

IMPACT OF THE COVID-19 ON THE DIAGNOSIS AND TREATMENT OF UROLOGIC CANCER: A LITERATURE REVIEW

O IMPACTO DA COVID-19 NO DIAGNÓSTICO E TRATAMENTO DO CÂNCER UROLÓGICO: UMA REVISÃO DA LITERATURA

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ABSTRACT

INTRODUCTION: At the end of 2019, a new disease caused by the SARS-CoV-2 virus emerged in Wuhan, China, leading to severe acute respiratory syndrome. This disease rapidly escalated into an unprecedented global health crisis, resulting in overcrowded hospitals and the suspension of non-urgent medical care. The implementation of surgical prioritization protocols was among the most significant challenges faced by urologists during the pandemic, as it led to a rise in postponed cancer surgeries. **OBJECTIVES:** To describe the impact of the COVID-19 pandemic on the treatment of urologic cancers. **METHODS:** This literature review included studies published in 2020. The literature search was conducted using SciELO and PubMed databases. **DISCUSSION:** This literature review highlighted the global impact of the COVID-19 pandemic on surgical and oncological practices in urology. Postponing certain surgeries may contribute to short-term cancer progression, increased cancer-specific mortality, and psychological consequences, such as anxiety and depression. **CONCLUSION:** Most studies on the topic highlighted the crucial role of physicians in assessing the risk profiles (i.e., disease severity and hospitalization needs) of patients. Additionally, the development of well-structured prioritization protocols by multidisciplinary teams is essential to minimize the negative consequences of delayed surgeries on patient outcomes.

Keywords: COVID-19; Pandemic; Cancer treatment; Genitourinary; Urology

RESUMO

INTRODUÇÃO: No final de 2019, foi relatado o surgimento de uma nova doença causada pelo SARS-CoV-2, originário de Wuhan, China, responsável por gerar uma síndrome respiratória aguda grave. Assim, instaurou-se uma crise de saúde sem precedentes, lotando os hospitais e ocasionando o cancelamento de atendimentos médicos não urgentes. Os novos protocolos de priorização cirúrgica têm aumentado o adiamento de cirurgias oncológicas, configurando um impacto desafiador para os urologistas nessa pandemia. **OBJETIVO:** Descrever o impacto da pandemia do coronavírus no tratamento dos cânceres urológicos, baseado em dados da literatura. **MÉTODOS:** O presente estudo consiste em uma revisão de literatura que apresenta dados provenientes de artigos científicos publicados no ano de 2020. A busca desses artigos foi realizada nos bancos de dados SciELO e PubMed. **DISCUSSÃO:** O trabalho procurou relatar os efeitos globais da pandemia de COVID-19 na prática de clínica cirúrgica e oncológica em urologia, indicando que o adiamento de certas cirurgias pode causar progressão clínica de curto prazo do câncer, aumento da mortalidade específica por câncer e alguns danos psicológicos, como ansiedade e depressão. **CONCLUSÃO:** Conforme explanado, a maioria dos artigos sobre o tema mostra papel fundamental que o médico desempenha na classificação dos pacientes quanto aos riscos de sua doença e de internação, bem como a importância do desenvolvimento de protocolos por equipes multidisciplinares para categorizar as prioridades da melhor maneira e minimizar os prejuízos desses adiamentos cirúrgicos para os pacientes.

Palavras-chave: COVID-19; Pandemia; Tratamento de câncer; Geniturinário; Urologia

INTRODUCTION

In late 2019, researchers identified a novel disease caused by the SARS-CoV-2 virus in Wuhan, China, which was linked to severe acute respiratory syndrome. Within five months, the disease spread to over 200 countries and was considered a pandemic in March 2020. As COVID-19 infections rapidly increased, healthcare practices changed, affecting healthcare systems and individual care. An unprecedented crisis was established as hospitals and clinics became overwhelmed with suspected and confirmed cases of COVID-19, resulting in successive cancellations of non-urgent medical appointments, including those for cancer patients. Among individuals infected with COVID-19, those living with cancer were at higher risk of poor outcomes. Consequently, clinical guidelines for managing COVID-19 recommended reducing the use of chemotherapy in this population to prevent further impairment of their immune systems^{1,2,5,6}.

Due to the urgent need to allocate hospital beds and healthcare professionals to care for patients affected by the new disease, the treatment of cancer patients classified as elective was postponed. Surgical departments worldwide restricted their activities, maintaining only high-priority procedures. In some cases, over 80% of patients fell under the category of non-urgent or elective care. However, the interpretation of what constitutes essential care is under significant debate, creating uncertainty about whether certain treatments can or should be delayed^{1,2}.

Although delaying certain treatments may be needed, the ethical implications must be considered when these delays can lead to disease progression, increased cancer-related mortality, and potentially irreversible psychological harm to patients^{5,6}.

METHODS

This literature review searched studies published in 2020 in SciELO and PubMed databases. The descriptors used included COVID-19, Pandemic, Cancer Treatment, Genitourinary, and Urology. The initial search found 71 studies; however, only those that met the eligibility criteria were included. Thus, nine studies were included, and all addressed the impact of COVID-19 on cancer treatment and discussed the harms and benefits of treatment delays during the pandemic.

DISCUSSION

The global impact of the COVID-19 pandemic on surgical and oncological clinical practices in urology has been widely discussed in previous studies¹⁻⁹. These studies highlighted the overwhelming strain on healthcare systems and the postponement of surgeries for cancer patients to reduce the exposure of surgical teams and patients to potential COVID-19 contamination. Additionally, the high demand for personal protective equipment, intensive care unit beds, and ventilators hindered surgical practices, contributing to the urgent need to postpone treatment for these patients^{3,9}.

In this context, physicians must weigh the risks associated with delaying oncological care for patients experiencing disease progression against the likelihood of COVID-19 infection during (neo) adjuvant or palliative therapy. Prioritization and triage protocols for cancer treatment during the pandemic have been introduced to assess which treatments can be delayed. Additionally, surgical departments were instructed to evaluate the reduction and prioritization of surgeries. Some authors recommend avoiding laparoscopic or robotic surgeries when possible. However, when these procedures are needed, they should be performed by experienced surgeons to reduce surgical time and postoperative complications^{3,4,7}.

Surgical prioritization protocols have led to moderate cancellation rates of oncological surgeries and reduced treatment, proving to be one of the greatest challenges for urologists during the pandemic. Physicians worldwide have faced not only ethical dilemmas but also the limited capacity of intensive care units due to reduced resources and the concentration of medical team efforts on treating COVID-19 patients.

Interestingly, the cancellation rates of oncological surgeries did not differ between high-risk and low-risk countries during the pandemic. However, the cancellation of non-oncological surgeries was higher in countries with a high-risk index.

The treatment of some types of tumors was prioritized due to their higher likelihood of progression, directly impacting mortality rates. Conversely, the recommendation for postoperative recovery in intensive care units hindered the performance of major surgeries, even though these were categorized as priority tumors, such as cystectomy for urothelial tumors. In urology, the estimated rate of suspension

of elective surgeries for oncological conditions was 36.6%, while for benign diseases, it was 81.7%^{3,6,8}.

This type of suspension raises serious ethical concerns, as delays may result in short-term cancer progression and increased cancer-specific mortality. Additionally, in oncology, the spread of disease and cancer-related mortality must be considered for palliative and (neo)adjuvant treatments, weighing the risk of COVID-19 infection and its associated resource demands^{7,8}. In response, many urologists have made adjustments to their clinical practices due to the COVID-19 pandemic, including canceling, postponing, or replacing in-person visits with telemedicine. These decisions are directly linked to the global changes in the treatment of cancer patients during the pandemic⁴.

Social distancing and isolation caused psychological issues in the general population, including stress, loss of motivation, and reduced self-esteem. These factors, combined with the repercussions of treatment delays for patients considered elective, exacerbated the well-known effects of a cancer diagnosis, such as anxiety and depression. Women and younger patients were the most affected by this condition⁸. For patients with an expectant strategy, the wait for cancer treatment worsened their mental health. Literature reports that individuals with prostate cancer and small renal tumors were the most affected by these issues; they were the most impacted by treatment delays due to the low aggressiveness of their tumors⁸.

CONCLUSION

The COVID-19 pandemic impacted cancer patients in several ways. The need to postpone certain treatments placed the responsibility on physicians to classify patients based on the risks of their disease and hospitalization, affecting the clinical practice of most urologists worldwide. This situation also had psychological repercussions, causing distress and anxiety among patients. In this regard, physicians play a crucial role in assessing the severity of the disease of their patients, as well as providing psychological support and clarifying the scenario to reassure them.

Therefore, it is essential to understand the best way to address the psychological and behavioral issues of this population to minimize the harm caused by these traumas. Multidisciplinary teams should develop protocols to prioritize cases effectively,

identifying those that can be postponed with minimal harm to the patients.

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THE ROLE OF PRIMARY HEALTH CARE IN FACING STI: AN EXPERIENCE REPORT

O PAPEL DA ATENÇÃO PRIMÁRIA À SAÚDE NO ENFRENTAMENTO DE IST: UM RELATO DE EXPERIÊNCIA

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ABSTRACT

Primary health care is the preferred entry point for users of the Brazilian Unified Health System. It allows early diagnosis and treatment of sexually transmitted infections (STIs), such as hepatitis B and C, HIV, and syphilis. This experience report described an action aimed at users of a Basic Health Unit (BHU) to improve their adherence to STI care and minimize its associated risks. This study was developed during the practical activities of undergraduate medical students at the Jardim Brasil V BHU in Olinda, Pernambuco (Brazil), in September 2020. The action was previously announced and involved 20 walk-in users; proper pandemic safety precautions were followed. Screening was performed using rapid tests for syphilis, HIV, hepatitis B, and hepatitis C. Participants also received information about STIs and the importance of early investigation; most of them were female, and 15% tested positive for syphilis. None of them had been tested previously. Only 15% of the participants were aware of STI screening tests and acknowledged their importance. Immediate care for individuals with STIs provides a curative strategy, aims to interrupt the chain of transmission, and prevents other STIs and their associated complications.

Keywords: STI; HIV; syphilis; hepatitis; prevention; diagnosis

RESUMO

A Atenção Primária à Saúde é considerada a porta de entrada preferencial do usuário no Sistema Único de Saúde (SUS). A partir dela, é possível garantir o diagnóstico e o tratamento precoces de doenças como as infecções sexualmente transmissíveis (IST), hepatites B e C, HIV e sífilis. Este relato descreve a experiência de uma ação realizada com usuários em uma Unidade Básica de Saúde sobre IST, visando melhorar a adesão da população ao cuidado com IST e minimizar seus riscos. Trata-se de um estudo descritivo do tipo relato de experiência desenvolvido durante as atividades práticas dos estudantes da graduação de medicina na UBS de Jardim Brasil V, em Olinda, Pernambuco, em setembro de 2020. A ação contou com 20 usuários da UBS de demanda espontânea, após sua divulgação prévia, e foram seguidos os cuidados em tempos de pandemia. Foi realizada triagem com testes rápidos para sífilis, HIV, hepatites B e C, e os participantes receberam informações sobre as IST e a importância da investigação precoce. A maioria era do sexo feminino, 15% testaram positivo (sífilis). Nenhum deles havia realizado esses testes antes. Apenas 15% dos voluntários tinham conhecimento dos testes de triagem das IST e compreendiam a importância de sua realização. O atendimento imediato de uma pessoa com IST não é apenas uma estratégia curativa, mas também visa à interrupção da cadeia de transmissão, bem como à prevenção de outras IST e complicações decorrentes delas.

Palavras-chave: IST; HIV; Sífilis; Hepatite; Prevenção; Diagnóstico

INTRODUCTION

Primary health care is the preferred entry point for users of the Brazilian Unified Health System (SUS), playing a crucial role in ensuring access to healthcare services for the population within its coverage area.¹

Sexually transmitted infections (STIs) are

a public health concern. They are among the most common communicable diseases, affecting the health and lives of people worldwide.² In May 2016, the World Health Assembly adopted the 2016–2021 Global Health Sector Strategy on STI,³ which includes the expansion of evidence-based interventions and services to control these infections and reduce their public health impact by 2030.

SPACE OF SOCIAL RESPONSIBILITY

In 2019, the Brazilian Notifiable Diseases Information System reported 152,915 cases of acquired syphilis, an easily detectable systemic disease, with a simple, low-cost, and 100% effective treatment.² The system also recorded 41,909 new cases of HIV infection and 37,308 AIDS cases.⁴ Most HIV infections in Brazil were reported among individuals aged 20 to 34 years (52.7%). Between 1999 and 2019, 673,389 confirmed viral hepatitis cases were reported.⁵

Ideally, 100% of primary health care teams should be trained in counseling and rapid testing (RT) for HIV, syphilis, and hepatitis B and C. The RT was implemented in Brazil in 2011 and plays a crucial role in the fight against STI, as it could facilitate the early diagnosis of people living with these infections¹. Moreover, determining serological status encourages behavioral changes in individuals. Following a positive diagnosis, adherence to treatment must occur to improve quality of life and even lead to a cure in cases of syphilis.^{6,7}

EXPERIENCE REPORT

Students from the Faculdade de Medicina de Olinda conducted observations during their activities at the Jardim Brasil V Basic Health Unit (BHU)

and identified a low demand for RT and STI prevention. These observations were part of the theoretical-practical program “Academy-Service-Community Integration” and the implementation of the Ministry of Health’s 2020 STI Prevention Campaign.⁸ Along with the Family Health Team, the students planned a brief intervention, which was announced 30 days in advance by the community health agents within the community.

On the scheduled day, the students and the Family Health Team welcomed the users and organized the appointments following distancing and anti-crowding guidelines in accordance with the COVID-19 pandemic public health recommendations. Twenty users participated in the action, with mean age of 56.7 years, being 90% females and 10% males. Initially, users were asked about their familiarity with STIs, their awareness of and the importance of RT, and any history of previous STI diagnosis. Then, they were informed about the testing procedures and invited to undergo testing; all users agreed to participate. Following the analysis, three users, including one couple, tested positive for syphilis. Seventeen users tested negative for syphilis, HIV, hepatitis B, and hepatitis C. Only three users were aware of the existence and importance of RT.



Figure 1. Record of a user performing rapid testing for sexually transmitted infections.

Last, the students warned the users on the importance of screening for STI diagnosis, prevention methods, modes of transmission, diagnostic processes (Figure 2), and the availability of free treatment provided directly at the BHU by the SUS.

COMMENTARIES

Reflections must be performed regarding the distribution of health services, considering the conditions under which users can access care to ensure isonomy for individuals with similar needs.

Naturally, controlling the disease by identifying existing cases and providing treatment should contribute to breaking the transmission chain. This strategy strengthens the importance of understanding how services are organized, aiming to formulate regionally focused policies that consider local realities, respect the historical and cultural aspects of management processes, and promote the equitable development of the SUS.

Last, care, diagnosis, and treatment are provided free of charge in SUS healthcare services.⁹ However, according to the World Health Organization, assessing the effectiveness of diagnosis and treatment requires the development of strategies that ensure the availability of RT supplies, confirm diagnoses, and initiate STI treatment. These strategies improve the quality of life of individuals and interrupt the transmission chain of these infections.

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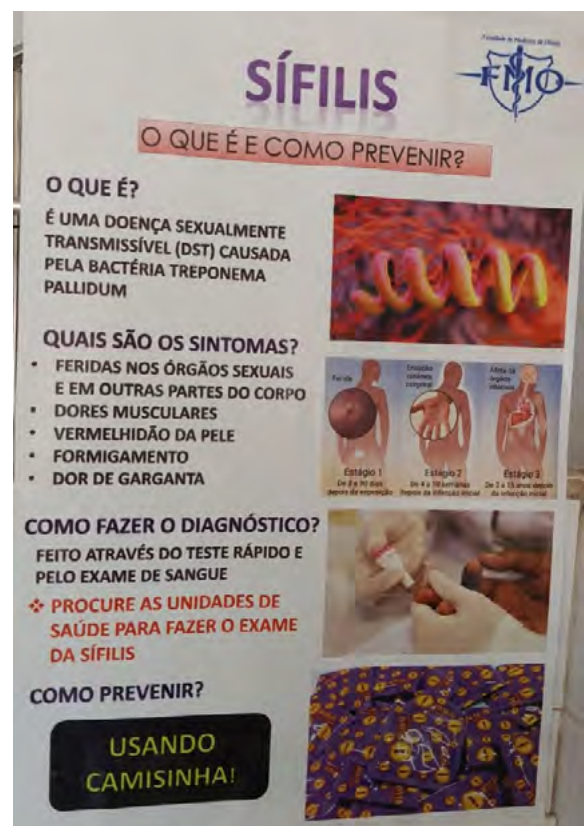


Figure 2. Poster about syphilis presented at the action.

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 systems².

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 prognosis³.

In Brazil, the Ministry of Health created numerous programs to control the most impactful diseases in the population⁴. 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 conditions⁵.

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 complications⁶. 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 hyperglycemia⁷.

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 Frágoso 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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