

Self-Care Management Practices of Diabetic Clients in Adopted Barangay Santa Barbara of CSPC Graduate School

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HOW TO CITE:

Modesto Papa Fucio (2026). Self-Care Management Practices of Diabetic Clients in Adopted Barangay Santa Barbara of CSPC Graduate School. International Journal of Special Education, 41(13s), 1026-1038

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ABSTRACT:

This study assessed self-care management practices among 30 diabetic clients aged 20 and above in Barangay Santa Barbara, Nabua, Camarines Sur, an adopted community of CSPC Graduate School. Most respondents were male (63.33%), aged 51 and older (70%), married, Roman Catholic, and unemployed (56.67%), with key practices including high rice consumption (86.67%), occasional blood glucose checks (66.67%), and low physical activity (40% inactive). Qualitative research gathering and evaluating non-numerical data to better comprehend concepts, ideas, or experiences. Health practices showed preferences for vegetables (80%) but inconsistent medication adherence (60% on maintenance) and doctor consultations as needed (53.33%). Personal factors like age (66.67%) and stress (53.33%), plus family history (53.33%), influenced practices, alongside occasional smoking (30%) and alcohol use. Findings highlight gaps in consistent monitoring and activity, aligning with Philippine diabetes trends where self-care varies by demographics. A proposed informational poster targets nutritional, monitoring, and lifestyle education to enhance community self-management.

Keywords: Diabetic Clients, Self Care Management, Adopted Community, Santa Barbara, Medication Adherence.

Introduction

Diabetes mellitus consists of diseases that impact the body's usage of blood sugar (glucose). This disease can result from insulin insufficiency, decreased insulin action, or a combination of these factors. Understanding the typical physiological processes that take place before, during, and after a meal is essential to understanding diabetes. Diabetes mellitus is a chronic condition characterized by elevated blood sugar levels (hyperglycemia) as a result of insufficient insulin production and/or activity. This is the hormone that controls the blood glucose levels. There are several people diagnosed with diabetes due to the pancreas can

no longer produce insulin. When the blood sugar cannot reach the cells to be used as energy, this is called type 1 diabetes. The type 2 diabetes is characterized by either insufficient insulin production by the pancreas or improper insulin used by the body. Such challenges may affect anyone's daily life.

The world is faced with various problems, most especially in the field of health. Health can be defined as the physical, social, psychological, and spiritual well-being of individuals. Having a disease affects the health of individuals. And one of these diseases is Diabetes which may be a lifelong disease, requiring a holistic approach for its management, where patient plays a crucial part

in its healing process. Taking control of diabetes to boost the quality of life has put the eye on the necessity for extra support and education for patients with diabetes. Although new treatments and technology have aided in controlling the disease in many individuals, the challenges of diabetes self-management are overwhelming for many.

Diabetes might be a chronic disease that requires patients to self-manage their health. Monitoring blood sugar levels, taking medicine, eating a nutritious diet, and exercising are all examples of self-management practices. Many patients must perform daily foot exams. Despite technical and scientific breakthroughs in diabetes therapy, only around one-third of patients report adhering to monitoring glucose levels. Noncompliance is relatively prevalent across all domains of self-management practices.

Based on the work of El-Sayed et al. (2022) Developing good health habits and sustaining psychological well-being is essential for attaining diabetes treatment goals and improving quality of life. Diabetes patients who engage in Diabetes Self-Management Education and Support (DSMES) are more likely to adhere to best-practice treatment recommendations. DSMES programs seek to encourage educated decision-making, self-care habits, problem-solving, and active engagement with the healthcare team. Routine physical exercise, health behavior counseling, and psychosocial care are all critical to attaining these objectives.

In 2019, diabetes was the direct reason for the 1.5 million deaths 48% of all deaths was because of diabetes which occurred before the age of 70. This rate is predicted to extend greatly over the subsequent half-century. Together with the rise in the incidence of diabetes, both individual and societal expectations concerning the management of diabetes have also increased, with many reports from The Centers for Disease Control (CDC). Someone afflicted with diabetes faces health risks and complications throughout his life, but it is often treated, and its consequences are avoided or delayed with diet,

physical activity, medication, and regular screening and treatment for complications.

Dhatariya K, Corsino L, and Umpierrez GE (2020). Data from the National Diabetes Statistics Report in 2020 estimated that 34.2 million Americans, or 10.5% of the population, had diabetes in the United States. The percentage of the population with diabetes is anticipated to rise, with one research predicting that one in every three persons in the United States would have diabetes by 2050. People with diabetes have a 35% higher likelihood of being referred for elective surgery and a 4-fold higher chance of being hospitalized than those without diabetes. According to data from the United States and Scotland, 30% of patients with a discharge diagnosis of diabetes may require two or more hospitalizations in any given year.

A study by Alotaibi, B. (2020) stated that Diabetes patients' self-care management practice is seen as a critical component in keeping diabetes under control, and disease management is typically carried out by the patients themselves and/or their families. The main aim of this study is to analyze the level of self-care management behaviors among type 2 diabetes patients in Saudi Arabia. Aside from medicine, the study results showed that the level of self-care management practices among patients with type 2 diabetes is insufficient. Beginning with assessing their patients' perspectives, healthcare practitioners should make realistic and specific suggestions for self-care activities. Furthermore, healthcare providers must provide information and a treatment plan specific to each patient.

According to Republic Act No. 8191, referred to as the "National diabetes Act of 1996 is an associate act prescribing measures for the interference and management of DM within the Philippines, providing for the creation of a National Commission on polygenic disease, appropriating funds so and for different functions. I It was declared a policy of the State that shall shield and promote the correct health of the individuals and instill health consciousness among them. There shall be a priority for the requirements of the underprivileged, sick, elderly,

disabled, women, and kids. so, the Duties and Functions. The Commission shall: assess the social and economic impact of DM on people, families, households, communities, and therefore the nation; measure the adequacy of national resources dedicated to the interference, diagnosis, and treatment of polygenic disease Mellitus; and formulate, by Section seven of this Act, the National polygenic disease interference and management set up. Section. 7. The National polygenic disease interference and management setup. The long varied national set up for the interference and management of DM shall offer for: the event of methods and programs, as well as awareness campaigns and therefore the continued education of health personnel and anxious people, to stop DM and its complications; the adoption of cost-efficient and applicable screening ways for the detection of DM in its early or diagnosis stages; the investigations into the medicine, etiology, diagnosis, treatment, interference and management of polygenic disease mellitus; the analysis of measures used, as well as drug and diet therapies, within the management of DM; the institution of mechanisms to cut back the socioeconomic impact of polygenic disease mellitus on affected people and families; the granting of incentives and support for organizations of affected people and families; the institution of coordinated health systems, that shall involve clinicians, researchers, allied health professionals, community-based physicians and lay volunteers, for coping with DM and its complications; the participation of authorities units, aboard with involvement government agencies and non-government organizations, within the implementation of programs on polygenic disease interference and management; the periodic review of analysis wants and potential within the control of polygenic disease mellitus; the systematic utilization of public and personal resources to attain the objectives enumerated.

According to the article of Mendoza, R. (2022), it stated that the Covid-19 pandemic has increased the number of diabetics in the nation, and specialists have asked the government to take

more measures to combat this so-called silent disease. Covid-19 triggered an increase in the number of people who developed diabetes; if they got Covid-19, their sugar levels increased, which is why [diabetes doctors] had been surrounded with referrals from Covid-19 patients. Diabetes affects a large number of young people. Diabetes, if left untreated and undetected, can result in blindness, renal problems, heart attack, stroke, and limb amputation, among other consequences.

An article written by Palo, R. (2022) stated that the government in Davao City has provided free diabetes evaluation and screening in all the city's barangay (village) and district health clinics. Whereas cases of juvenile diabetes are on the rise worldwide, free screening is available to people as young as 20. Diabetes is a chronic condition that presently has no cure. In the early stages, symptoms are unnoticeable. Polyuria (excessive urine output), dry mouth, intense weariness, numbness owing to nerve damage, unexpected weight loss, blurring of eyesight, kidney damage, poor wound healing, and even heart attack are signs of advanced diabetes.

The Manila Times (2022) wrote about Empowering Filipinos in the fight against diabetes. It stated that 'Type 2 diabetes, sometimes known as "adult diabetes," Diabetes is more likely in persons with a family history of diabetes, making it hereditary. Unhealthy eating habits, a sedentary lifestyle, taking steroids-infused medications, and irregular sleeping patterns are also risk factors. "Apat Dapat" checklist that patients should follow in order to keep their blood sugar levels stable. The checklist includes eating healthy, exercising regularly, strictly adhering to their prescribed medication, and visiting their doctors on a regular basis.

According to the article of Robredo, J. P., & Cembrano, D. L. (2022). Thorough lockdowns impacted public transit and restricted mobility in the Philippines, as in many other countries. People with diabetes in rural places skipped medication renewals and follow-up visits, turned to alternative cures and sought medical advice from neighbors who had similar experiences.

The lack of urgency in diabetes care in the Philippines can be traced back to before the COVID-19 pandemic. Access to anti-hyperglycemic agents was temporarily halted, adding to the financial burden of diabetes mellitus care. Adequate nutrition is frequently out of reach for most people, public settings are rarely conducive to safe physical exercise, and health literacy remains low.

In the article of Goyal R, and Jialal I. (2022) Diabetes mellitus (DM) is a chronic metabolic condition characterized by hyperglycemia that persists. It might be related to decreased insulin secretion, resistance to insulin's peripheral activities, or both. Diabetes mellitus is a global public health burden, which is anticipated to climb to another 200 million by 2040. Chronic hyperglycemia, when combined with other metabolic abnormalities in diabetes mellitus patients, can cause damage to various organ systems, leading to the development of disabling and life-threatening health complications, the most prominent of which are microvascular (retinopathy, nephropathy, and neuropathy) macrovascular complications, which lead to a 2- to 4-fold increased risk of cardiovascular diseases.

An article from Diabetology. (2022) stated that Diabetes is a major public health issue in China, and behavioral and environmental risk factors largely determine the disease's onset and progression. Rapid urbanization and economic growth in the country have resulted in a dramatic increase in urban lighting and the number of people exposed to it. The intensity of urban light pollution has escalated to the point that it affects people not just in major cities, but even in rural places such as suburbs and forest parks.

In the article by Lee, D. (2022) Diabetes can be difficult to manage since it needs continual medical care. Improper treatment can result in frequent infections due to weakened immunity, heart and renal damage, and excessive glucose levels, known as hyperglycemia. Holistic diabetes management necessitates proactive actions to manage the illness and postpone consequences while also lowering healthcare costs. For

individuals living with diabetes, adopting substantial lifestyle adjustments is far from simple, especially when monitored dietary and physical activity regimens are added to their everyday lives. However, because these strategies help keep glucose levels under control, Filipinos with diabetes must build resilient habits in order to have a higher quality of life.

According to the World Health Organization (2022), Diabetes is a chronic, metabolic condition defined by high levels of blood glucose (or blood sugar). Diabetes can cause serious damage to the heart, blood vessels, eyes, kidneys, and nerves. Stopping the growth in diabetes and obesity by 2025 is an internationally agreed-upon goal. Diabetes affects around 422 million people globally, with the majority residing in low- and middle-income countries, and diabetes is directly responsible for 1.5 million deaths per year. Diabetes has been progressively growing in both the number of cases and the prevalence during the last few decades.

In the literary work of ElSayed, N. et. al. (2022) The health outcomes of a group of individuals, including the distribution of health outcomes within the group, is known as population health. Efforts to enhance population health will need a combination of policy-level, system-level, and patient-level measures. Diabetes therapy must also be individualized for each patient to achieve the best results. The proportion of persons with diabetes who attain prescribed A1C, blood pressure, and LDL cholesterol levels have changed over time. Glycemic control and cholesterol management by diet remain difficult.

Based on Commissioner, O. (2022), Currently, the U.S. Tzield (teplizumab-mzwv) injectable has been authorized by the Food and Drug Administration to prevent the emergence of stage 3 type 1 diabetes in adults and children's patients 8 years and older who are currently in stage 2 type 1 diabetes. Tzield may deactivate immune cells that assault insulin-producing cells while boosting the number of immune-moderation cells. Teplizumab can also assist those at risk of type 1 diabetes to prevent traumatic and potentially fatal diabetic ketoacidosis (DKA).

DKA is caused by a significant shortage of insulin, which prevents the body from using glucose for energy. TZield's safety and effectiveness were studied in 76 individuals with stage 2 type 1 diabetes in a randomized, double-blind, event-driven, placebo-controlled experiment. 45% of individuals who got TZield were later diagnosed with stage 3 type 1 Diabetes compared to 72% of those who received a placebo. This is a statistically significant delay in the onset of stage 3 Type 1 Diabetes. The most prevalent adverse effects were a drop in specific white blood cell counts, a rash, and a headache.

Based on Sanjuna, A & Vasanthasena, D & Navyasree, M & Akhila, P & Hemanthanissi, B & Madhu, Chandaka. (2022) A category of metabolic diseases known as diabetic mellitus are defined by hyperglycemia, which develops as a result of deficiencies in insulin secretion, action, or both. Diabetes-related emotional distress is known as diabetic distress and is defined by significant anxiety, discomfort, or dejection brought on by a perception of being unable to manage the demands and responsibilities of having diabetes. Clinical pharmacists' duties include monitoring patient medication compliance, assessing quality of life, and determining depression levels in diabetics. Patients' quality of life and drug adherence can be enhanced by appropriate counseling and ongoing involvement.

According to the article of Cudis, C. (2021), The pandemic and subsequent lockdown have had a direct impact on diabetes management. There is a lack of accessibility, movement limitations, and a lack of exercise, as well as an increase in anxiety and fear among patients and their families. According to the Philippine Statistics Authority Diabetes, Mellitus accounted for 37,265 deaths in 2020, after also heart disease (99,680), cancer (62,289), and cerebrovascular illnesses (59,736). The increase in ischemic heart disease is only 2.3 percent, while cancer went down by about 10%, pneumonia by about 6%, and diabetes by 7.8 percent. Approximately 85 percent of diabetic individuals have type 2 diabetes.

Based on Villegas-Florencio, M. Q. (2021) Elevated blood sugar levels brought on by abnormal insulin secretion and/or action define diabetes as a chronic disease. Diabetes prevalence in the Philippines climbed from 5.6% in 2013 to 8.2% in 2019, according to data from the DOST-FNRI. One in five Filipinos has abnormal glucose levels, and 14.2% of the population already has prediabetes. The SARS-CoV-2 virus strain, which causes the novel disease COVID-19, is more likely to cause severe sickness in elderly people and people with pre-existing medical disorders such as diabetes, hypertension, heart disease, lung disease, obesity, and cancer. Diabetes is linked to systemic inflammation, and those who have it are more likely to require hospitalization, be admitted to the intensive care unit, experience serious complications, and pass away.

In the article of Blanco, M. E. B. (2021) Diabetes is a chronic condition brought on by insufficient insulin production by the pancreas or inefficient insulin utilization by the body. Raised blood sugar, or hyperglycemia, is a frequent complication that can seriously harm many different bodily systems. The International Diabetes Federation estimates that there were 3.9 million cases of diabetes in the Philippines as of May 2020, with an associated higher risk of heart disease and stroke. More severe problems, such as blindness, kidney and heart failure, amputation, and a shorter life span, could develop if the condition is not treated.

According to the article of Arcellana & Jimeno, (2020). These diseases have a high prevalence in the Philippines. Diabetes, a chronic metabolic condition characterized by hyperglycemia, affects approximately 7.1% of persons aged 20 to 79 in 2019. The country has been hit by a COVID-19 outbreak, and as of this writing, there have been over 6000 cases of COVID-19 infection, with over 400 people dying as a result of the sickness. Diabetes patients might be both direct and indirect victims of this pandemic. Poor blood sugar management may result in an immunocompromised condition, increasing the likelihood of getting COVID-19 and developing complications.

Chatterjee, S., et.s Al. (2018) Both type 1 and type 2 diabetes are linked with long-term consequences that can be avoided or postponed with strict glycemic control. People with diabetes who are empowered and skilled in self-management have better health outcomes. Diabetes self-management education programs differ in terms of delivery, content, and technological usage. They are taught by professional educators, and quality is maintained by independent evaluators and frequent audits.

In the work of Robinson, D. J., et. al. (2018). Diabetes distress refers to the unpleasant feelings and self-management burden associated with diabetes. "Psychological insulin resistance" is hesitation or refusal to undertake insulin therapy, which may postpone the initiation of essential treatment for a length of time. Another typical diabetes-related problem is hypoglycemia. Diabetes complications and early mortality are increased in those who have psychiatric problems.

The People's Republic of China has had one of the world's most significant increases in diabetes prevalence according to Ma, R. C. (2018). Diabetes risk factors in the Chinese population are comparable to those seen in other populations, while gestational diabetes and young-onset diabetes are becoming more

common. Many problems and obstacles limit effective diabetes prevention and treatment delivery, despite significant advances in recent years.

Methodology

The design enables researchers to fine-tune research methodologies appropriate for the topic matter and put their studies up for success. Qualitative research is gathering and evaluating non-numerical data to better comprehend concepts, ideas, or experiences. It can be utilized to gain in-depth insights into a topic or to generate new research ideas Bhandari, P., (2022). To accomplish the study, the qualitative research design will be use, and the understanding of participants' behavior on how and why people react to disease management practices will be explore using a qualitative approach. This study involves the respondents from Barangay Santa Barbara Nabua Camarines Sur. Those will include in the study ages 20 and above. Provided that there is no use of medical jargon, and the questions were short and direct, participants will be no trouble responding to them during the interview session. The answer to the questions and the information from the respondents will serve as primary data. The books and online sources serve as secondary data.

Results and Discussions

Table 1
Socio Demographic Profile of the Respondents according to Age
(n=30)

Age group	Frequency	Percentage
20-25	1	3.33
26-30	0	0
31-35	1	3.33
36-40	1	3.33
41-45	4	13.33
46-50	2	6.67
51 years old and above	21	70

Total	30	100
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Table 2
Socio Demographic Profile of the Respondents according to Sex
(n=30)

Sex	Frequency	Percentage
Male	19	63.33
Female	11	36.67
Total	30	100

Table 3
Socio Demographic Profile of the Respondents according to Civil Status
(n=30)

Civil Status	Frequency	Percentage
Single	8	16.67
Married	22	83.33
Total	30	100

Table 4
Socio Demographic Profile of the Respondents according to Religion
(n=30)

Religion	Frequency	Percentage
Roman Catholic	24	80
Iglesia ni Cristo	5	16.67
Evangelical Christianity	1	3.33

Total	30	100
Table 5		
Socio Demographic Profile of the Respondents according to Occupation		
(n=30)		
Occupation	Frequency	Percentage
Driver	8	26.67
Teacher	1	3.33
Policeman / Policewoman	1	3.33
Welder	1	3.33
Contractor	1	3.33
Retired Police	1	3.33
None	17	56.67
Total	30	100

Health Practices of the Respondents

Table 6
Nutritional Consideration

Food/ Daily Meals	Frequency	Percentage
Vegetables	24	80
Fruits	12	40
Rice	26	86.67
Soft drinks	7	23.33
Juices	2	6.67
Meat	18	60
Bread	19	63.33
Sweets	5	16.67
Fish	7	23.33
Chicken	5	16.67

Table 7
Medical consultation
(n=30)

Indicator		Frequency	Percentage
How often do you consult the doctor?	Every month	8	26.67
	Every six months	4	13.33
	Once a year	2	6.67
	As needed	16	53.33
TOTAL		30	100

Table 8
Maintenance
(n=30)

Indicator		Frequency	Percentage
Do you have maintenance for diabetes?	Yes	18	60
	No	12	40
TOTAL		30	100

Table 9
Check Blood Sugar Level

Indicator		Frequency	Percentage
How do you check your blood sugar level?	Self-monitoring device	11	36.67
	Laboratory	21	70

Table 10
Often do you check

Indicator		Frequency	Percentage
How often do you check your blood sugar level?	Once a week	4	13.33
	Twice a week	3	10
	Once a month	2	6.67
	Twice a month	1	3.33
	Sometimes	20	66.67
TOTAL		30	100

Table 11
Daily Activities
(n=30)

Indicator		Frequency	Percentage
Physical activity	Yes	10	33.33
	No	12	40
	Sometimes	8	26.67
TOTAL		30	100

Table 12
Lifestyle

Activities	Frequency	Percentage
Bicycling	8	26.67

Tennis	1	3.33
Running / Jogging	14	46.67
Walking	22	73.33
Watching tv	17	56.67
Physical fitness/ exercise	5	16.67
Dieting / Weight control	12	40

Factors That Affect the Health Practices of Diabetic Patients

Table 13

Personal Factors

Factors	Frequency	Percentage
Work	5	16.67
Age	20	66.67
Stress	16	53.33
Weight issues	10	33.33
Lifestyle	14	46.67

Table 14

Family History

Indicator	Family History	Frequency	Percentage
Do you have a family history of diabetes?	Yes	16	53.33
	No	14	46.67

Table 15**Smoking**

Frequency of Cigarette Smoking	Frequency	Percentage
Sometimes	5	16.67
Always	9	30

Table 16**Alcohol intake**

Frequency of alcohol intake	Frequency	Percentage
Always	1	3.33
Sometimes	4	13.33
Occasionally	9	30

Conclusion

1. Most of the respondents who were found vulnerable to diabetes were male. Religion was also found to have an impact on the choice of food for an individual, which may also affect their diabetes. The type of work and the people an individual works with also have direct impacts on the habits of diabetic patients.

2. The majority of respondents are aware of the meals and foods that are best for their illnesses and the foods that are most likely to trigger diabetes. Additionally, it was discovered that the respondents were aware that monitoring one of their self-care routines is checking their blood sugar levels. It was also revealed that they were aware of the importance of daily activities in their lifestyle.

3. It was also found that despite the age and stress experiences of the respondents, they still positively viewed or perceived influences from their families. People who experience high levels of stress may develop unhealthy lifestyle habits like smoking and excessive alcohol consumption.

Recommendations:

The researcher recommends to stop cigarette smoking completely and also minimize alcohol intake. It is our duty and responsibility as health care practitioners to give our patients the necessary information about healthy lifestyle choices, good habits, and other activities that will improve their illnesses and physical well-being. For better care and treatment of diabetic clients, it also works harder to build trustworthy relationships with patients.

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