

Clinical podiatry in planning nursing care for patients with diabetes mellitus

La podología clínica en la planificación de los cuidados de enfermería al paciente con diabetes mellitus

A podiatria clínica no planejamento de assistência de enfermagem direcionada ao paciente portador de diabetes mellitus

Cibele Barbosa Lima¹

ORCID: 0000-0001-5455-4883

Selma Conceição Gil^{1*}

ORCID: 0000-0001-8769-3900

Francisca Célia da Silva¹

ORCID: 0000-0001-5710-4765

Vania Declair Cohen¹

ORCID: 0000-0003-2699-2717

¹Centro de Treinamento Ellu Brasil. São Paulo, Brazil.

*Corresponding author: E-mail: selma-gil@hotmail.com

Abstract

The aim was to emphasize the importance of clinical podiatry in planning nursing care for patients with diabetes mellitus. This is a bibliographic review, with a narrative character and a descriptive approach, with emphasis on the Systematization of Nursing Care (SAE), using articles published in indexed journals about patients with diabetes and clinical podiatry. The research was relevant to contribute to specific care for patients with diabetes mellitus at risk and patients with injuries resulting from foot complications. It is concluded that the SAE focused on the feet of patients with diabetes mellitus becomes significant to avoid injuries and, consequently, irreversible complications such as amputations. Clinical podiatry is a modality of treatment and specific care for the nursing staff that aims to develop care planning aimed at patients with diabetes mellitus.

Descriptors: Nursing Care Systematization; Clinical Podiatry; Diabetes Mellitus; Diabetic Foot; Nursing Care.

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Resumén

El objetivo fue resaltar la importancia de la podología clínica en la planificación de los cuidados de enfermería al paciente con diabetes mellitus. Se trata de una revisión bibliográfica, de carácter narrativo y abordaje descriptivo, con énfasis en la Sistematización de la Atención de Enfermería (SAE), utilizando artículos publicados en revistas indexadas sobre pacientes con diabetes y podología clínica. La investigación fue relevante para contribuir a la atención específica de pacientes con diabetes mellitus en riesgo y pacientes con lesiones derivadas de complicaciones en los pies. Se concluye que el SAE enfocado en los pies de pacientes con diabetes mellitus se vuelve significativo para evitar lesiones y, consecuentemente, complicaciones irreversibles como amputaciones. La podología clínica es una modalidad de tratamiento y cuidados específicos para el personal de enfermería que tiene como objetivo desarrollar una planificación de cuidados dirigida a los pacientes con diabetes mellitus.

Descriptor: Sistematización de la Atención de Enfermería; Podología Clínica; Diabetes Mellitus; Pie Diabético; Cuidado de Enfermería.

Resumo

Objetivou-se enfatizar a importância da podiatria clínica no planejamento da assistência de enfermagem aos portadores de diabetes mellitus. Trata-se revisão bibliográfica, de caráter narrativo e abordagem descritiva, com ênfase na Sistematização de Assistência de Enfermagem (SAE), utilizando artigos publicados em periódicos indexados sobre pacientes portadores de diabetes e podiatria clínica. A pesquisa foi relevante para a contribuição nos cuidados específicos aos portadores de diabetes mellitus com risco e portadores de lesões decorrentes de complicações nos pés. Conclui-se que a SAE focada nos pés dos pacientes portadores de diabetes mellitus se torna significativa para evitar lesões e, consecuentemente, complicações irreversíveis como amputações. A podiatria clínica é uma modalidade de tratamento e cuidados específicos do corpo de enfermagem que visa elaborar planejamento de assistência direcionado aos portadores de diabetes mellitus.

Descritores: Sistematização de Assistência de Enfermagem; Podiatria Clínica; Diabetes Mellitus; Pé Diabético; Cuidados de Enfermagem.

Introduction

The nursing process (NP) is a method characterized by the Systematization of Nursing Assistance (SAE) that began in its implementation in the 70s, but only in 2002, SAE was implemented in Brazil by Wanda de Aguiar Horta with the legal support of the Federal Council of Nursing (COFEN), according to Resolution No. 272, determining the implementation of Brazilian health institutions nationwide. The identification and need for implementation faced several difficulties by the nursing team, a diagnosis made by the Regional Nursing Council (COREN - SP), after several inspections in various health institutions, it was detected that 65% of the institutions did not know how to implement the SAE, 38% were in the implementation phase, 15% were reluctant and 10% were prevented by the institution¹.

COFEN's proposal is the implementation of SAE by institutions based on technical-scientific knowledge with the aim of providing adequate, humanized care for patients. An institution that presents the SAE properly can perform a work based on an organized philosophy with a mission in its objectives of improvement in nursing care¹.

For an effective SAE implementation, nurses need to seek theoretical-practical training according to the particularities and individualities of each medical diagnosis. It is essential to plan the NP by the nurse, respecting the difficulties and peculiarities of the team, aiming at breadth and coherence to carry out a safe and effective process. Adequate practice in the use of SAE contributes to several

important points in comprehensive patient care. From the moment of the beginning of the implementation to the current period, there has been an important beneficial evolution in the NP, with better results in relation to the need and direction associated with the medical diagnosis^{1,2}.

Currently, several institutions use computerized SAE, optimizing time with improved description of the entire process and better quality of care. The SAE process is a laborious step at the time of implementation and, mainly, during follow-up. The NP is not assigned to an individual institutional option, it has become a mandatory practice according to the regional nursing councils (COREN) and COFEN^{1,2}.

The SAE, defined by specialty, characterizes the complexity of specific care aimed at patients with complex, chronic diseases associated or not with comorbidities. In view of several studies and the degree of need, the SAE evolved according to the needs, with important adjustments focused on the importance of individual care planning. Patients with diabetes mellitus (DM), with or without lesions, gained prominence about the importance of individualized nursing care, due to the severity, evolution and significant increase in annual cases. Elaborating the SAE directed to the patient with DM guarantees the quality of life and avoids mild and serious complications. Accompanying, monitoring and guiding about the risks of the disease are part of the nurse's role. The health education process, as a health technology, needs to be bilateral, that is, the nurse



needs important information, specific knowledge and connection with the patient, to maintain adherence to treatment, social interaction and self-care^{3,4}.

The diabetic foot is characterized by a multifaceted pathophysiological state resulting from lesions that arise as a result of peripheral neuropathy and deformities. Injuries are usually caused by trauma and with severe complications. When the patient with diabetes mellitus requires hospitalization to treat complications developed by the disease, the hospitalization period extends for a longer period compared to patients affected by the same diagnosis with no complications^{5,6}.

The risk factors of patients with lesions increase according to the impairment, and may progress to amputation and reduced survival. Amputations occur as a result of ulcers, characterized by skin lesions with loss of the epithelium, reaching the dermis, reaching the deeper tissues and in some cases reaching the bone part^{5,6}.

The development of the diabetic foot and the complications resulting from this event have become a challenge for nursing, understanding the extreme needs for evaluation and conduct. When citing the SAE, as the PE individually, complications from DM need to be avoided with planning and knowledge of simple tests that can be introduced in PE to avoid peripheral neuropathy. Specific exams to control complications in the diabetic foot are low cost and easy to understand and can be performed through the PE exam. The most used tests are: monofilament 10 g associated with the tuning fork, loss of protective sensitivity (PSP), the tibial brachial index (ABI) and the presence of Peripheral Arterial Disease (PAD)⁷.

The evaluation of the diabetic foot needed improvements over time. In Brazil, clinical podiatry is little publicized in the nursing service, many are still unaware of the specialty that has timidly increased the interest of some professionals and the dissemination of some educational institutions. In 2007, nurse Vera Ligia was the forerunner of the modality in Brazil, a new reality to implement care and treatment. The specialty remained dormant for a while, after a long period it was awakened as an important need for prevention. Clinical podiatry is a method of tracking, promoting and preventing foot complications in patients with diabetes with or without injury. The planning of care for people with diabetes needs to be effective, it requires technical-scientific knowledge for its development.

The nurse working in clinical podiatry has an important commitment in the daily life of the diabetic patient, who will become the reference in the follow-up with welcoming strategies, easy-to-understand guidance according to the patient's profile, encouraging self-care and disease control, reducing considerably the risks of complications from complications arising from the feet. Knowledge can be acquired through training, qualification and specialization courses⁸.

Thus, the present study aimed to emphasize the importance of clinical podiatry in planning nursing care for patients with diabetes mellitus.

Methodology

The study was carried out through a bibliographic survey focusing on clinical podiatry, using the Google Scholar database. To carry out the search, the following Health Sciences Descriptors (DeCS) were used: "Clinical Podiatry", "Nursing Care for Diabetic Foot", "Systematization of Nursing Care". According to the theme and search strategy, the period from 2018 to 2021 was selected for the published studies, with the keyword "Nursing Care in Patients with Diabetic Foot" 4,470 articles were found and 06 articles were considered; with the keyword "Systematization of Nursing Care" 15,900 articles were found, considered 07 articles; with the keyword "Clinical Podiatry", 27 articles were found, only 01 were used due to relevance. It was observed that there is a deficiency of articles related to the topic.

Results and Discussion

DM is a disease considered a public health concern, currently, there are approximately 415 million people with DM. By the year 2040, more than 227 million people are expected to have the disease. The impact of the disease will lead to millions of deaths and amputations. It is estimated that there are approximately 14.3 million Brazilians with DM, with this, Brazil becomes the fourth country with the highest number of people with the disease. The structure in Brazil for planning support in terms of prevention of complications related to DM is inefficient due to several factors, including specific services to guide the importance of prevention programs, development by nursing professionals of simple and effective tools⁶.

Diabetes is the disease that causes the greatest impact on the quality of life of patients and the performance and commitment of health professionals are infinite and permanent education to maintain balance, considering other comorbidities that are relevant to the risks of complications being more potentiated^{5,6}.

In up to 6%, diseases caused by DM affect the feet, such as infectious lesions, tissue destruction, affecting the quality of life, disrupting social life and livelihoods. The patient with diabetic foot affected by lesions is 0.03% to 1.5% will need amputation. The lack of care, guidance and monitoring of this patient profile will corroborate the significant increase in repeat amputation in the same limb. The SAE with the inclusion of clinical podiatry would avoid the involvement of the diabetic foot with better cost and greater benefit. The cost of treating DM complications is considered extremely high for the Unified Health System^{1-3,7-10}.

Nursing has a fundamental role in program development, guidance and supervision in complications programs in patients with diabetes. The wounds caused as a result of diabetes are difficult to heal with significant evolution¹⁰.

Clinical podiatry associated with SAE, focusing on anamnesis, patient history, physical examination with greater attention to the feet, prescribing care, oriented patients with continued supervision and complementary exams - such as 10 gr monofilament, tuning fork, ITB -, there will be a significant reduction in complications. The



importance of the podiatric service developed by the nurse, whether in the public or private service, is the consistency of the balance in the safety assessment offered to the patient with DM, avoiding complications due to injuries, amputations and early deaths^{6,9}.

The patient needs to be aware of the importance of preventive care. Hydration, balanced diet, control of comorbidities, strict control of capillary blood glucose, adequate footwear, the risks of harm resulting from alcohol and tobacco abuse. Podiatric nursing needs a scientific basis to successfully develop the care technique⁹.

To this end, nurses need to follow their care purpose and the exercise of the profession by updating themselves so that, thus, their assistance, the implementation of the NP is based on a theoretical framework that translates care, enabling a holistic view, humanized care and individualized, paying attention to the biopsychosocial needs of the individual, as it is the individual with DM with foot complications, and not just "feet". Under the care and NP context, it is emphasized that nursing diagnoses and interventions have several classification systems, such as the North American Nursing Diagnoses Association-NANDA International Taxonomy⁶.

In a study⁶ performed after assistance to an individual with diabetic foot, the following nursing diagnoses were verified: Risk of Unstable Glycemia related to insufficient control of diabetes, evidenced by a verbal report of not using the prescribed drugs; Sedentary lifestyle related to daily physical activity lower than recommended for gender and age, evidenced by verbal reports of not performing physical activity; Ineffective coping related to risk-taking behavior, evidenced by not looking for the Health Unit to renew revenue; Impaired skin integrity related to alteration in skin integrity, evidenced by a left diabetic foot

type lesion; Risk of infection related to invasive procedure (left foot injury); Disturbance in body image related to the absence of part of the body (left toes); Low situational self-esteem related to negative self-talk, evidenced by discouragement and loss of hope for improvement; Self-negligence related to insufficient oral hygiene, evidenced by the presence of caries in the teeth; Impaired physical mobility related to the reduction in gross motor skills, evidenced by the use of crutches; Risk of metabolic imbalance syndrome related to elevated blood glucose levels. It appears that clinical podiatry opens a new horizon of perspective and specialty to care for the individual with diabetic foot, having its scientific basis for diagnosing primary and secondary causes, rehabilitating and restoring the patient's quality of life, dependence and self-esteem.

Conclusion

Considering the epidemiology of diabetes in Brazil, the most effective and best-return programs to improve the quality of life of DM patients would be the promotion, prevention, guidance, education and tracking of the disease's evolution. The nurse with knowledge in clinical podiatry chooses a permanent and satisfactory bond with patients with or without complications, due to the property of knowledge that the specialty provides. Clinical podiatry associated with thorough SAE plays a fundamental and effective role in the prevention of venous neuropathies, PSP and PAD.

It is emphasized that, as a limitation of the study, there was a minimal amount of publications available on the subject addressed here, which is a gap to arouse the interest of the academy and of the assistant professionals for the continuation of research in this so rich and promising area of the clinical podiatry.

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