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The Role of Nurses in Health Education and Diabetic Foot Prevention in Primary Health Care in the Municipality of Pimenta Bueno/RO: An Experience Report

Nurses' Role In Health Education And In The Prevention Of Diabetic Foot In Primary Health Care In The Municipality Of Pimenta Bueno/RO: Experience Report

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Abstract

Introduction: Diabetes Mellitus is one of the main chronic non-communicable diseases, associated with high morbidity and mortality rates and serious complications, among which diabetic foot stands out, a condition that can lead to ulcerations, infections, and amputations. In Primary Health Care, the nurse's role is fundamental for the prevention of these complications, especially through health education and systematic foot assessment. **Objective:** To report the experience of the nurse's role in health education and prevention of diabetic foot in a Basic Health Unit of Primary Health Care. **Methodology:**

This is a descriptive study, of the experience report type, carried out at the Madre Tereza Basic Health Unit during the month of December 2025, with patients diagnosed with Diabetes Mellitus followed by the Hiperdia program. Individual consultations were carried out with foot assessment using the Semmes-Weinstein monofilament, associated with educational guidance on self-care and

Recording of actions in the Citizen's Electronic Medical Record. **Results:** It was observed that most patients had prior knowledge about foot care and underwent regular health check-ups; however, some presented decreased protective sensitivity, onychomycosis, and improper nail trimming, with no record of amputations. The educational actions were well accepted, with emphasis on adherence to medication treatment and preventive care, with reassessments scheduled in six months for patients without protective sensitivity and in twelve months for those with preserved sensitivity. **Discussion:**

Experience has shown that nursing consultations are an effective strategy for the early identification of risk factors for diabetic foot and for strengthening self-care. Despite the positive reception from users, challenges such as low demand for preventive actions and functional limitations in elderly patients are still present. **Conclusion:** The role of nurses in Primary Health Care has proven essential for health education and the prevention of diabetic foot, contributing to the reduction of complications and the promotion of quality of life for people with Diabetes Mellitus, reinforcing the need to institutionalize these actions in the routine of health services.

Keywords: Diabetes Mellitus; Diabetic foot; Health education; Nursing; Primary Health Care

Abstract

Introduction: Diabetes Mellitus is one of the main chronic non-communicable diseases, associated with high morbidity and mortality rates and serious complications, among which diabetic foot stands out a condition that can lead to ulcerations, infections, and amputations. In Primary Health Care, the nurse's role is fundamental in preventing these complications, especially through health education and systematic foot assessment. **Objective:** To report the experience of nursing practice in health education and in the prevention of diabetic foot in a Primary Health Care Unit. **Methodology:** This is a descriptive study, of the experience report type, carried out at the Madre Tereza Basic Health Unit during December 2025, with patients diagnosed with Diabetes Mellitus monitored by the Hiperdia program. Individual consultations were conducted, including foot assessment using the Semmes-Weinstein monofilament, combined with educational guidance on self-care and documentation of actions in the Electronic Citizen Medical Record. **Results:** It was observed that most patients had prior knowledge regarding foot care and maintained regular health follow-up;



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however, some presented reduced protective sensitivity, onychomycosis, and inadequate nail trimming, with no records of amputations. Educational actions were well received, with emphasis on adherence to drug treatment and preventive care. Reassessments were scheduled for six months for patients without protective sensitivity and twelve months for those with preserved sensitivity.

Discussion: The experience demonstrated that nursing consultations are an effective strategy for the early identification of risk factors for diabetic foot and for strengthening self-care. Despite good user acceptance, challenges such as low demand for preventive actions and functional limitations among elderly patients remain. **Conclusion:** The nurse's role in Primary Health Care proved to be essential for health education and diabetic foot prevention, contributing to the reduction of complications and to the promotion of quality of life for people with Diabetes Mellitus, reinforcing the need to institutionalize these actions within the routine of health services.

Keywords: Diabetes Mellitus; Diabetic foot; Health education; nursing; Primary HealthCare

Introduction

Diabetes Mellitus (DM) is classified as one of the chronic non-communicable diseases of with the greatest impact on the global stage, showing significant growth, especially in countries where development. This increase is directly related to factors such as aging.

population growth, the accelerated process of urbanization, changes in lifestyle, sedentary lifestyle, increased obesity rates and longer life expectancy for those affected (CARVALHO et al., 2021).

This is a metabolic condition characterized by persistent hyperglycemia, resulting from alterations in insulin production or action, being responsible for high rates of morbidity and mortality, hospitalizations, and strain on healthcare systems. Among the One of the most frequent and serious chronic complications of diabetes mellitus is diabetic foot, a condition... multifactorial involving neurological, vascular, orthopedic, and infectious alterations, which may can develop into ulcers, serious infections, and lower limb amputations.

Peripheral neuropathy is identified as one of the main risk factors for development of diabetic foot, as it promotes the progressive loss of protective sensation, making the feet more vulnerable to trauma, injuries, and infections. Associated with this are the changes... Motor and structural factors contribute to osteoarticular deformities, increasing pressure points and... risk of foot ulceration (OLIVEIRA NETO et al., 2017).

In the context of Primary Health Care (PHC), care for people with Diabetes Mellitus It must be continuous, comprehensive, and focused on preventing complications. In Brazil, this care is... developed by multidisciplinary teams, with particular emphasis on the role of the nurse, who plays a strategic role in clinical monitoring, systematic foot assessment, and in Development of health education initiatives. Nursing consultations enable... Early identification of risk factors, knowledge of socioeconomic realities and habits. of the patient's life, in addition to developing an individualized care plan (CUBAS et al., 2013).



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In this sense, educational actions focused on self-care of the feet are fundamental for to reduce the incidence of ulcerative lesions and amputations, since they enable the individual to Recognizing warning signs, adopting safe practices in daily care, and seeking assistance in a way that... timely. Thus, the nurse's role in health education, combined with careful clinical assessment. And with systematic monitoring, promotion becomes essential for the prevention of diabetic foot. quality of life and reduction of complications associated with Diabetes

Mellitus. This work is part of a research project approved by the Ethics Committee of the Center. Maurício de Nassau University of Cacoal – UNINASSAU, under number from opinion number 7,880,925 and aims to report the experience of the nurse's role in Health education and prevention of diabetic foot in a Primary Health Care Unit. Health.

Methods

This is a descriptive study, of the experience report type, developed in the Unit. Basic Health Unit Madre Teresa, during the month of December 2025. The action was planned with the The objective is to strengthen health education and diabetic foot prevention activities, as well as To meet the indicator related to the assessment of the feet of people with Diabetes Mellitus in Primary Care. Primary Health Care.

These activities are not part of the unit's regular routine and are carried out independently. punctual, during the regular operating hours of the UBS, from 7 am to 12 pm and from 1 pm to 5 pm, with Appointments were scheduled every 20 minutes per patient. Doctors from all four clinics participated in the initiative. Teams from the unit and two nurses, one of whom is the author of the report. Each team had one day. specifically designed for conducting consultations.

Community Health Workers were responsible for actively seeking out and scheduling appointments. of the users. All patients diagnosed with Diabetes Mellitus who participated in the action took part. They attended the Hiperdia program during the established period. One user was excluded from the program. action for no longer presenting a diagnosis of diabetes after bariatric surgery.

The consultations involved clinical evaluation of the feet, using the monofilament of Semmes-Weinstein for verification of protective plantar sensitivity, in addition to educational actions. Individuals were observed during the consultation. The information was recorded in the Electronic Medical Record of the Citizen (PEC), including records related to Hiperdia and foot assessment. There were none. longitudinal follow-up or holding a second meeting to assess changes. behavioral.



Results

Participants in the action included users with Diabetes Mellitus, some of whom also diagnosed with systemic arterial hypertension. It was observed that a small proportion were using insulin, while two to four patients did not use any type of medication, despite the medical recommendation.

Most patients demonstrated prior knowledge about foot care, The importance of regular check-ups, beyond just prescription renewals, as well as conducting examinations, was emphasized. Routine and regular blood glucose monitoring. Educational activities were targeted primarily related to adherence to medication and preventive foot care, such as Proper nail trimming, not sharing personal items, and adequate drying between the fingers. Wear comfortable socks and shoes.

During clinical evaluation, some patients presented with decreased sensitivity. protective, in addition to alterations such as improper nail trimming and the presence of onychomycosis. No Cases of amputation were identified. Interdigital mycoses were treated with antifungals. Topical treatments were used, while cases of onychomycosis received guidance for the use of methylene blue. manipulation and performance of laser therapy sessions at the primary health care unit itself.

Patients with decreased protective sensitivity had a new evaluation scheduled for six months, while those with preserved sensitivity were instructed to repeat the examination in twelve months, as recorded in the PEC.

Discussion

The findings of this report reinforce the importance of nursing consultation as a tool. Early identification of diabetic foot is fundamental in the prevention of diabetic foot in primary health care. Loss of protective sensitivity, coupled with educational initiatives, allows for timely interventions. capable of reducing the risk of ulcers and amputations, as described in the literature (CUBAS et al., 2013; OLIVEIRA NETO et al., 2017).

The positive response of patients to educational guidelines demonstrates the potential of Individualized health education, especially when integrated with clinical assessment. The fact that The fact that most users have prior knowledge and few complications suggests its effectiveness. Continuous monitoring in primary health care.

However, a challenge observed was the belief that visits to the primary health care unit should only occur for Prescription renewals limit the demand for preventative care and favor treatment only when necessary. of established complications. In addition, elderly patients reported difficulties related to Mobility, such as proper drying between the toes, highlights the need for strategies.



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Educational methods adapted to functional limitations.

Although it was not possible to assess behavioral changes or adherence to treatment medication due to the absence of subsequent follow-up, experience shows that the The nurse's role is essential for organizing care, recording actions, and coordinating efforts with a network of specialized care for the most complex cases.

Conclusion

The reported experience demonstrates that the nurse's role in health education and in Prevention of diabetic foot in Primary Health Care is essential, constituting a... An effective, low-cost strategy with high potential for reducing associated complications for Diabetes Mellitus. The nursing consultation, combined with systematic foot assessment and education. In individualized health care, it contributes to the early identification of risk factors, strengthening of self-care and promotion of quality of life for users.

Despite the challenges related to patient adherence to preventive measures, the results They demonstrate the importance of institutionalizing these practices in the routine of the primary health care unit, aiming at prevention of complications and improvement of care for people with diabetes.

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