Impact of H-E-A-L-T-H-Y program among Caviteños

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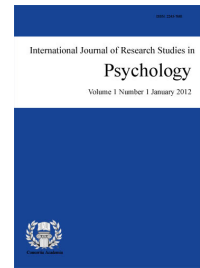
Abstract

The researcher conducted the study entitled "Prevalence of Diabetes Mellitus among Caviteños" as this may serve as an attempt to improve the knowledge of health workers and patients on the prevalence of diabetes mellitus, decrease in the chances of contracting diabetes mellitus among the health workers, and improved overall health of the community people of Caviteños. The researcher used descriptive method to attain the goals set by this study. The descriptive method aimed to elaborate on the nature of the situation as it existed at the time of the study and to explore the causes of particular phenomena. This study utilized the question-survey method to gather information on the level of awareness of the personnel. The study also found that the most common lifestyle practices associated with diabetes mellitus were unhealthy diet, physical inactivity, and smoking. The most common reasons for not practicing a healthy lifestyle were related to not allowing to go to the doctor due to pandemic. The "H-E-A-L-T-H-Y" Program to help clients to manage health condition had a great impact in the lives of diabetic client.

Keywords: diabetes mellitus, risk factors, health workers, Caviteños

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1. Introduction

Diabetes is a serious health problem in the Philippines: It has a high number of diabetes cases, with over 4 million Filipinos diagnosed and likely more undiagnosed. This ranks the country among the top 15 with diabetes globally. Over four million Filipinos are diagnosed with the disease. According to Bunag, (2023), approximately 6.3% of Filipino adults have diabetes mellitus. In other words, in about 63 million adults in the country, approximately 4 million Filipino adult are considered diabetic. In the International Diabetes Federation or IDF younger people were not included in the data and also those people who are pre-diabetic were not taken into consideration. Which means that there may still be undocumented cases in the Philippines that were not included and recorded in their data. According to Cavite Ecological Profile (2020), Cavite province exemplifies the national trend, listing diabetes mellitus as a top 10 cause of mortality.

Diabetes occurs when the body has too little insulin, has developed resistance to insulin, or both. Thus, it could be differentiated into two types: Type 1 diabetes wherein the pancreas produces inadequate amount of insulin, and which its exact cause remaining unknown; and Type 2 Diabetes wherein the body tissues become resistant to insulin, failing to make use of the insulin present in the blood. The researcher aims to focus on the respondents who were diagnosed with Diabetes Mellitus type II. Nurses play a key role in both preventing and managing diabetes. Diabetes can lead to serious complications, but many of these can be avoided with proper education and lifestyle changes. While heart disease is the biggest killer among diabetic complications, amputations, blindness, and kidney failure are also major threats. Understanding a patient's background and risk factors is important for tailoring prevention and management strategies. The pandemic significantly burdens people with diabetes, it adds to the challenges in accessing health care, replenishing of medications and diabetic related paraphernalia, and even maintenance to a healthy lifestyle and social connections have been affected. (Bellido et. al., 2021). Many have been affected by the spread of the virus that it has caused many downfalls including the health of Filipinos. The researcher being the nurse and a Disease Surveillance Officer developed a curiosity to conduct a study. It is a signal to do something to eventually find fault and find a solution to this so called "lifestyle disease".

Objectives of the Study - This study aimed to identify the factors influencing healthy lifestyles among respondents and to inform the community about different programs employed to reduce diabetes complications and to educate them on diabetes control through the H-E-A-L-T-H-Y program. Additionally, assessed the program's impact to allow for adjustments and improvements based on the needs of the public, particularly Cavite residents. The study aimed to determine the prevalence of Diabetes Mellitus among community people in Silang, Cavite; the study aimed to determine the factors affecting healthy lifestyle; and, finally identified the impact of implementation of H-E-A-L-T-H-Y program.

Theoretical Framework - The theoretical framework is anchored in the Behavioral Theory, which analyzes learned associations a person has made prior to experience as well as antecedents and consequences found in their environment to try and explain human behavior. Behaviorism is a learning theory that holds that all behaviors are acquired through conditioning processes. Personality is the product of an individual's interaction with their environment. The study was being connected, and the researcher concentrated on the respondents' behavior rather than their mental or emotional well-being, focusing mostly on Lifestyle Practices. Furthermore, this notion may be related to the study's desired goal, which is to promote a healthy lifestyle.

Conceptual Framework - This framework proposes that various factors influence healthy lifestyle choices, which in turn, affect the prevalence of Diabetes Mellitus. The H-E-A-L-T-H-Y program is introduced as an intervention to promote healthy behaviors. By improving healthy lifestyle scores, the program aims to ultimately

decrease the prevalence of Diabetes Mellitus in the community. This framework outlines the relationships between factors influencing the prevalence of Diabetes Mellitus. Healthy lifestyle behaviors, measured by a Healthy Lifestyle Score, can influence the likelihood of developing Diabetes Mellitus as well as the impact of the program. The H-E-A-L-T-H-Y program is designed as an intervention to promote healthy behaviors. Improved healthy lifestyle scores are expected to be associated with a decrease in Diabetes Mellitus prevalence.

Factors affecting healthy lifestyle.	⟹	Impact of implementation of H-E-A-L-T-H-Y program.

Guided by the Behavioral Theory, the figure above shows the conceptual framework of the study. The input is the profile of the respondents according to age, gender and educational attainment. The research process includes conducting a survey and interviewing. The output is to determine prevalence of Diabetes Mellitus among Caviteños, to determine factors affecting healthy lifestyle and to identify the impact of implementation of H-E-A-L-T-H-Y program.

2. Methods

Research Design - The researcher utilized a mixed quantitative and qualitative descriptive method to know the different lifestyle practices of the respondents and the health practices affecting the respondents with type 2 Diabetes Mellitus. The researcher gathered this information through a survey. In addition, a questionnaire survey method is used to gather information on the lifestyle practices of diabetes mellitus patients.

Setting and Participants - This study was conducted among respondents from 10 selected barangays in Silang, Cavite. The particular population was chosen because it is the primary concern of the study. The researcher intentionally selected the participants based on their characteristics and criterion. The researcher set the following criteria for participants in the study wherein respondents must be (a.) community residents of Silang, Cavite, (b.) Male and Female, (c.) must be clinically diagnosed with Type II Diabetes Mellitus.
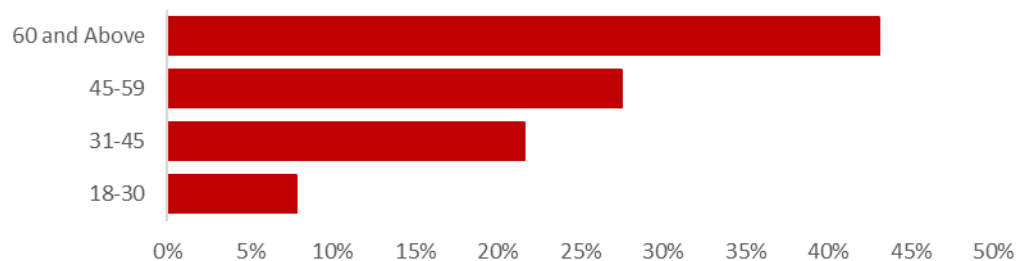

Figure 1. Profile of the Respondents According to Age

Figure 1 illustrates the profile of the respondents according to age. Out of Fifty one (51) participants, the survey has garnered a 100% response rate. Among 51 participants who took part in the study 43.1 percent of the respondents are 60 years old and above, 27.5 percent are 45-59 years old, 21.6 percent of the respondents falls under 31-45 years old and with under 10 respondents, 7.8 percent of the respondents are 18-30 years old. Type 2 Diabetes is more common in adults and are rarely diagnosed in younger years. It means that the older the person gets, the more it is likely to have diabetes. Middle age is when the diagnosis starts to strike. For Americans, it is estimated at 14% in ages 45-64 or approximately 11 people ae diagnosed with type 2 diabetes mellitus. It can even jump higher when the person reaches its senior years.

Figure 2 illustrates the profile of the respondents according to gender. Out of 51 respondents, majority of the respondents are female with 58% and 41.2 percent are male.
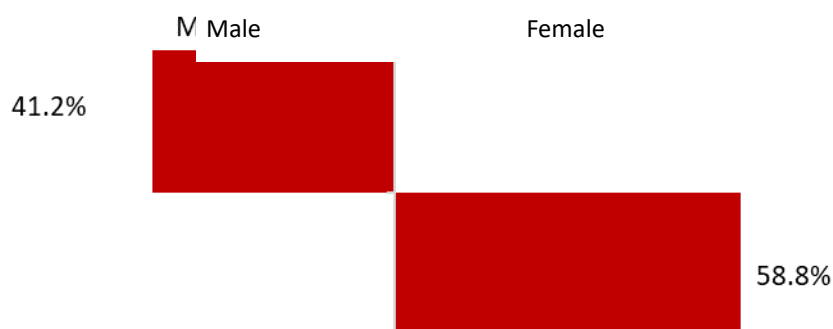
Figure 2. Profile of the Respondents According to Gender

Instrument of the Study - The researcher decided to use the survey questionnaire as the first tool for gathering data required for the research. The researcher utilized a self-made questionnaire that consists of three parts. The first part comprises demographic information of the respondents, such as their age, gender, highest educational attainment, and occupational status. The second part contains questions about the respondents' lifestyle practices. The third part contains questions about their reasons for not practicing healthy lifestyles. Further, the researcher used a 4-point Likert-type scale to measure the respondents' agreement with the statements. The respondents were asked to indicate their answers as follows: 4 – Always, 3 – Sometimes, 2 – Rarely, 1 – Never. The researcher used an interview method to determine the impact of H-E-A-L-T-H-Y program in their daily lives.

Sampling Technique - The purposive sampling method is used in the study. The researcher chose 10 selected Barangay's in Silang, Cavite and relied on the data collected from population members who are willingly and available to participate in study. The population includes all the community residents in the province of Cavite. The researcher set criterion in which the respondents has been diagnosed with Diabetes Mellitus Type II, Male or Female. The researcher coordinated with the Rural Health Unit and Barangay Captain to ask permission to conduct the study among the possible respondents.

Data Collection Procedures - The researcher compiled pertinent information and materials from a range of books, journals, reviews of papers, internet databases, and other studies carried out by other researchers. Furthermore, before being disseminated, the questionnaires were presented to the adviser and panelist for approval and the Ethics Review Board. The researcher acquired approval to conduct and carry out the study from the Municipal Health Officer through a letter. The researcher moved on to the real survey with conventional questionnaires or Google Forms, depending on what is most suitable for the participants, after the research instrument has been developed and pilot tested. The statistician will then examined the data collected, using the results as the basis for the study's interpretation and findings. The researcher interviewed those who participated in the study to determine the impact of H-E-A-L-T-H-Y program in their daily activities.

Statistical Treatment of Data - The following statistical tools were utilized to answer the specific problems and to test the hypothesis of the study.

Frequency. This is used to organize the collected data and display the respondent profile factors based on age, gender, and length of service. It is a methodical list of numbers arranged from lowest to highest, accompanied by a count of how many times each value was acquired.

Percentage. This is used in identifying the distribution of respondents in terms of their profile variables and the prevalence of diabetes among the respondents. This establishes the ratio of a component to the whole, such as the number of respondents to the sample population It is a method for representing a number as a percentage

of 100.

Mean. Used in the study to identify the average in each variable that is used in the study. It is the sum of all scores, divided by the number of scores – what people usually refer to as average.

Qualitative Analysis. Utilized in research to analyze human experiences and motives by thoroughly examining the narratives-or stories-that people tell in a given setting.

Ethical Consideration - The researcher is responsible to debrief and informed the respondents about the true nature of the study and will correct any misleading ideas and impressions the have about the study. The nature and goal of the study must be communicated to the participants wherever feasible. The respondents gave the researcher their informed consent, which included all pertinent information about the study, including what was needed and what the respondents' contributions would be. The researcher also ensure and respect the participants' right to privacy and confidentiality that anyone promises will not be breached. The researcher also observed the ethical principles of beneficence or doing well and prevent or remove harm. The right to withdraw from the study at any time and to not finish were explained to the participants. Additionally, formal consent will be given to staff members taking part in the study, and participant anonymity and confidentiality have been guaranteed.

3. Results and discussion

Table 1

Lifestyle Practices of Community People

Indicators	WM	VI	Rank
No longer eats fatty foods and salty foods	2.37	Rarely	13
Not eating pork, beef or any red meat	2.39	Rarely	12
Take meals or refreshments at regular interval to prevent sudden drop of blood sugar	2.76	Sometimes	8
Eat a well-balanced diet using a list of food exchanges from doctors	2.78	Sometimes	7
Eat foods containing dietary fiber like grain, vegetable, and fruits everyday	3.16	Sometimes	2
Try to maintain a normal body weight based on the required weight prescribed by doctors	3.06	Sometimes	3
Do some physical exercises to help regulate body weight as well as blood sugar two or three times each week	2.55	Sometimes	9
Bringing emergency kit when travelling	2.48	Rarely	10
Taking diabetic medicine, as instructed, paying close attention to dosage and schedule	2.41	Rarely	11
Strive to maintain a healthy weight by weighing on a regular basis	2.92	Sometimes	5
Educate on effective diabetic management methods by participating in numerous diabetic educational programs	2.76	Sometimes	8
Educate family and friends	2.94	Sometimes	4
Go to the hospital on a regular basis, according to doctor's appointment for examinations or diabetic treatment	2.86	Sometimes	6.5
Go to the hospital on a regular basis, according to doctor's appointment for examinations or diabetic treatment	2.86	Sometimes	6.5
Avoid smoking because it can affect diabetes condition	3.28	Sometimes	1
Uses herbal medicine to treat diabetes	2.16	Rarely	14
Composite Mean	2.73	Sometimes	

Legend: 3.50-4.00 = Always; 2.50-3.49 = Sometimes; 1.50-2.49 = Rarely 1.00-1.49 = Never

The results revealed a composite mean of 2.73, which is interpreted as "sometimes." This means that even during the pandemic, respondents were able to practice healthy lifestyles according to their capabilities, but there is still room for improvement due to inconsistencies in practicing appropriate healthy lifestyles. Respondents who avoided smoking because it can affect diabetes condition obtained the highest weighted mean of 3.28. The second highest mean garnered a weighted mean of 3.16 which is eating foods containing dietary fiber like grain, vegetable and fruit. The third highest weighted mean obtained 3.06 which is trying to maintain a normal body weight based on the required weight prescribed by doctors. This suggests that respondents understood the harmful effects of smoking on their health, including the fact that nicotine can increase blood glucose levels and constrict blood vessels over time.Quitting smoking is the best thing patients with T2DM can do to improve their

health. There are a number of effective treatments available to help patients quit smoking, and novel approaches are being developed. This is supported by Campagna et al. (2019), Patients with diabetes who smoke may have an acceleration of vascular damage due to the combined detrimental effects of smoking cigarettes and high blood sugar, and healthcare providers should encourage and support all patients with T2DM to quit smoking. The respondents are also aware that eating foods high in fiber and maintaining a healthy weight are beneficial in diabetic patient.

The results obtained with the lowest mean of 2.16 is using herbal medicine to treat diabetes. This means that majority of the respondents do not use herbal medicine in treating diabetes mellitus. The second lowest mean obtained a weighted mean of 2.37 is no longer eating fatty foods and salty food. Not eating pork, beef or any red meat obtained a weighted mean of 2.39. This could mean that the respondents are unaware of the diet restrictions required for diabetic patients. By keeping a healthy weight and leading a healthy lifestyle, diabetes can be avoided or postponed (Galaviz et. al., 2018). The characteristics of those with and without diabetes were similar in terms of smoking, activity, BMI and sleep issues. The majority of people, both with and without diabetes said they were poor.

In addition type 2 diabetes is added to the extensive list of health issues connected to smoking. Compared to non-smokers, smokers have a 50% risk of developing diabetes, and heavy smokers are considerably more at risk. On the other hand, second in the list of highest weighted mean among participants in the study are eating foods containing dietary fiber like grain, vegetable, and fruits everyday, those who try to maintain a normal body weight based on the required weight prescribed by doctors with means of 3.16 and 3.06 respectively. Food is essential to maintain good health and endurance. However, for patient known diabetic there are certain foods that are not suitable to eat, limitation and eating in moderation will help diabetic client maintain the glucose level in acceptable range. Keeping the weight on track at a normal level can help regulate glucose thus complication will be prevented.

Diabetes is a lifestyle disease and a restrict diet is essential to promote healthy, carbohydrate restrictions might help maintain glucose and weight at an acceptable level. Overall, according to World Health Organization (WHO), has been demonstrated that adopting certain lifestyle modifications can either postpone or prevent the onset of type 2 diabetes. People should: (1) reach and maintain a healthy body weight; and (2) engage in regular, moderate-intensity physical activity, lasting at least 30 minutes per day, in order to help avoid type 2 diabetes and its complications. To control weight, one must: (1) increase physical activity; (2) consume a nutritious diet low in sugar and saturated fats; and (3) abstain from tobacco usage as smoking raises the risk of diabetes and cardiovascular disease. Getting frequent exercise, eating balanced diet low in carbohydrates, and reaching a healthy weight all contribute to better blood glucose control. You could require more or less carbohydrates during a meal or snack if you are using insulin to maintain a healthy blood glucose level.

The results in table 2 revealed a composite mean of 2.45, which is interpreted as "rarely" This means that even during the pandemic, respondents were able to practice good healthy lifestyle, Most of the respondents stated that the reasons for not practicing healthy lifestyle due to not allowed to go out due to restrictions related to health protocols, Physically inactive during pandemic, do not have enough money to support the needs in proper diet, medication, and diagnostic procedures and cannot consult to doctors at a regular interval due to increase of prices in hospitalization and consultation during pandemic. This suggests that the reason of most of the respondents for not practicing healthy lifestyle were due to pandemic reasons.

The results showed a highest weighted mean is at 2.80 which is not allowing to go out due to restrictions related to health protocols. The second highest weighted mean showed a result of 2.65 which is cannot consult to doctors at a regular interval due to increase in prices in hospitalization and consultation during pandemic. The third highest mean obtained a result of 2.63 which is physical inactivity during pandemic and do not have enough money to support the needs in proper diet, medications and diagnostic procedure.

Table 2

Assessment of Respondents on the Reasons for Not Practicing a Healthy Lifestyle

Indicators	WM	VI	Rank
Poor awareness regarding the effectiveness of modification of lifestyle change for diabetes prevention and management	2.30	Rarely	6
Lack of knowledge for the appropriate exercise	2.38	Rarely	4
Afraid that doing more exercise may worsen the condition	2.35	Rarely	5
Not taking proper medication	2.22	Rarely	7
Cannot visit doctors for check-ups due to situation related to COVID-19	2.22	Rarely	7
Cannot follow recommended meal plan due to financial problem	2.38	Rarely	4
Not allowed to go out due to restrictions related to health protocols	2.80	Sometimes	1
Physically inactive during pandemic	2.63	Sometimes	3
Cannot consult to doctors at a regular interval due to increase of prices in hospitalization and consultation during pandemic	2.65	Sometimes	2
Do not have enough money to support the needs in proper diet, medication, and diagnostic procedures	2.63	Sometimes	3
Composite Mean	2.45	Rarely	

Legend: "Never (1.00 – 1.50)", "Rarely (1.51 – 2.50)", "Sometimes (2.51 – 3.50)", "Always (3.51 – 4.00)"

The results showed a lowest mean of 2.22 which is not taking proper medication and cannot visit doctors for checkups due to financial problems. The second lowest mean shows a result of 2.30 which is poor awareness regarding the effectiveness of modification of lifestyle change for diabetes prevention and management. The third lowest mean showed a result of 2.35 which is afraid that doing more exercise may worsen the condition.

More than 200 countries have been affected by Coronavirus. People have reduced their outside activities and begun embracing new, healthy lifestyle practices as a result of lockdowns. During the Covid-19 pandemic, there was a noticeable improvement in the consumption of fruits and vegetables, pulses, eggs and meat. There was a notable increase in the amount of time spent doing housework and viewing television or mobile devices. Of the subjects, 37.8% gained weight throughout the COVID-19 pandemic, whereas the majority maintained a steady weight. Their daily anxiety also rose, mostly because of their worry of Covid-19. In summary, a noteworthy correlation was discovered between physical activity levels of research participants and their gender, place of residence, type of employment and hours worked during the Covid-19 pandemic. During the Covid-19, there has been an improvement in the quality of sleep, participation in home activities and healthy eating habits. Additionally, lifestyle domains can be investigated to promote a healthy way of living and help the general public adopt good lifestyle habits (Pandey et al., 2023).

Many nations imposed lockdowns in an effort to stop the Covid-19 from spreading. On the other hand, these limitations can have unanticipated detrimental effects on lifestyle choices. In the study of Radwan et al., (2021) this new circumstance may make it more difficult for people to buy on a daily basis and may influence their decisions on a balanced, healthful diet, leading them to rely more on highly processed, high-sugar high-fat cereals and junk food. Such eating patterns will raise the risk factors for long-term conditions such as kidney disease, obesity, heart disease, stroke, type 2 diabetes, certain malignancies and heart disease. Furthermore, a lockdown's restriction on movement may cause a large number of individuals to stay indoors and reduce their physical activity, which increases sedentary behavior and raises the risk of chronic illness. In actuality, people were unable to exercise or engage in leisurely physical activity because gyms and recreational facilities were placed under lockdown closures. Furthermore, because the scenario is pushing the world into unfamiliar territory, reports suggest that the lockdown tactics may be linked to upsetting experiences and ennui. Loss of routine and decreased social and physical interaction with others may be the cause of such situations. Sleep is essential for emotional and mental health and for coping with stress and anxiety, according to studies. Nonetheless, people's sleep habits may be disrupted during the pandemic containment.

However, there is still room for improvement due to inconsistencies in practicing appropriate healthy lifestyles. Respondents who avoided smoking because it can affect diabetes condition obtained the highest weighted mean of 3.28. Table 2 presents rate of recurrence of respondent's reasons for not practicing a healthy

lifestyle. The reason that not allowed to go out due to restrictions related to health protocols, obtained the highest mean of 2.80 followed by the cannot consult to doctors at a regular interval due to increase of prices in hospitalization and consultation during pandemic with mean of 2.65, physically inactive during pandemic and do not have enough money to support the needs in proper diet, medication, and diagnostic procedures with both mean of 2.63 and are the only reasons that is verbally interpreted as Sometimes while the rest of the reasons for not practicing a healthy lifestyle obtained weighted means lower than 2.50, thus, were verbally interpreted as rarely. Thus, the rate of recurrence of respondent's reasons for not practicing a healthy lifestyle is "rarely" with an overall weighted mean of 2.45. One of the most prevalent clinical disorders that family doctors treat on a daily basis is diabetes mellitus. They are continuously faced with the responsibility of providing care for patients who are poorly managed and adhering to their treatment plans, resulting in avoidable severe, incapacitating, and disfiguring consequences.

Six criteria were used to construct the healthy lifestyle score (HLS): a balanced diet, moderate alcohol use, coffee drinking, physical activity a normal body weight and not smoking. To engage in health-improving behaviors, at risk individuals require education, access to continuing support, and a suitable environment (Galaviz et. al., 2018). The good news is that most cases of type 2 diabetes and prediabetes can be avoided. Modifying one's lifestyle can prevent approximately 90% of instances in the United States. These same modifications can also reduce the risk of certain malignancies and heart disease. Five simple phrases sum up the secret to prevention: stay active and thin.

Maintaining a healthy lifestyle was linked to a decreased risk of cardiovascular events and mortality in individuals with diabetes. Diabetes caused an increase in age-standardized death rate of 3% between 2000 and 2019. In lower-middle-income nations, death rate from diabetes rose by 13%. There's been a sharp increase in type 2 diabetes mellitus (T2DM) and its related problems. This is correlated with growing evidence of clinically significant differences in sex and gender. Gender differences appear to have a significant impact on the etiology, epidemiology, treatment, and consequences of many diseases, with noncommunicable diseases showing an especially strong correlation with these differences. The preventive effect of female sex against the development of nephropathy and heart illnesses appears to be lessened by diabetes. Gender inequality is influenced by endocrine and behavioral factors that impact the result. In the future, additional research on the sex-dimorphic pathophysiological mechanisms of type 2 diabetes and its consequences could lead to more individualized diabetes care and raise awareness of the risk factors particular to gender and sex

The "H-E-A-L-T-H-Y" Program Conceptual Framework

The proposed program will help the respondents maintain a healthy lifestyle, which will prevent complications and the worsening of their health condition.

Goal: Improve blood sugar control to prevent complications and to improve overall health and well-being among diabetic patients.

Objectives : Within 6 months, the respondents will increase eating healthy foods, enhance physical activity and, engage to at least 30 minutes of moderate intensity exercise most days of the week by walking briskly for 30 minutes 3-4 times per week.

The Respondents Narrative on the Impact H-E-A-L-T-H-Y program

(Informant 1)"*At kapag bumalik ka sasabihin mong napakaganda ng program, bago sa pakiramdam. Oo naman, depende sa gagawin mo mas pagod ka ngunit para sa mood na mas maganda ang pakiramdam mo kaysa kapag hindi mo ito ginagawa.*"
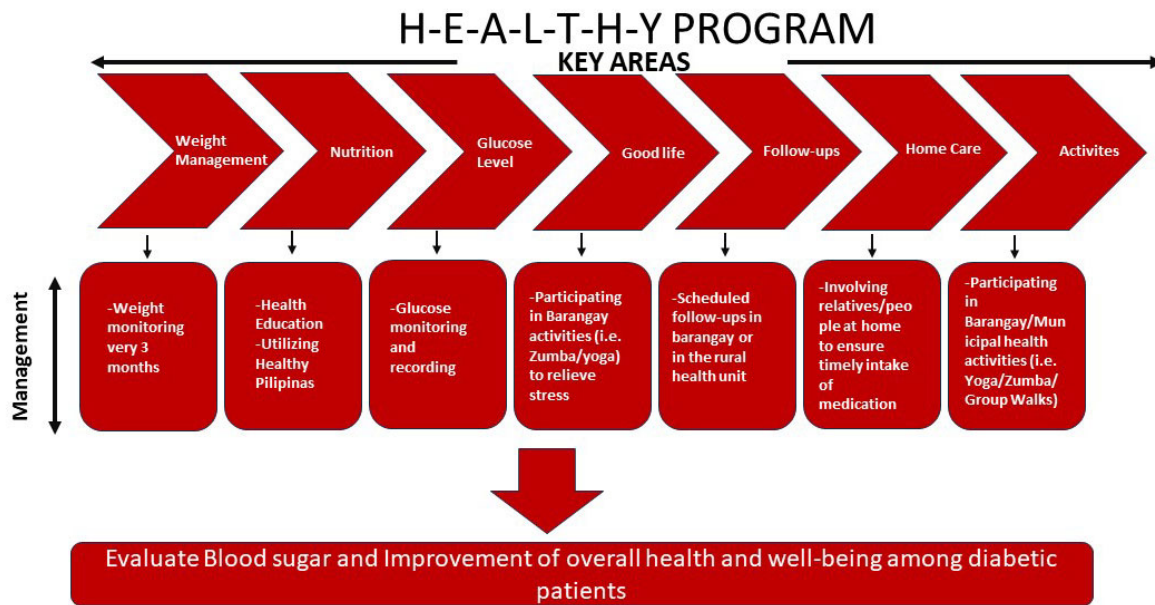
(Informant 2)"*Oo, ngayong nakasanayan ko na, gusto ko nang lumabas at sumali lagi sa program. Kahit ang init lumalabas na din ako ng bahay.*"

(Informant 3)"*Pwes, ito ang katotohanan na kung ayaw mo, maghanap ka ng maraming dahilan.*"

(Informant 4)"*Maganda nagkaroon ako ng exercise na noon ay hindi ko nagagawa.*"

(Informant 5)"*Nagkakaroon ako ng libangan.*"

Routine is a key factor for optimal adherence to PA. This degree of daily and constant commitment emphasize the active role of patients when following a program prescribed or recommended by a health professional along with the support of the community leaders. The current study investigates the adaption and maintenance of physical activity in patients with Diabetes Mellitus in a community setting. It also focuses on the individual tactics and circumstances that enable these people to be regarded models of excellent programs and physical activity adherence.

4. Conclusions and recommendations

This study investigated the prevalence of diabetes mellitus, lifestyle practices, and reasons for not practicing a healthy lifestyle among community people in Silang, Cavite. The study also found that the most common lifestyle practices associated with diabetes mellitus were unhealthy diet, physical inactivity, and smoking. The most common reasons for not practicing a healthy lifestyle were related to not allowing to go to the doctor due to pandemic. The proposed program for maintaining a healthy lifestyle is based on The "H-E-A-L-T-H-Y " Program to help clients to manage health condition

The findings of the study suggest that there is a need for public health interventions to promote healthy lifestyles and prevent diabetes mellitus among Caviteños. The researcher recommends that the local government of Cavite develop and implement a public health program to promote healthy lifestyles and prevent diabetes mellitus. The local government should also work with community leaders and organizations to develop and implement community-based programs to promote healthy lifestyles. Healthcare providers should educate their patients about the risk factors for diabetes mellitus and the importance of a healthy lifestyle. They should also provide patients with resources to help them make healthy choices and manage their diabetes mellitus. By taking these steps, we can help to reduce the prevalence of diabetes mellitus and other chronic diseases in Cavite.

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