

EDUCATIONAL INTERVENTION ON HEALTHY EATING AND ASSESSMENT FOR PEOPLE WITH DIABETES IN A HEALTH CENTER IN BELO HORIZONTE/MG

Carla Maria Pereira Meirelles Nicoliello

Faculdade de Ciências Médicas de Minas Gerais
Belo Horizonte - Minas Gerais
<https://orcid.org/0009-0006-9093-4617>

Alice Pereira Silva

Faculdade de Ciências Médicas de Minas Gerais
Belo Horizonte - Minas Gerais
<https://orcid.org/0009-0000-4553-4282>

Beatriz de Freitas Pereira Garcia

Faculdade de Ciências Médicas de Minas Gerais
Belo Horizonte - Minas Gerais
<https://orcid.org/0009-0007-0587-4873>

Ana Carolina Rodrigues Oliveira Miranda

Faculdade de Ciências Médicas de Minas Gerais
Belo Horizonte - Minas Gerais
<https://orcid.org/0009-0008-2014-9116>

Ana Laura Amaral Abreu

Faculdade de Ciências Médicas de Minas Gerais
Belo Horizonte - Minas Gerais
<https://orcid.org/0009-0005-7603-8034>

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Bruna Cerqueira Caldas Pinheiro
Faculdade de Ciências Médicas de Minas Gerais
Belo Horizonte - Minas Gerais
<https://orcid.org/0009-0002-7370-3682>

Júlia Marinho Simião
Faculdade de Ciências Médicas de Minas Gerais
Belo Horizonte - Minas Gerais
<https://orcid.org/0009-0000-7871-9646>

Patrícia Fernandes
Nurse at: Centro de Saúde Oswaldo Cruz,
Secretaria Municipal de Saúde de Belo Horizonte, Minas Gerais, Brasil
<https://orcid.org/0009-0001-1215-079X>

Juliana Veiga Costa Rabelo
Faculdade de Ciências Médicas de Minas Gerais
Belo Horizonte - Minas Gerais
<https://orcid.org/0000-0001-7599-5565>

Abstract: Introduction: Diabetes Mellitus is a chronic metabolic disease that is commonly accompanied by several complications due to failures in its control. With this relevance and based on the demand for a Health Center, medical students created a project focused on prevention and health education for people with Diabetes Mellitus. Objective: To evaluate risk factors for complications of Diabetes Mellitus and promote health education, focusing on nutrition. Methodology: Based on a list of diabetics who had not performed glycohemoglobin in the last semester, an invitation was made, by telephone or WhatsApp, to participate in a group activity. Initially, dynamics on nutrition were carried out, discussing food composition, glycemic index and more balanced foods. In addition, vaccination was offered, from bivalent Pfizer, Influenza, meningitis C and Pneumo-13. In addition, exams were requested, blood pressure and capillary blood glucose measurements, assessment of feet and oral health. Results: 14 people participated in the action. The evaluations were, for the most part, good, and patients who presented changes, such as hypertension, hyperglycemia, calcaneal fissures and onychomycosis, were advised according to the municipal protocol. Conclusion: The students concluded that the dynamics were very positive, as they learned about preventing diabetes complications and dialogue with the public. Therefore, the positive result for both parties of the open and playful discussion was undeniable, stimulating understanding about the disease and allowing the exchange of knowledge and doubts.

INTRODUCTION

Diabetes Mellitus (DM) is a chronic metabolic disease characterized by increased serum glucose that can occur due to various etiologies. There are several types of diabetes, such as Gestational DM, type 1 and type 2.

Among these, type 2 Diabetes Mellitus is the most prevalent, it occurs when the body becomes resistant to or does not produce insulin and is often associated with other metabolic diseases.

The prevalence of DM is growing around the world, especially in poorer countries, it is predicted that by 2045 more than 700 million adults will be diabetic. Furthermore, the International Diabetes Federation estimates that in Brazil, this same year, there will be 21.8 million diabetics. Therefore, from the Brazilian perspective, an increase has already been observed, comparing the years 2006 and 2016, of 3.4% in the prevalence of self-reported diabetes in the capitals.

It is observed that uncontrolled DM is associated with several complications, such as neuropathies, retinopathy, cardiovascular diseases, urinary and respiratory tract infections, lower limb amputation, kidney failure and stroke. These are closely related to risk factors such as blood pressure, lipid parameters, heart rate, body weight and uric acid. Therefore, DM is an extremely present and worrying disease in the health system, mainly due to its various complications and the importance of controlling and monitoring it.

Given this, the importance of health promotion actions in basic health units (UBS) aimed at controlling diabetes is evident, especially in units that cover a territory with a high number of people affected by the disease. These actions aim to improve monitoring, prevent complications and encourage self-care.

In view of the above, the present work aimed to evaluate the risk factors for complications of Diabetes Mellitus and promote health education actions, focusing on healthy nutrition.

METHODOLOGY

The present study was carried out in a Health Center (HC) located in the hypercenter region of Belo Horizonte, capital of the state of Minas Gerais. Participants were recruited via telephone or WhatsApp, according to the list of diabetic patients who were registered with this service and who had not undergone a glycohemoglobin test in the last six months. In total, contact was made with around 90 people and of these, 17 confirmed their presence.

The dynamic was based on a fixed structure: at the beginning of the action, an interactive activity was carried out with the participants, and later the group of medical students, with the help of the nurse, nursing technician and Community Health Agent from one of the CS Family Health teams were divided into stations to serve the participants. Feet assessments were offered; vaccination against influenza, pneumo-13, meningo C and bivalent pfizer; measurement of blood pressure and capillary blood glucose; requesting exams and scheduling appointments with CS professionals.

At first, everyone participated in a dynamic in which the students brought foods that are common in the daily diet of a Brazilian citizen, such as salt bread, bananas, rice and beans. All food was placed on a table, next to two scales. The objective of the dynamic was for participants to choose a food that was available on the table and say how much sugar or salt they thought each one had, placing the imagined amounts on the scale. With this, the academics showed the correct amounts of carbohydrates and sodium in each food.

To conclude, the importance of ingesting foods with a low glycemic index pattern was explained, focusing on its relevance for controlling glycated hemoglobin and other parameters, and the need to find a balance between foods that cause an accelerated increase in patients' capillary blood glucose.

with DM and foods that delay this peak. Throughout the initial dynamics, patients were free to ask questions and showed interest in the content covered.

After the dynamic, three rooms were used to divide participants into service stations so that they would not have to wait for long periods and avoid overcrowding. At the “Vaccination” station, vaccines against Influenza, Pneumo-13, Meningo-C and bivalent Pfizer were offered to those who had not yet been immunized.

The “Exam Appointment” station carried out complementary investigations, with the main requests being: fractional and total cholesterol, fasting glucose, glycohemoglobin, potassium and sodium dosage, triglycerides, blood count and urine test. Finally, instructions were given to patients regarding each exam requested.

Regarding assessments, the “Blood Pressure (BP) Measurement” station measured the patients’ BP and then they were directed to the “Capillary Blood Glucose” station, where a digital blood puncture was performed.

At the “Feet Assessment” station, the students screened for angiopathy and polyneuropathy, identified abnormalities, assessed muscle strength, presence of peripheral arterial disease and tracked foot sensitivity using a 10-gram Semmes-Weinstein monofilament.

RESULTS

14 people attended the action out of the 17 who confirmed their presence.

The use of a playful dynamic contributed to a better assimilation of patients regarding the relevance that food has in their daily lives. Furthermore, it was possible to get closer to the reality of these individuals’ eating routine, as many reported their difficulties and concerns.

This way, it was possible to promote health literacy, which is defined by the World Health

Organization as:

“The cognitive and social skills that determine the motivation and ability of individuals to access, understand and use information in ways that promote and maintain good health” (Tefera, 2020)

By promoting knowledge about DM, it is possible to promote a greater level of adherence to treatment and reduce complications due to poor control.

At the “Vaccination” station, 100% of those present received the Pneumo-13 vaccine, as it is not routinely offered at the CS. The other vaccines were administered as needed and after card evaluation.

Regarding the “Scheduling of Exams”, everyone was instructed on how to prepare them and also how to schedule the results to be delivered to the team doctor.

Regarding Blood Pressure Measurement, the majority of patients were normotensive and were controlled with medication. However, some were not taking medication and had hypertension, so it was recommended to discuss this change in pressure with their doctor and it was noted in their medical records. Regarding capillary glycemia, the results fluctuated, with the majority of patients being either normoglycemic or hyperglycemic.

When evaluating the feet, it was observed that the patients maintained preserved muscle strength and sensitivity and normal gait. However, some patients had calcaneal fissures and onychomycosis and were advised about these. In the end, it was recommended the use of suitable, comfortable and closed shoes, daily inspection of the feet, drying of the feet after bathing and daily hydration. This way, the 5 elements necessary for the prevention of complications and ulcers in diabetic feet were addressed: identification of feet at risk, inspection and examination, patient education, recommending the use

of appropriate shoes, and identification and future treatment of risk factors, such as presence of calluses and fungal infections.

It is important to note that there were some limitations that must be observed. The main one was the time available at the UBS to carry out the action, which took place in the afternoon. This time coincided with the work hours of many patients, who were unable to participate. Furthermore, as it was an action carried out for the first time in the CS, after the pandemic, it is believed that some individuals were resistant to attending. These factors led to a smaller number of people present, which was lower than expected by academics and professionals. Furthermore, it was observed that the participants were diagnosed with type 2 DM, so it was not possible to reach patients who suffered from other forms of Diabetes Mellitus.

CONCLUSION

The health promotion action for people with DM reaffirmed the importance of preventing complications that may arise due to the disease. Care proved to be important not only in relation to the physical health of

individuals, but also in relation to education about the eating habits that must be adopted.

It became clear that adequate care goes beyond medical consultation, elucidating the relevance of continuous care with nutrition and the prevention of complications. This activity also showed that health care for diabetics is only possible through integration between professionals from various health areas and the relevance of this cooperation.

The action allowed students to develop their social skills such as speaking in public, communicating with people of different ages and listening to others regarding their doubts, fears and insecurities. Furthermore, it allowed for intellectual growth, as they needed to carry out a lot of research and reading to be able to communicate actively, to learn about the prevention of complications caused by DM and to carry out the necessary assessments and techniques for the group.

Therefore, the dynamics were very positive, for both groups enabling active learning and exchange of experiences, mainly due to the playful and open aspect of the discussion, which always allowed openness and a safe environment.

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