PERFORMANCE OF NURSING TECHNICIANS OF THE BASIC HEALTH CARE IN DIABETIC CARE TO THE PATIENT

ABSTRACT

Objectives: assessing the role of the nursing technician in the care of the diabetic patient. Jointed in Basic Health Care; identifying the guidance of the nursing technicians provided to diabetic patient Jointed in Basic Health Care on foot care. Method: an exploratory and descriptive study with a qualitative approach conducted with 40 nursing technicians of primary care in the city of João Pessoa/Paraíba/Brasil, from a form used during the interviews. The data were analyzed using the technique of the Collective Subject Speech. The research project was approved by the Research Ethics Committee, CAEE 03459112.1.0000.5188. Results: there was a significant contribution of the nursing technicians in the care of the diabetic patient in primary care by monitoring and guidance. Conclusion: the contributions of the technicians provide a reduced risk for the development of complications arising from diabetes mellitus. Descriptors: Nursing; Diabetes Mellitus; Health Education.

RESUMO


RESUMEN

Objetivos: evaluar el papel del técnico de enfermería en el cuidado de usuario diabético. Registrado en los Centros de Atención Primaria; Identificar la orientación del personal de enfermería prestados al usuario diabético. Registro en la Atención Primaria de Salud en el cuidado de los pies. Método: un estudio exploratorio y descriptivo en enfoque cualitativo, realizado con 40 técnicos de enfermería de atención primaria en la ciudad de João Pessoa/Paraíba/Brasil, a partir de un formulario que se utiliza durante las entrevistas. Los datos fueron analizados utilizando la técnica del Discurso del Sujeto Colectivo. El proyecto de investigación fue aprobado por el Comité de Ética de Investigación, CAEE 03459112.1.0000.5188. Resultados: se observó una importante contribución de los técnicos de enfermería en el cuidado del usuario diabético en atención primaria mediante la supervisión y orientación. Conclusión: las aportes de los técnicos proporcionan un menor riesgo para el desarrollo de las complicaciones derivadas de la diabetes mellitus. Descriptores: Enfermería; Diabetes Mellitus; Educación para la Salud.
INTRODUCTION

Seen today as a worldwide epidemic, diabetes mellitus (DM) makes up the group of non-communicable chronic diseases and is associated with microvascular and macrovascular complications with high morbidity and mortality, as in the case of kidney failure, lower limb amputation, blindness and cardiovascular disease.1-2

It is estimated that, worldwide, by 2025, 333 million people will present positive diagnosis for DM, configuring itself as a major challenge to health systems. In addition, diabetes causes negative effects on human, social and economic side impacts, since four million deaths a year are determined by this disease and its complications, representing 9% of total deaths.1,3

Among the chronic complications of DM stand out relating to the feet, through the development of diabetic foot which can lead to non-traumatic amputations, which represent one of the most incriminating problems associated with the disease, causing loss of productive capacity. This health problem is among the top ten causes of death in most countries, generating early deaths could be prevented.4,5

In people with diabetes, foot ulcers are characterized by cutaneous lesions with loss of epithelium, which extend into the dermis, may cross it and reach deeper tissues, reaching bones and muscles; commonly, ulcers precede 85% and amputations are the result of combining two or more risk conditions that act simultaneously, of which peripheral neuropathy is the most important. Thus, it is understood that prevention efforts can contribute to decrease the prevalence of injuries and amputations.5

Preventive actions should be taken to reduce the number of people with diabetes who may have lost limbs, because the procedure related to amputation generates expensive costs to the health sector as well as irreversible damage to people who undergo this intervention. Therefore, the importance of its prevention has become increasingly because time and expense are minor compared with the major hospital and drug costs generated by the treatment, as well as lower physical and psychosocial wear for the patient and their family.6

The prevention of complications arising from diabetes mellitus has been a priority for public health, using as the main strategy to health education that can help to reduce the high prevalence of complications in people with diabetes, since educating users with DM may have a fundamental role the encouragement and support to take on the responsibility for controlling the diary of her health condition.7

It is understood that the family health, understood as a reorientation of the health care model that provides actions for health promotion, prevention, recovery, rehabilitation of diseases plays a fundamental role in the diabetic patient care strategy because it requires continuous care, continuing education and support to prevent acute complications and to reduce the risk of chronic complications.1,8

The nursing team composed of nurses and nursing technicians, into the context of a multidisciplinary team that makes up the FHS plays a fundamental role, as they have assignments that include technical procedures, holistic and comprehensive care to the diabetic patient.1,9

The nursing staff are a significant number of workers in the health services, and in Nursing, represent the largest workforce.10 However, few studies in the literature investigating how the practice of these professionals has proceeded ahead to care for the diabetic patient, hence the development of this study, since the activities of nursing staff may serve as a strategy for reduce the negative impacts of DM and thus contribute to improving the quality of life of diabetics.

OBJECTIVES

• Ensuring the participation of the nursing technician in the care of diabetic User Joined in Primary Care Health
• Identifying the guidelines of nursing technicians provided to diabetic User Joined in Primary Health Care on foot care.

METHOD

The present study was taken from the Final Report of the Research Project of Scientific Initiation/CNPq/PIBIC/UFPB << Process of Taking Care of Diabetic Patients in Primary Care Registered in João Pessoa >>, effective in August from 2012-2013.

This is an exploratory and descriptive study with a qualitative approach conducted in the Family Health Units in the city of João Pessoa/Paraiba/Brazil of Health District III, which makes up the largest district from the five health districts of that locality. The period of the study occurred between the months of May to July 2013.

The population consisted of 66 nursing technicians who make up the multidisciplinary teams of the Family Health Strategy. To select
the sample, we adopted the non-probabilistic, being elected accessibility\textsuperscript{11}, where subjects were selected according to the following inclusion criteria: have at least one year of work in the Family Health Unit (FHU) and be USF present in the period of data collection, the following exclusion criteria: having less than a year of work at USF and was not present at said location during the data collection. Thus, the study sample consisted of 40 nursing technicians.

In order to make the collection of data from the nursing staff, was first kept in touch by phone with the matrix of USFs supporters or even the professionals themselves, when possible, to schedule the day and time most conducive to such activity.

To enable production of empirical material interview was conducted with average thirty minutes each, using as instrument a form previously constructed, containing subjective questions about the role of nursing staff in the care of diabetic user, which were recorded their responses. The interview was conducted in the workplace professional cited with private environment where there was no interference, ensuring tranquility so that the issue of responses.

The data produced were analyzed qualitatively using the technique of discourse analysis of the collective subject, using as central figures methodological ideas and collective subject discourse.\textsuperscript{14} This is a technique for organizing data that enables rescue discursive understanding of a given phenomenon in a given universe. This technique is operationalized in four steps listed below:

First stage - key expressions are selected for each individual speech obtained from each subjective question proposed for studies.

Second stage - corresponds to the identification of the core ideas that each of the participants involved in the study presented in his speech and key phrases for each response of a given issue, thus forming a summary of the content of these expressions.

Third stage - the grouping of similar or complementary core ideas, involving the same answers to a particular question, it literally transcribing the terms used by the participants of the research occurs.

Fourth stage - comprises the structuring of speech synthesis, speech or collective subject, by grouping similar central ideas, which represents a single speech, as if everyone had been uttered by one individual.

It is noteworthy that to characterize the sample studied variables were considered: gender, age, length of service and time of work in that workplace. The data were processed using the software Statistical Package for Social Sciences (SPSS) version 20.0.

For the procedure for conducting the study, were included ethical observances of regulatory guidelines for research involving human subjects - Resolution 466/12 of the National Council of Health\textsuperscript{12} and Resolution 311/2007 of Federal Board of Nursing\textsuperscript{13}, especially with regard the informed consent of participants, confidentiality and data privacy.

The research project was approved by the Ethics Committee in Research of the Center for Health Sciences, Federal University of Paraíba, CAEE 03459112.1.0000.5188, as also authorized by the Municipal Health Department, according to Case No. 06871/2013.

RESULTS AND DISCUSSION

The study included 40 nursing technicians (NT), with thirty-seven (92.5%) females and three (7.5%) males, aged between 20 and 62, with average and standard deviation 41,15 ± 10,91 years; profession time with mean and standard deviation of 13,23 ± 9,83 years and time of experience in that workplace with mean and standard deviation of 4,75 ± 3,97 years.

With regard to nursing care of the NT to the diabetic user, the following question was made: “Being a nursing technician, how do you take care of the diabetic user?” This question gave rise to two main ideas (IC), with their respective speeches collective subject (DSC): Central Idea 1 - Guidelines that address non-pharmacological and pharmacological treatment for diabetes mellitus, as well as on hygiene and foot care, and Central idea 2 - Technical Procedures nursing.

Central Idea 1 - Guidelines that address non-pharmacological and pharmacological treatment for diabetes mellitus, as well as on hygiene and foot care - Collective Subject Speech:

Guiding in feeding care [...] such as not eating sweets, fats [...] eating every three hours. I also find important guidance on foot care on hygiene [...] without forgetting the achievement of physical activities such as walking, also talk about medication that should be controlled properly taken [...] on time. As well as, participate in care of diabetic patients when step information about their disease [...] clarifying doubts, within my knowledge, about their entire treatment [...] Always be ready to listen to your questions. Yet I guide on the...
Oliveira PS, Costa MML, Bezerra EP et al.

The Discourse of the Collective Subject of participants enrolled in the study, expressed in Central Idea 1, shows that NT believe that caring user with DM can be accomplished through guidance, particularly with regard to drug treatment - proper use of medication, and non-pharmacological treatment - proper nutrition and regular physical activity.

This is a positive finding, since a study in João Pessoa/Paraíba revealed that diabetic users of primary care have limited knowledge in relation to the DM, but also the means to control such chronic disease, which can provide the emergence of complications.15

Thus, the orientation is presented as a tool that allows the technician to promote nursing care through health education at the time; it provides patients the knowledge and the means to control the DM, contributing to the prevention of injuries arising from said chronic disease. Once to provide guidance in this patient, prevention is also promoted because it stimulates it a disseminator of information, and allow the person affected, greater participation in decisions and actions relating to their health, as well as promotion of self-care.16-17

Corroborating this finding, the literature shows that the best way to prevent the complications of diabetes is prevention, being mainly to nursing professionals the important role of caring, periodically monitor and guide the DM patients, their families and community at large about the importance of foot care, proper nutrition, regular practice of physical exercise and the need for glycemic control, to achieve a healthier life.18

From the perspective of the patient and the health professional, the treatment of diabetes is complex and difficult to be realized, which has caused difficulties in controlling the disease.19 Therefore, it is emphasized that the strategies of health education should be participatory nature, because the educational actions influence the lifestyle, improve the social and physical environments and interpersonal relationship between practitioner and patient. In addition, health education, based on dialogue, ie, exchange of knowledge, fosters the understanding of this relationship in the health-disease process and, respectively, the exchange between scientific knowledge and popular knowledge.20

Central Idea 2 - Procedures of nursing technicians - Collective Subject Speech:

Upon the coming of the user to the FHP, my professional category have their specific technical procedures, ie, check weight, blood glucose, waist circumference and blood pressure at least once a month, also do the healing wounds of people who have diabetic foot; [...] administer insulin.

Regarding the DSC shown in IC 2, it was demonstrated that NT indicate the technical nursing procedures as a way to provide care for diabetics users, which shows that these professionals follow the suggestions of the last notebook of Primary Care paragraph 16 Ministry of health5 for their assignments professions, among them: check levels of blood pressure, weight, height and waist circumference in people’s spontaneous demand of the health unit; advise patients about self-monitoring (CBG), and injection technique insulin.

One can understand that the technical nursing care to participate in the afflicted person DM through health education, as well as through nursing care, which contributes to adherence, as the main factors involved in adherence treatment are related to knowledge, adequate assistance, personal motivation for seeking better health, and obtaining glucose control through changes in lifestyle habits.21

About the Guidelines on foot care, was asked to nursing staff: “What you offer guidance to users on diabetic foot care?” This question originated five core ideas, with their corresponding DSC: Central Idea 1 - Wearing shoes that protect the feet, Central Idea 2 - Inspection of the feet, Central Idea 3 - Hygiene and moisturizing the feet, Central Idea 4 - Nail Care and Central idea 5 - Prevention of injury.

Central Idea 1 - Wearing shoes that protect the feet. Collective discourse:

So they do not walk barefoot; [...] should always walk shoes with comfortable, suitable and closed shoes, [...] protecting the feet of stumbles, scratches and wounds [...] to avoid getting hurt, consequently, there are no complications regarding healing.

Central Idea 2 - Inspection of the feet. Collective discourse:

Inspect your feet daily, including the area between the toes. Search cracks, blisters, swelling, injury, any color change, [...] sensitivity. Whenever a wound appears, however small he (user) seek help from a professional health care for that injury is unlikely to have complications.

Central Idea 3 - Hygiene and moisturizing the feet. Collective discourse:

Always keep your feet clean by washing well with soap and water, [...] making proper
hygiene; [...] then has to dry well, especially between the toes, so that your feet do not get wet. I also guide that it is important that after putting moisturises, [...] oil at least once a day, to keep them hydrated feet, [...] preventing dryness.

Central Idea 4 - Nail Care. Collective discourse:

Be careful with the nails [...], keeping them clean and to cut, take care to leave them always straight; [...] avoid removing cuticles and never use pliers; [...]. And if you can always prefer sanding nails to cut them, [...] when the pedicure, reporting that she is diabetic to be more careful when doing nails.

Central Idea 5 - Prevention of injury. Collective discourse:

I tell them that observe due caution to avoid stumbles, falls, because the healing of diabetic is not easy and it deserves proper attention, [...] so I say to be very careful and not get hurt.

The legs are one of the most vulnerable regions of the body in people with DM. In this sense, it is understood the need for attention to the foot care, since studies show that over 10% of people with diabetes are prone to develop foot ulcers at some point in their life.22

Speeches presented by the nursing staff in the IC 1, 2, 3, 4 and 5, through guidance, recommend the necessary care that people with diabetes must develop in order to prevent the appearance of wounds and thus avoid complications.

Agreeing with the findings of this study, the literature points out that people with diabetes must know the mechanisms that can cause injury to the feet in order to become aware of the need to care for your feet, through measures of hygiene, hydration and protection with footwear appropriate, as well as through daily inspection of feet in search of signs of injury, without forgetting the inspection of the inside of shoes before using them.20

The nursing technicians can help to prevent one of the most disabling chronic complications resulting from poor control of DM, which is called "diabetic foot", which are foot ulcers of diabetic patients that occur as a result of neuropathy, vasculopathy and deformities, which associate and influence each other. Neuropathy is to decrease thermal and pain sensitivity loss as a mechanism for protection against traumatic injuries. The vasculopathy arises upon responsible for altering the microcirculation microangiopathic lesions, causing poor circulation to peripheral tissues and the deformities are from mechanical stress. These lesions, which are usually due to trauma, complicated by infection, often having as a gateway cracks and interdigital mycosis, and can end in amputation if treatment is not timely and adequate.19

The program of diabetes education aims to increase knowledge about the disease, develop skills for self-care, encourage changes in behavior, providing support to solve daily problems from this disease and prevent acute and chronic complications.23 However, the majority of diabetic foot related problems are preventable through health education of the user and their families, as the literature shows that when there is increased knowledge, is proven to reduce, even minimal, risk ulceration and amputation.24 25

CONCLUSION

This study enabled us to identify the relevant contribution of the nursing staff in the care of diabetic user in primary care, since their discourses revealed care focused on health education, and for nursing care as much, which gives the reduced risk for development of complications arising from the DM.

The nursing staff also had important role in the prevention of complications; especially those occasioned in the lower limbs, which provide a reduction of the negative impact on the biopsychosocial, spiritual and economic aspects of the diabetic foot, especially non-traumatic amputations, results in life diabetic user. Thus, it is evident the importance of health professionals in the context of a multidisciplinary team of family health strategy.

It is necessary that these professionals undergo frequent training for exercising their care process of becoming qualified manner, providing improved care for diabetics. For this to be achieved, we need more attention from the municipal health management for these professionals, with regard to the valuation profession and the provision of continuing education, which often is geared only for nurses, technicians leaving nursing background.

Limited literature was found regarding the care of nursing staff in primary care which points to the importance of studies that focus on the role of these professionals, both in hospitals and in the context of primary care process, especially with regard care to people affected by diabetes mellitus.

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