RISK ASSESSMENT OF DIABETIC FOOT IN A BASIC HEALTH UNIT

AVALIAÇÃO DE RISCO DO PÉ DIABÉTICO EM UMA UNIDADE BÁSICA DE SAÚDE

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ABSTRACT

According to the United Nations, 70% of amputations performed in Brazil are due to diabetes mellitus (DM). Patients with poorly controlled or untreated DM experience increased rates of hospitalization, cardiovascular and cerebrovascular events, blindness, renal failure, and non-traumatic lower limb amputation. Experience report: Between May and June 2018, undergraduate medical students conducted activities to assess and care for the diabetic foot among patients at the Jardim Fragoso I basic health unit (BHU) in Olinda, Pernambuco, Brazil. Twenty-one patients with early-stage DM participated in these activities. Group discussions were held to provide guidance and education regarding diabetic foot care, followed by an assessment using forms for neuropathic pain, loss of protective sensation, and peripheral arterial disease. The most significant finding identified was the reduction of plantar protective sensation. Conclusion: This experience highlights the need to implement secondary prevention practices in BHU for patients with DM, including risk assessment for ulceration. The BHU services impact significantly on prognosis and reducing complications related to chronic diseases, as they coordinate care, organize the health network, and are entry point to the unified health system (SUS).

Keywords: Diabetic foot; Primary healthcare; Diabetes mellitus

RESUMO

De acordo com a Organização das Nações Unidas, 70% das amputações realizadas no Brasil são decorrentes do Diabetes Mellitus (DM). Há evidências de que indivíduos com DM mal controlado ou não tratado desenvolvem consequências como aumento do número de hospitalizações, aumento de eventos cardiovasculares e cerebrovasculares, cegueira, insuficiência renal e amputação não traumática do membro inferior. Relato de experiência: No período de maio a junho de 2018, estudantes da graduação de medicina realizaram algumas atividades para avaliar e cuidar do pé diabético de pacientes da Unidade Básica de Saúde (UBS) de Jardim Fragoso I, localizada no município de Olinda, Pernambuco. Participaram das atividades 21 pacientes que apresentavam o diagnóstico precoce de DM. Foram realizadas rodas de conversa sobre orientações e cuidados com o pé diabético; seguida de uma avaliação empregando o formulário de Avaliação e Rastreamento de Dor Neuropática, Perda da Sensibilidade Protetora e Doença Arterial Periférica para Atenção Primária em Saúde. A alteração mais significativa identificada neste estudo foi a redução da sensibilidade protetora plantar. Conclusão: A partir dessa experiência, identifica-se a necessidade de realizar, nas UBSs, práticas de prevenção secundária voltadas para pacientes diagnosticados com DM, incluindo o rastreamento do risco de ulceração. Por ser coordenadora do cuidado, ordenadora da Rede de Atenção à Saúde e porta de entrada do Sistema Único de Saúde, o serviço das UBSs gera impactos relevantes na melhoria do prognóstico e redução de complicações referente às doenças crônicas.

Palavras-chaves: Pé Diabético; Atenção básica; Diabetes Mellitus

INTRODUCTION

Diabetes mellitus (DM) are metabolic disorders of diverse etiologies, characterized by hyperglycemia from deficient insulin secretion by pancreatic beta cells, peripheral insulin resistance, or both1. The World Health Organization (WHO) estimates hyperglycemia as the third most important risk factor for premature mortality, behind high blood pressure and tobacco use. Thus, DM impacts economy and healthcare systems[2].

DM is preventable, controllable, and can be diagnosed in the early stages. Well-controlled glycemia can mitigate patient harm, allowing for non -pharmacological measures, including physical activity and adequate diet. Furthermore, ensuring the correct use of pharmacological interventions by patients with DM is important as they are responsible for their prognosis[3].

In Brazil, the Ministry of Health created numerous programs to control the most impactful diseases in the population[4]. For example, the National Program for Hypertension and Diabetes Mellitus (Hiperdia) reoriented pharmaceutical care by providing continuous and free access to medication, along with monitoring of patients conditions[5].

According to the United Nations (UN), 70% of amputations performed in Brazil are consequences of DM, representing approximately 55,000 procedures annually. Globally, the situation is more alarming: every minute, three patients undergo an amputation due to DM complications[6]. Considering the Brazilian context and quality of life of patients with DM, improving lower limb assessment and guidance on prevention and care emerged to minimize the harm resulting from uncontrolled hyperglycemia[7].

DM management involves many factors that should be addressed within primary healthcare, including patient awareness of the severity of the disease and secondary prevention practices, such as early diagnosis and appropriate treatment. In this context, glycemic control may substantially reduce the risk of DM complications[8,9,10].

EXPERIENCE REPORT

Based on the experience at the basic health unit (BHU) Jardim Fragoso I, a group of students identified that the family health team was organized into seven micro-areas and provided care for 187 patients with DM. Listening to the difficulties reported by patients regarding treatment and disease control revealed a demand for medical appointments to address symptoms and laboratory test abnormalities.

The activities conducted by the medical students from the Faculdade de Medicina de Olinda began with dialogues with patients who were questioned about complaints and challenges, along with active searches with community health agents (CHA). Students accompanied many routine activities, including home visits conducted by CHA, where they met and exchanged information with patients with DM. Through active listening, a few reasons were identified for the lack of participation in the Hiperdia program, the most common being scheduling conflicts with work hours and the unavailability of medications in primary healthcare units.

During the visits, patients were questioned about lifestyle habits and difficulties accessing medications at the BHU. A stronger relationship was established among students, patients, and their families by dialoguing and exchanging information. On these occasions, patients were also invited to participate in the action day at the BHU.

Patients arrived on a walk-in basis and were welcomed by the students and the multidisciplinary team of the BHU. The activities began with a group discussion, facilitating the exchange of experiences and helping to clarify any doubts. Subsequently, a banner was displayed with guidance on diabetic foot care, addressing risk factors and necessary precautions. In primary healthcare units, patients completed the assessment forms for neuropathic pain, loss of protective sensation, and peripheral arterial disease. After that, the assessment and screening forms for neuropathic pain, loss of protective sensation, and peripheral arterial disease for primary healthcare were completed. The foot-washing activity was then initiated, along with the assessment form recommended by the Ministry of Health, specifically focused on diabetic foot.

The foot-washing activity fostered interpersonal relationships between students and patients, highlighting the importance of providing appropriate healthcare. Students took this opportunity to emphasize the potential issues affecting patients feet and to provide guidance on necessary care.

Last, the students made a mold of the foot of each patient, which was later compared with their footwear. The objective was to demonstrate that properly fitting shoes should match the dimensions of the mold to avoid risks of compression, injury, or reduced sensitivity. After the comparison, the mold was given to the patients to be used as a reference when selecting appropriate shoes, preventing fissures and wounds. Properly shaped footwear is essential for patient comfort and well-being, helping pre-

vent future complications.

From this experience, contributions of the activities conducted to the self-care routines of patients and their relationship with disease management were identified. Studies showed the importance of primary healthcare in health education practices and the prevention of complications, considering its role in providing comprehensive and longitudinal care to patients with DM within the health network[11,12]. However, patients often face challenges due to social vulnerabilities. Access to adequate diet, treated water, and appropriate housing influences the health-disease process and the occurrence of health complications, which may delay rehabilitation and wound healing. For this reason, the student group prioritized dialogue with patients to better understand their realities.

CONCLUSION

This experience report demonstrated the importance of knowledge sharing with the population using a horizontal exchange, supported by guidance and illustrative materials. The information exchange established during the group discussions was essential for understanding the profiles of patients, clinical practices, and preventive measures related to DM. Assessments demonstrated that complications arising from DM treatment were not solely due to inadequate medication adjustments but to a significant gap between patients and the BHU. Some complications are detected only after they have worsened, hindering treatment. In summary, the activities were important to develop individualized management strategies and care protocols for the patients. The experience also reinforced the importance of active case finding and dynamic health education for other healthcare professionals, as these can raise awareness, support diagnosis, and strengthen ties with the community, since the patient is an active part of the treatment. Therefore, based on collective effort, a multiprofessional approach may enhance the effectiveness of health guidance. The results of this study support actions of various healthcare professionals in establishing appropriate protocols for the prevention of injuries that contribute to the morbidity of diabetic foot ulcers, contributing to the reduction of mortality, hospitalizations, and amputations caused by this highly prevalent chronic disease.

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