



NURSE ORIENTATIONS TO THE ELDERLY WITH DIABETES MELLITUS: PREVENTING INJURY

ORIENTAÇÕES DO ENFERMEIRO AOS IDOSOS COM DIABETES MELLITUS: PREVENINDO LESÕES ORIENTACIONES DEL ENFERMERO PARA ANCIANOS CON DIABETES MELLITUS: PREVENCIÓN DE LESIONES

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ABSTRACT

Objective: to analyze the guidelines of the Nurses of the Family Health Units to the elderly with Diabetes Mellitus in the prevention of skin lesions. **Method:** it is a qualitative, descriptive, exploratory study with seven nurses, through an interview, using a semi-structured instrument, and for the analysis, the technique of Content Analysis was used in the category Categorical Analysis. **Results:** it was evidenced that there are deficits regarding the method of evaluation and orientation to the care of skin lesions during Nursing consultations as well as strategies of involvement of the family in the participation of this care in the description of the categories. **Conclusion:** it is understood that the nurse needs to have a good theoretical-practical knowledge so that, together with the family and the multiprofessional team, it can promote the care that is due to these patients, intervening positively and reducing the risk of developing lesions and skin problems. **Descriptors:** Nursing; Health of the Elderly; Diabetes Mellitus; Skin; Primary Health Care; Guidance.

RESUMO

Objetivo: analisar as orientações dos enfermeiros das Unidades de Saúde da Família aos idosos com Diabetes Mellitus na prevenção de lesões na pele. **Método:** trata-se de um estudo qualitativo, descritivo, exploratório, com sete enfermeiros, por meio de uma entrevista, utilizando um instrumento semiestruturado, e para a análise, empregou-se a técnica de Análise de Conteúdo na modalidade Análise Categrórica. **Resultados:** evidenciou-se que existem *deficits* quanto ao método de avaliação e orientação aos cuidados de lesão na pele durante as consultas de Enfermagem como, também, estratégias de envolvimento do familiar na participação desse cuidado na descrição das categorias. **Conclusão:** entende-se que o enfermeiro precisa ter um bom conhecimento teórico-prático para que, junto com a família e a equipe multiprofissional, venha promover o cuidado que é devido a esses pacientes, intervindo positivamente e diminuindo o risco de desenvolvimento de lesões e problemas na pele. **Descritores:** Enfermagem; Saúde do Idoso; Diabetes Mellitus; Pele; Atenção Primária à Saúde; Orientação.

RESUMEN

Objetivo: analizar las orientaciones de los enfermeros de las Unidades de Salud de la Familia para ancianos con Diabetes Mellitus en la prevención de lesiones cutáneas. **Método:** se trata de un estudio cualitativo, descriptivo, exploratorio con siete enfermeros, a través de una entrevista, utilizando un instrumento semiestructurado y, para el análisis, se utilizó la técnica de Análisis de Contenido en la modalidad de Análisis categrórico. **Resultados:** se evidenció que existen deficiencias en cuanto al método de evaluación y orientación a los cuidados de lesiones cutáneas durante las consultas de enfermería, así como a las estrategias de involucración de la familia en la participación de este cuidado en la descripción de las categorías. **Conclusión:** se entiende que el enfermero necesita tener un buen conocimiento teórico y práctico de modo que, junto con la familia y el equipo multiprofesinal, venga promover el cuidado que se debe a estos pacientes, interviniendo positivamente y disminuyendo el riesgo de desarrollo de lesiones y problemas en la piel. **Descriptores:** Enfermería; Salud del Anciano; Diabetes Mellitus; Piel; Atención Primaria de Salud; Dirección.

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How to cite this article

Santos MKS, Martins KP, Santos MCS dos, Lins WGS, Freitas RSC, Ferreira FÂ, *et al.* Nurse' orientations for the elderly with diabetes mellitus: preventing injuries. J Nurs UFPE on line. 2019;13:e240074 DOI: <https://doi.org/10.5205/1981-8963.2019.240074>

INTRODUCTION

Aging is a process of transformation that naturally brings with it physiological, morphological, functional, psychological and biochemical modifications that make the individual need a multi-professional look and individualized health care in the prevention of some pathologies during the course of their old age.¹

It is known that many people, when they reach senile age, acquire certain pathologies that may make them feel fragile and that their routine of daily life is modified by certain habits that they had in their youth and in adulthood, for example, sedentary lifestyle, obesity, inadequate eating habits, social changes, among others, and such habits end up favoring the development of several chronic diseases, among them Diabetes Mellitus (DM).²

It is noteworthy that DM is a chronic disease that refers to an aspect of metabolic disorder syndrome, being classified as types 1 and 2, and the latter has a higher prevalence among the elderly, as it is characterized as degrees of deficiency and resistance to the action of insulin, which is a hormone secreted by the pancreas with important function in the metabolism of carbohydrates in the blood.¹

It is necessary to watch carefully the elderly person with DM by the family and also by the health team for which he/she is cared for. Most of the assistance is provided by the Family Health Strategy (FHS). It should be the multiprofessional team and especially the nurse, take a lot of care with the elderly to ensure a life of quality and daily pleasure, without suffering and without their unbalanced health.³

In this perspective, these professionals need to be careful, since, in addition to the pathology, there is the process of natural aging, which will make the skin less elastic, dry and more sensitive, and may develop lesions. It is also added that the skin is the largest and most visible organ of the human body, and is also responsible for protection, excretion, temperature regulation, support, sensory perception, vitamin D metabolism, secretion, communication, homeostasis, absorption and identification.⁴

It is warned that skin dryness can easily happen if the patient is dehydrated, predisposed to the appearance of cracks in the skin; so it is important to have a very detailed physical examination, intervening with guidelines on the importance of liquid intake, hydration of the skin and hygienic care with their body.⁵

It is therefore advised that the skin of the elderly needs a careful look, since the risk of injury to this age group increases due to the decrease of the skin barrier as well as the difficulty of perceiving aggressive and traumatic

stimuli by the sensory receptors due to age and vascular disease.⁴

It is understood, based on this understanding, that the nurse should develop educational activities so that the user, family members or caregivers will know how to deal with this pathology and what health problems it can cause. It is advisable to raise awareness about the need for consultations, glycemic tracing, approach to risk factors, guidance on lifestyle change and drug treatment and, moreover, to explain clearly and comprehensively the family or to the caregiver of the elderly, what he or she has to do so that this individual does not trigger more serious health problems and does not develop lesions on their skin.¹

It should be pointed out that, due to the skin lesion being one of the main complications for the patient with DM and the elderly population being the most affected, research is needed on this subject in order to ensure that the nursing professional performs a more effective intervention with regard to care and specific guidelines for the prevention and treatment of skin lesions to that individual.

OBJECTIVE

- To analyze the guidelines offered by FHS nurses to the elderly with Diabetes Mellitus in the prevention of skin lesions.

MÉTHOD

This is a qualitative, descriptive, exploratory study carried out at the Family Health Units (FHU) in the city of Pitimbu, Paraíba, Brazil. The population of the municipality was estimated, in 2015, by IBGE, in 18,685 inhabitants, distributed in 136 km². The municipality was composed by seven FHU's that serve the population.

The study population was composed by the nurses working in the FHUs of the municipality of Pitimbu-PB, and the sample was composed of all FHU nurses from that municipality, totaling seven professionals. As part of the sample, the ones that were present at the time of collection were included and the non-FHS nurses were excluded. Data was collected in the period from September to October 2017.

The data was collected through an interview with a semi-structured instrument, containing, in its first part, data related to the characterization of the sample: sex, age, training time and specialty. It is reported that the second part has five subjective questions that met the objectives of the study. The interviews were recorded with the aid of a mp4 device and, later, there was the transcription to better analyze the subjectivity.

The analysis of the data was constituted through the use of the technique of Bardin ⁶, we also used a biostatistical program (excel) and organized the data into four categories describing

the reports of the participants and relating them to the chosen categories, which were: 1 - guidelines during consultations with the elderly regarding skin care; evaluation of the skin during the consultations, 3- Interventions that are made when the elderly do not have autonomy for the self-care, and 4- Strategy for the participation of the family in the care. Participants were identified to ensure their privacy with letters followed by sequential numbers corresponding to the order in which the interviews were conducted.

They obeyed the guidelines inherent to the research protocol found in resolution 466/12 of the National Health Council (NHC), which regulates research involving human beings. This study was approved by REC / UNIPÊ with CAAE number 69078117.6.0000.5176. The written free and informed consent term (FICT) was read and signed by two participants, one copy being with the interviewee and the other with the interviewer.

RESULTS

It is reported that a total of seven nurses working in the FHS participated in this study and six were female, corresponding to 86%, while only one was male, corresponding to 14%; in the age group, prevailed between 31-40 years, with 42%; then between 20-30 years and 41-60 years, both with 29%.

Based on the analysis of the collected data, four pertinent categories were found that respond to the objective of the respective study, which were: Guidance given during consultations with the elderly regarding skin care; Evaluation of the skin during the consultations; Interventions that are made when the elderly do not have autonomy for skin care and strategies for family participation in care. The following categories are discussed below.

♦ CATEGORY 1: Guidance given during the consultation of the elderly regarding skin care

One sought to identify, in this category, how the nurse guides elderly patients with DM regarding skin care. Following are the main lines.

I advise that they always keep the skin moist but dry, be careful with the extremities, with food, with being overweight, checking the blood glucose, using insulin in the right dose [...]. (E1)

On the importance of skin hydration, fluid intake, healthy eating, use of sunscreen [...]. (E3)

Drink plenty of water and use moisturizer to the skin every day to avoid dehydration [...]. (E6)

Nutritional orientation, hydration, physical activity, smoking and alcoholism and medication control [...]. (E7)

It can be seen that nurses E1, E3, E6 and E7 make similar orientations, during consultations, on skin hydration, medication, water intake and food care. This effect is followed, following these guidelines, with the process of care through food,

medication and water intake, on the outside as the skin, leaving it stronger and more resistant and making it difficult for injuries to happen.

♦ CATEGORY 2: Method of evaluation of the skin during the consultations

One sought to investigate, in this category, the method that nurses use to evaluate the skin of the elderly during their consultations. Following are the main lines.

I have direct contact with the patient inspecting his skin and touching to feel as he really is [...]. (E2)

Through clinical examination, visual and palpable assessment [...]. (E3)

By touch and look [...]. (E6)

I tighten the skin, if it remains raised, it is diminished turgor. If you come back fast, the skin is normal [...]. (E7)

Method itself does not develop. I do not evaluate the elasticity of the skin [...] this care is not done with the elderly [...]. (E4)

From the reports cited by the participants, the evaluation of turgor and elasticity by means of inspection and palpation by E2, E3, E6 E4 and E7 are used to arrive at a result. It is reported that by coming in contact with the skin and getting closer to the patient, the bond will be larger.

♦ CATEGORY 3: Interventions that are made when the elderly do not have autonomy for self-care

One sought to evaluate, in this category, the interventions that nurses do when the patient does not have autonomy for self-care. Following are the main lines.

I will seek the help of the community health agent to get in touch with the person responsible for that elderly person. So that you can help me with this treatment. If they do not know how to perform the care, I call for me to teach an hour in the unit [...]. (E1)

Usually, I go in with the person who lives with him / her. Or the caretaker because he does not have his self-care [...]. (E2)

Visit the family of the elderly and call for longitudinal care with the family and the community health agent, with a weekly visit to observe any type of injury to the skin [...]. (E5)

It has been shown that E1 asks for help from another team member to make this contact with the family; E2 and E5 are in direct contact with the family member or primary caregiver so that they can intervene together in the care of this patient.

♦ CATEGORY 4: Strategy for family participation in care

It was investigated, in this category, how the strategy is used for the family to participate in care. Following are the main lines.

I ask that the family or guardian always come to the consultations [...]. (E1)

Through the guidelines and always look for positive feedback from the family [...]. (E3)

There is no method in itself towards relatives [...]. (E4)

Home visit and consultation with family member [...]. (E5)

It is understood, based on participants' answers, that some nurses use strategies in order to involve the relative in this care. E1, E3 and E5 refer only to guidance to family members during consultation and home visits, and E4 reports that there is no method in itself of strategy for family participation in care.

DISCUSSION

The health education offered by nurses is configured as an appropriate technology for the development of health promotion and the autonomy of the user, in a continuous, flexible and in dialogue with the broad aspects involved in the process of living with the DM so that can strengthen the individuals' ability to act to coexist with the disease with quality of life.⁷

It is argued, corroborating this aspect,⁸ that patients with DM need to be made aware of the importance of the guidelines given and understand that this is a commitment to be taken in the long term and that will contribute to their own quality of life. In this way, the nurse should advise on the daily observation of her skin, seeking to identify the presence of edema, erythema, callosity, discoloration, cuts or perforations and excessive dryness; and that, in the absence of such observation, a family member must do so.¹⁸

It is believed that the nurse is responsible for collecting the patient's history with DM, identifying, during consultations, risk factors and morbidities, assessing and performing physical examination of the skin and feet in order to prevent injuries and diabetic foot.⁹

It is inferred that although skin assessment requires theoretical-practical knowledge of the nurse, he is able to make the initial evaluation of the skin for guidance and preventive care for patients not to develop skin lesions or diabetic neuropathies. It is known that the care of the skin so that it does not develop lesions is a program of prevention and control of the disease that the nurse does.¹⁰

It is required, in the sense of intervention method of these professionals for the training or orientation of the patient with diabetes, much more than technical skills. It is also required skills that involve communication and affective relationship in caring and that the patient is aware of what a chronic illness is for the individual to have the knowledge, acceptance and capacity for self-care.¹¹

Among the interviewed nurses, there was a report with a deficit regarding the specific knowledge regarding the skin care of the elderly. Understanding the fragility of past care, it is understood that training is needed on the care given to diabetics in general and, especially, to the skin because, in addition to having a better

knowledge about the health of the elderly person, the skills are useful tools to change the profile of the elderly care attended by the FHS in that they stimulate a new innovative view of care of the professionals on what comes to be the care when being old.¹²

Self-care practices provide greater importance to health, since elderly patients acquire autonomy regarding their health, leading to improvements in quality of life.⁴

The family is constituted as a support network, being indispensable for the successful control and treatment of DM, and can contribute positively to promote well-being and improvement in the quality of life of the elderly.⁷ For this reason, it is essential to find the family member to participate in the Nursing consultations so that he can be inserted in the care of this patient, giving him a healthy lifestyle.¹⁶

It is explained that going to the home is an action given to the individual and family with the purpose of promoting comfort, quality of life and learning of self-care. In the development of home care, knowledge, responsibility, technical and pedagogical skills are involved, in which the nurse must be an ally of the family and the person with DM.¹³

Thus, the nurse plays a fundamental role as a member of the multidisciplinary team that works in the education of diabetic patients, since orientation to the patient and his family is a very important task; however, the joint action of several professionals involved as well as the community health agent (CHA) is a decisive strategy for a successful treatment.¹⁴

It should be noted that providing care for the health of an elderly person is an activity that requires knowledge, requires skills and abilities. It is necessary the caregiver or family member to adapt and coexist with the changes occurred in the life of the elderly, especially if he has a chronic illness like DM.¹⁵

It becomes, therefore, the support of the family in the consultations in the fundamental unit to understand the modifications that happen to the person who has this pathology, as well as the changes in the habits of life and food so that the health condition of the patient / user gradually improve to reach the goals.¹⁷

CONCLUSION

In this study, the orientations that the FHS nurses carry out in the consultations with the elderly with DM, in the prevention of skin lesions, and the strategies that are used for a qualified, preventive and resolute care in the care of these patients were analyzed.

It was evidenced, however, that there are deficits regarding the method of evaluation and orientation to the care of skin lesions during the Nursing consultations, as well as strategies of

involvement of the family member in the participation of this care, being necessary a specific training of these professionals.

It is considered that the FHS aims to develop educational health care actions for the elderly with DM, stimulating a healthy aging, through a professional and interdisciplinary team that will understand what the elderly need and what he can do according to their living conditions for promotion, diagnosis, treatment and rehabilitation, favoring the integration and organization that will be provided to the consulted user.

It is considered that the nurse inserted in the FHS has a very important role in caring for the elderly with DM, but, for this, it needs to have a good theoretical-practical knowledge so that, together with the family and the multiprofessional team, it will promote the care that is due to these patients, intervening positively and decreasing the risk of developing lesions and skin problems.

It is strongly contributed by this research to the guidelines on the prevention of Diabetes Mellitus in primary care, bringing with it a qualitative approach with relevant data for the construction and encouragement of future research on the subject.

REFERENCES

1. Batista MG, Melo RKA, Maximino DAFM, Silva PE, Lucena ALR, Vieira KFL. Diabetes mellitus: characteristics of nursing care and assistance to the elderly. *J Nurs UFPE* on line. 2014 Sept;8(12):4237-44. Doi: [10.5205/reuol.6825-58796-1-SM.0812201407](https://doi.org/10.5205/reuol.6825-58796-1-SM.0812201407)
2. Carneiro JA, Ramos GCF, Mendonça JMC, Costa FM, Caldeira AP. Prevalence and factors associated with frailty in non-institutionalized older adults. *Rev Bras Enferm.* 2016 May/June;69(3):408-15. Doi: <http://dx.doi.org/10.1590/0034-7167.2016690304>
3. Carvalho Filha FSS;Nogueira LT, Viana LMM. Hiperdia: adherence and perception of users accompanied by the family health strategy. *Rev RENE.* 2011;12(Spe):930-6. Doi: <http://dx.doi.org/10.15253/rev%20rene.v12i0.4380>
4. Lira ALBC, Sá JD, Nogueira ILA, Medeiros MDC, Fernandes MICD, Vitor AF. Kin integrity in older adults: literature review according to health promotion charters. *Cogitare Enferm.* 2012 Dec;17(4):767-74. Doi: <http://dx.doi.org/10.5380/ce.v17i4.30389>
5. Cruz RAO, Acioly CMC, Araújo AA, Arruda AJCG, Oliveira PS. Erosis skin in the elderly: the importance of nursing carespecialist. *Rev UNINGÁ* [Internet]. 2016 Sept [cited 2018 Sept 10];49:107-12. Available from: <http://revista.uninga.br/index.php/uninga/article/view/1296/915>

6. Bardin L. *Análise de conteúdo*. 3rd ed. Lisboa: Edições 70;2009.
7. Becchi AC, Fertonani HP, Fagundes CPJ, Marcon SS, Almeida EFA, Mendonça PR. Evaluation of a group intervention: quality of life and autonomy in users with diabetes mellitus. *J Nurs UFPE* on line. 2014 Aug;8(10):3369-76. Doi: [10.5205/reuol.6039-55477-1-ED.0810201415](https://doi.org/10.5205/reuol.6039-55477-1-ED.0810201415)
8. Cubas MR, Santos OM, Retzlaff EMA, Telma HLC, Andrade IPS, Moser ADL, Erzinger AR. Diabetic foot: orientations and knowledge about prevention care. *Fisioter Mov* [Internet]. 2017 July/Sept [cited 2018 Aug 10];26(3):647-55. Available from: <http://www.scielo.br/pdf/fm/v26n3/a19v26n3.pdf>
9. Romualdo SH, Vasconcelos TLS, Souza FSL. Prevention and care of the diabetic foot: a matt. *Rev Educ Meio Ambiente Saúde* [Internet]. 2016 [cited 2018 July 10];6(2):134-54. Available from: <http://www.faculadadedofuturo.edu.br/revista1/index.php/remas/article/view/36/22>
10. Grossi SAA, Pascali PA. Cuidados de enfermagem em diabetes mellitus [Internet]. São Paulo: Saúde direta; 2009 [cited 2018 Aug 10]. Available from: http://www.saudedireta.com.br/docsupload/13403686111118_1324_manual_enfermagem.pdf
11. Tanqueiro MTOS. Self-care management in older people with diabetes: systematic review of literature. *Referência.* 2013 Mar;3(9):151-60. Doi: <http://dx.doi.org/10.12707/R111202>
12. Oliveira MAS, Menezes TMO. The nurse in the care to the elderly in the family health strategy: meanings of the lived experience. *Rev Enferm UERJ.* 2014 July/Aug;22(4):513-8. Available from: <http://www.facenf.uerj.br/v22n4/v22n4a13.pdf>
13. Dornelles SS, Silva DMGV, Mattosinho MMS, Kuhen AE, Baião S, Sandoval R. The care for the person with diabetes mellitus and their family. *Cogitare Enferm.* 2013 July/Sept;18(3):496-501. Doi: <http://dx.doi.org/10.5380/ce.v18i3.33562>
14. Visentin A, Mantovani MF, Caveião C, Hey AP, Scheneider EP, Paulino P. Self-care of users with type 1 diabetes in a basic health unit. *J Nurs UFPE* online. 2016 Mar;10(3):991-8. Doi: [10.5205/reuol.8702-76273-4-SM.1003201607](https://doi.org/10.5205/reuol.8702-76273-4-SM.1003201607)
15. Floriano LA, Azevedo RCS, Reiners AAO, Sudré MRS. Care performed by family caregivers to dependent elderly, at home, within the context of the family health strategy. *Texto contexto-enferm.* 2012 July/Sept;21(3):543-8. Doi: <http://dx.doi.org/10.1590/S0104-07072012000300008>
16. Lebrun S, Malekan M, Mazurkiewicz R, Bond R. Identifying gaps in care of diabetic patients: a look at statins. *JACC.* 2018 Mar;71(11):1827. Doi: [10.1016/S0735-1097\(18\)32368-4](https://doi.org/10.1016/S0735-1097(18)32368-4)

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17. Johnson R, Osbourne A, Rispoli J, Verdin C. The diabetic foot assessment. *Orthop Nurs.* 2018 Jan/Feb;37(1):13-21. Doi: [10.1097 / NOR.0000000000000414](https://doi.org/10.1097/NOR.0000000000000414).

18. Jeffcoate WJ, Vileikyte L, Boyko EJ, Armstrong DG, Boulton AJM. Current challenges and opportunities in the prevention and management of diabetic foot ulcers. *Diabetes Care.* 2018 Apr;41(4):645-52. Doi: <https://doi.org/10.2337/dc17-1836>

Submission: 2018/03/10

Accepted: 2019/06/18

Publishing: 2019/07/27

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