14(14%)
3.	I do add extra salt to my regular diet?	2(2%)	56(56%)	42(42%)
4.	My work does not allow me visit the hospital for check up	72(72%)	14(14%)	14(14%)
5.	I am willing to adapt to lifestyle enhancing behaviour	2(2%)	98(98%)	—
6.	I engage in regular exercise to prevent Diabetes	34(34%)	62(62%)	4(4%)
7.	I engage in healthy feeding habits to prevent Diabetes	4(4%)	68(68%)	28(28%)

From table 3, the results revealed that 7(7%) of the respondents says they control their weight and 82(82%) of the respondents says they control their weight sometimes while 11(11%) of the

respondents says they don't control their weight. Also 22(22%) of the respondents says that they do monitor their blood glucose and pressure always while 64(64%) of the respondents says that they sometimes monitor their blood glucose and pressure and while 14(14%) of the respondents agreed that they don't. Also 2(2%) of the respondents says that they always add extra salt to their diet and 56(56%) of the respondents says sometimes while 42(42%) says they do not add extra salt to their diet. 72(72%) of respondents says that their work strongly does not allow them visit the hospital and while 14 (14%) of the respondents says sometimes and also another 14% says they are permitted. Also 2(2%) of the respondents says that they willing to adapt to lifestyle enhancing behaviour and majority of the respondents representing 98% says sometimes and none of the respondents disagreed. Also 34(34%) of the respondents says they engage in regular exercise and 62(62%) of the respondents says they sometimes engage in regular exercise while 4(4%) of the respondents says they don't engage in regular exercise. And also 4(4%) of the respondents say they always engage in healthy feeding habits and while 68(68%) says they sometimes engage in healthy feeding habits while 28(28%) of the respondents says they don't engage in healthy feeding habits.

Discussion of Findings

On the knowledge of Diabetes Mellitus, the findings of the study showed that there is awareness of Diabetes Mellitus among the uniform men in Edo state as majority of the uniform men have heard of Diabetes Mellitus and have seen it's complications on other individuals, this study relate

with that of Amid (2017). Also majority of the respondents believe Diabetes Mellitus to be high blood sugar while others says it's sores on injuries and also majority of them feels that Diabetes Mellitus is a genetic/hereditary disease while the others disagree or have no idea. Also on the knowledge on the risk factors of DM, majority says it is too much sugar intake rather than salt intake, while others believe it to be family history. They also believe that DM causes leg or hands amputation while others believe it causes deaths.

On the Attitude of uniform men, findings shows that the respondents have positive attitude towards Diabetes Mellitus as their various perception about feeding habits which may include adding extra salt to diet as they feel, timing and food intake pattern. Diabetes Mellitus is a condition that can affect anyone and also it is a life threatening diseases and can't easily be treated. (Amid and Rez 2017)

On the preventive Practice of Diabetes Mellitus among the uniform men is low as most of the officers although aware of the preventive practices such as good feeding habits, regular exercise as well as lifestyle enhancing behaviours, monitoring blood glucose levels and regular hospital visitation but fails to practice them, as work is a barrier, this study correlate with the study of the Prevalence of Diabetes Mellitus among the Uyo market women, (2019).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

The purpose of the study is to identify the perceived Knowledge, attitude and practice of Diabetes among uniform men in Benin City. Diabetes is when the body doesn't make enough insulin or can't use it as well as it should. When there isn't enough insulin or cells stop responding to insulin, too much blood sugar stays in the bloodstream. Over time, that can cause serious health problems, such as heart disease, vision loss, and kidney disease.

Findings

1. There is high knowledge of Diabetes Mellitus among the uniform men in Benin City
2. The uniform men have positive attitude towards Diabetes Mellitus
3. The preventive practices among the uniform officers towards Diabetes Mellitus is low.

Conclusion

Knowledge of Diabetes is high among uniform men while the attitude and practice of healthy lifestyle's about Diabetes among uniform men is very low. It is clear that uniform men faces a lot of problem in their attempt to carry-out positive attitude and health promotion lifestyle in the practice of Diabetes. There is need to channel supportive measure through a wide system approach which is to include the uniform men, the health care providers, the government e.t.c

giving in their full in order to improve attitude and practice of diabetes and also aim at reducing any complications associated with Diabetes.

Recommendation

Based on the findings of this study, the following recommendations are proposed to strengthen the Knowledge of Diabetes and enhance the attitude and Practice of Diabetes thus, encouraging a totality of well-being among uniform men as well as the society at large:

1. Uniform men should always Plan what they eat and following a healthy meal plan. Follow a Mediterranean diet (vegetables, whole grains, beans, fruits, healthy fats, low sugar) or Dash diet. These diets are high in nutrition and fiber and low in fats and calories. See a registered dietitian for help understanding nutrition and meal planning.
2. Exercising regularly. Try to exercise at least 30 minutes most days of the week. Walk, swim or find some activity you enjoy.
3. Achieving a healthy weight. Work with your healthcare team to develop a weight-loss plan.
4. Monitoring their blood glucose and blood pressure levels at home.
6. Myths and misconceptions should be addressed in a culturally sensitive manner, utilizing various modes and channels of communication.
7. The government should provide at least 1-2 weeks leave for every six months to enable uniform men go for proper medical check up.

8. The government should liaise with the comptroller to ensure uniform men gets adequate modern medical facilities in each command.

Suggestion for further findings

1. The perception of Diabetes Mellitus among university graduate in University of Benin
2. Prevalence of Diabetes and it's risk factors among adults in Ovia North East LGA
3. Causes, effects and management of diabetes in rural area of Edo State.

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QUESTIONNAIRE

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QUESTIONNAIRE ON THE KNOWLEDGE, ATTITUDES AND PRACTICE OF DIABETES MELLITUS DM AMONG UNIFORMS MEN

DEAR RESPONDENTS,

THIS QUESTIONNAIRE IS DESIGNED TO BE USED FOR A RESEARCH PURPOSE.

PLEASE RESPOND TRUTHFULLY TO THE TREATED ITEMS AS THE INFORMATION PROVIDED BY YOU WILL BE TREATED WITH UTMOST CONFIDENCE.

INSTRUCTION: Please tick the correct answer(s)

- Age range: less than 30(); 31-50() Above 50()

- Highest Educational qualification:

None () School set () Higher institution degree () Others ()

- Marital status: Married () Single () Divorced () Widowed ()

Religion: Christian () Muslim () Others ()

SECTION B

KNOWLEDGE OF DIABETES MELLITUS AMONG UNIFORMS MEN

1. Have you heard of Diabetes Mellitus

a) Yes

b) No

c) Not sure

2. If yes, What is Diabetes?

a) High Blood sugar

b) Sores in Injuries

c) I don't know

3. Diabetes is a genetic/hereditary disease?

a) Yes

b) No

c) I don't know

4. What are the risk factors of diabetes, you know

a) Too much Intake of sugar

b) Too intake of salt

c) Family history

5. The complications of Diabetes, you know

a) Leg or hands amputation

b) Deaths

c) I don't know

ATTITUDE OF DIABETES MELLITUS DM ON UNIFORM MEN

ITEMS	AGREE	DISAGREE
Regular exercise has an effect on diabetes		
Sugar has an effect on diabetes?		
Active/passive smoking causes diabetes?		
Lifestyle does not affect Diabetes		
Feeding habit (timing and food intake pattern, extra salt intake) can cause diabetes?		
Diabetes is a condition that can affect any one		
Diabetes is a life threatening disease		
Diabetes cannot be treated		

THE PRACTICE OF DIABETES MELLITUS

ITEMS	Sometimes	Always	Never
I control my weight to prevent diabetes			
I do monitor my blood glucose and blood pressure			
I do add extra salt to my regular diet			
My work does not allow me visit the hospital for check up			
I have seen the complications of Diabetes Mellitus on other individuals			

I am willing to adapt to lifestyle enhancing behaviour			
I engage in regular exercise to prevent Diabetes			
I engage in healthy feeding habits to prevent Diabetes			