

**HEALTH BELIEFS OF PEOPLE WITH DIABETES MELLITUS AND COMPLEX WOUNDS****CRENÇAS EM SAÚDE DE PESSOAS COM DIABETES MELLITUS E FERIDAS COMPLEXAS****CREENCIAS EN SALUD DE PERSONAS CON DIABETES MELLITUS Y HERIDAS COMPLEJAS**

Bianca Moura Peloso-Carvalho<sup>1</sup>, Jenika Ferreira Dias<sup>2</sup>, Camila Maria Silva Paraizo-Horvath<sup>3</sup>, Rogério Silva Lima<sup>4</sup>, Eliza Maria Rezende Dazio<sup>5</sup>, Silvana Maria Coelho Leite Fava<sup>6</sup>

**How to cite this article:** Peloso-Carvalho BM, Dias JF, Paraizo-Horvath CMS, Lima RS, Dazio EMR, Fava MCL. Health Beliefs of people with diabetes mellitus and complex wounds. Rev Enferm Atenção Saúde [Internet]. 2022 [access: \_\_\_\_]; 11(2):e202250. DOI: <https://doi.org/10.18554/reas.v11i2.5353>

**ABSTRACT**

**Objective:** To know the beliefs of people with Diabetes Mellitus and complex wounds. **Method:** Descriptive, transversal, qualitative approach, based on the theoretical framework of the health beliefs model. Fourteen people with Diabetes Mellitus and complex wounds, selected for convenience, participated in this study. Data were collected in an interview by semi-structured script, interpreted by content analysis in the thematic modality. **Results:** The thematic categories were constructed: The role of beliefs in understanding the genesis of the disease and complex wounds; Coping with barriers to disease and wound management and Beliefs about complications. Health beliefs can contribute to disease control, but hinder lifestyle changes. **Conclusion:** Knowing the health beliefs allows an approximation of the worldview of people, which can favor the dialogicity and planning of coherent and contextualized care.

**Descriptors:** Health beliefs; diabetes mellitus; diabetic foot ulcer; nursing.

<sup>1</sup> RN, PhD in Nursing from the Federal University of Alfenas, Alfenas-MG, Brazil. Federal University of Alfenas-MG. <http://orcid.org/0000-0001-5336-2249>

<sup>2</sup> RN, Specialist in Urgency and Trauma by the Pontifical Catholic University PUC-Campinas. Campinas, SP, Brazil, Professor of Nursing at Faculdade Anhanguera- Campinas, SP, Brazil. Faculdade Anhanguera- Campinas, SP, Brazil. <http://orcid.org/0000-0002-2743-0751>

<sup>3</sup> RN, PhD in Science from the Graduate Program in Fundamental Nursing of Ribeirão Preto, University of São Paulo. Ribeirão Preto, SP, Brazil. University of São Paulo, USP. <http://orcid.org/0000-0002-3574-7361>

<sup>4</sup> RN, PhD in Health Sciences, Adjunct Professor at the Federal University of Alfenas, Alfenas, MG, Brazil. Federal University of Alfenas-MG. <http://orcid.org/0000-0002-1751-2913>

<sup>5</sup> RN, PhD in Nursing, associate professor at the Federal University of Alfenas. Alfenas, MG, Brazil. Federal University of Alfenas-MG. <http://orcid.org/0000-0001-9216-6283>

<sup>6</sup> RN, PhD in Health Sciences, associate professor at the Federal University of Alfenas. Alfenas, MG, Brazil. Federal University of Alfenas. <http://orcid.org/0000-0003-3186-9596>

## RESUMO

**Objetivo:** Conhecer as crenças de pessoas com Diabetes Mellitus e feridas complexas. **Método:** Estudo descritivo, transversal, abordagem qualitativa, fundamentado no referencial teórico do Modelo de Crenças em Saúde. Participaram deste estudo 14 pessoas com Diabetes Mellitus e feridas complexas, selecionadas por conveniência. Os dados foram coletados em entrevista por meio de instrumento semiestruturado, interpretados pela análise de conteúdo na modalidade temática. **Resultados:** Construíram-se as categorias temáticas: O Papel das crenças na compreensão da gênese da doença e das feridas complexas; O enfrentamento das barreiras para o manejo da doença e da ferida e Crenças sobre as complicações. As crenças em saúde podem contribuir para o controle da doença, mas dificultar mudanças no estilo de vida. **Conclusão:** Conhecer as crenças em saúde permite uma aproximação da visão de mundo das pessoas, o que pode favorecer a dialogicidade e o planejamento de cuidados coerentes e contextualizados. **Descritores:** Crenças em saúde; diabetes mellitus; úlcera diabética do pé; enfermagem.

## RESUMEN

**Objetivo:** conocer las creencias de personas con diabetes mellitus y heridas complejas. **Método:** estudio descriptivo, transversal, cualitativo, fundamentado en la referencia teórica del Modelo de creencias en salud. Participaron catorce personas con diabetes mellitus y heridas complejas, seleccionadas convenientemente. Los datos fueron recogidos en entrevistas, con guion semiestructurado e interpretados por análisis en modalidad temática. **Resultado:** se construyeron diferentes categorías temáticas: El papel de las creencias en la comprensión de la génesis de la enfermedad y las heridas complejas; El enfrentamiento de las barreras para su manejo; y Creencias sobre complicaciones. Las creencias sobre la salud pueden contribuir al control de enfermedades, pero obstaculizan los cambios en el estilo de vida. **Conclusión:** conocer las creencias en salud permite una aproximación a la visión de mundo de las personas, lo que puede favorecer al diálogo y a la planificación de cuidados coherentes y contextualizados. **Descriptor:** creencias en salud; diabetes mellitus; úlcera diabética del pie; enfermeira.

## INTRODUCTION

Diabetes mellitus (DM) is one of the most frequent chronic conditions that represents a major health problem around the world.<sup>1</sup> Despite the efforts made by public health to control it, it remains an epidemic condition, with relatively high morbidity, attributed to complications resulting from ineffective disease control.<sup>1</sup>

DM, from a biomedical point of view, is characterized by a metabolic disorder with persistent hyperglycemia, resulting from a

deficiency in insulin production, or in its action, or both.<sup>2</sup> Among its complications, diabetic foot ulcers (DFUs) stand out, which, due to the high incidence and prevalence rates, compromise the quality of life in health, autonomy, self-care and can cause a high socioeconomic impact, both for patients and their families, and for public health.<sup>1</sup>

DFUs are classified among the complex wounds, as they are difficult to resolve, associated with extensive skin loss,

aggressive infections, the presence of ischemia and/or necrosis, associated pathologies, besides they do not heal spontaneously within a period of three months.<sup>3</sup>

These DFUs may be prevented with lifestyle changes, adherence to pharmacological and non-pharmacological measures and self-care with the feet.<sup>2</sup> However, understanding the disease and managing care are determined by behavior, influenced by values, beliefs, individual and collective experiences, so that beliefs can both promote health and influence it negatively.<sup>4</sup>

Recognizing the influence of beliefs on the way people interpret and act in the face of their illness, Rosenstock developed the Health Belief Model (HBM), which includes four dimensions: perceived susceptibility, which assesses the degree of acceptance that the person has about the possibility of contracting a certain condition or disease; the perceived severity, in which the person may or may not consider that the disease will cause serious consequences for his/her life; the perceived benefits, which is the person's perception of believing that health actions are related to the reduction of susceptibility or severity, leading to the achievement of positive results and, finally, the existing barriers, which refer to the negative aspects that can make difficult the adherence to treatment.<sup>4</sup>

The HBM has been used in studies to understand the beliefs of people with chronic conditions, especially in Systemic Arterial Hypertension (SAH) and Diabetes Mellitus (DM).<sup>5-6</sup> However, studies related to DM and complex wounds are scarce, mainly at the national level, which justifies the contribution of this study.

In addition, its relevance is fundamental for the opportunity of people to express their perceptions about the disease and their way of caring. The approach to these people has demonstrated the uniqueness in the way they experience the disease, care and the recognition of the influence of beliefs on motivations and decisions, as well as the cultural diversity that permeates the health-disease process.

These experiences awakened the need to deepen knowledge, which is translated into the following question: What are the beliefs of people with DM and complex wounds that may influence the disease, treatment and care? To answer this question, the study was developed with the objective of knowing the beliefs of people with diabetes mellitus and complex wounds.

## **METHOD**

Descriptive, cross-sectional study with a qualitative approach, based on HBM theoretical framework.

The study was carried out in 2017 with 14 people, selected by convenience, of both

genders, diagnosed with DM and complex wounds, living in urban areas of a municipality in the south of Minas Gerais, through an active search based on data from the records of people with DM of nine, out of a total of twelve, Family Health Strategies. Of the 695 people with DM contacted, 29 claimed to have DM and complex wounds. Of the 29 possible participants, 12 had wounds healed and three refused to participate in the research.

The following inclusion criteria were adopted: people aged 18 years or over, diagnosed with DM and with the presence of complex wounds; as exclusion, having healed wounds and not belonging to the assigned areas.

The interviews were carried out individually in the participants' homes, through face-to-face contact. Data were collected by two authors, in a pre-scheduled home visit, through an individual interview, only with the presence of the participant, with an average duration of 60 minutes, with the application of an adapted and validated semi-structured instrument, with a pilot test being carried out with three participants, containing questions of sociodemographic and clinical characterization and questions based on the HBM.

The testimonies were recorded on a digital recorder and the non-verbal communication and the researchers' impressions were recorded in a field diary.

Data were transcribed in full in a text editor, read and reread by the authors for transcription accuracy. The transcript resulted in 128 pages, typed in a space of 1.5 cm. This study was developed according to the criteria recommended by the Consolidated criteria for reporting qualitative research (COREQ).

For data organization, Content Analysis was used in the thematic modality.<sup>7</sup> The recording units were identified and coded by four researchers who were part of a research group and the discussion of the data was guided by the Theoretical Framework of the HBM and supported by related literature.

The research was approved by the Research Ethics Committee, under the number CAAE55493516.8.0000.5142 and protocol 1,566,398. In order to maintain confidentiality and preserve anonymity, the names of the participants were replaced by the letter "E" followed by ordinal numbers.

## RESULTS

It was found that most participants were female 64.29% (n=9), with mean age of 62.29 years, married 50% (n=7) and Catholics 64.29% (n=9). As for the socioeconomic aspects, 42.86% (n=6) had monthly income of 2 to 3 minimum wages; 42.86% (n=6) were retired and 85.71% (n=12) attended incomplete elementary

school. As for health background, 64.29% (n=9) already smoked or still smoke; 78.56% (n=11) self-reported SAH as associated comorbidity; 50% (n=7) used insulin; 57.13% (n=8) with a family history of DM; 50% (n=7) with DM diagnosis time for 10 years or less; 71.43% (n=10) had a wound; 57.13% (n=8) with wound duration for more than a year and 57.13% (n=8) reported not following a specific diet for DM.

The empirical material was coded using the Word computer program, Microsoft® review tool, analysis and construction of the themes in line with recurring themes, namely: The role of beliefs in understanding the genesis of disease and complex wounds; Coping with barriers to disease and wound management and Beliefs about complications.

### **The role of beliefs in understanding the genesis of the disease**

The influence of beliefs on the perception of the multicausality of the disease and complex wounds was verified. Excess blood sugar, heredity, ineffective control, and emotional factors were named

### **Facing barriers to disease and wound management**

Living with the disease and the wound is permeated by difficulties and restrictions, since it involves changes in behavior and the

as the main culprits for the onset and/or worsening of DM and complex wounds.

Participants attributed DM to excess sugar in the blood:

*What causes it is the excess sugar in the blood. (E4)*

Heredity was a cause for DM and complex wounds:

*In my family, had so someone with diabetes, my father, my mother, I am afraid of my children having it, my mother-in-law was also diabetic. (E6)*

*These wounds are genetic, my aunt, my grandmother, all died of this ... I believe that they are not caused by diabetes. (E7)*

Some participants believed that the ineffective control of DM was responsible for the appearance and worsening of the wounds:

*Diabetes helped, I had nothing. I did not follow my diet to the letter and I did not take my medication right, then it got worse, if you do not follow it to the letter, the healing takes much longer. (E4)*

*Everything is a problem of blood glucose, if blood glucose is high, it (wound) will get worse. (E2)*

Regarding emotional factors, they believed that feelings of nervousness, anger and stress caused the DM and the wounds.

*I went on a trip with my husband, I don't know if I spent a lot of anger there, on the trip I got very tired, then, from that time on, that I started the diabetes problem. (E10)*  
*It has already closed once, but then opened again, it opened again because I spend a lot of time nervous, stressed, every time I get nervous it worsens the wound. (E11)*

rules recommended by the professional health system for the management of the disease and the wound go against their model of beliefs. In this way, the

naturalization of transgressions was perceived as part of the daily life of these participants.

One of the difficulties in changing eating habits was mainly related to the abandonment of the consumption of sweets. For them, candy was part of the pleasant side of their life story:

*Since childhood, sweets seem to be part of our lives, if we do not eat sweets, we seem to be in a bad mood. I have a crazy desire to eat sweets, every day, but I control it, or it gets worse, you know. There are days when I abuse the candy a little bit, but then I control it, I go on a diet. (E7)*

Among other difficulties, there are the financial conditions to meet the prescriptions of health professionals for treatment:

*Will the poor be able to take care of them like the doctors ask? They will not, not everything, poor people cannot afford treatment. (E6)*

Although barriers coexisted, they believed in the benefits of treatment for disease control and wound healing prescribed by the professional and popular health system.

For the participants, the consumption of food that comes from underground, dark green leaves, fish and certain fruits could lead to the lack of control of the disease and make it difficult for wounds to heal:

*Some people say you cannot eat anything from the land, manioc, those things. (E11) Vegetables now have to be light, it can't be too dark. (E9)*

*I do not eat fish from the sea, it makes me sick, then I do not eat it to heal, I do not suck on lemon either, papaya, I just eat it and I feel that the smell of milk comes out of the wound. (E7)*

*One says he cannot eat fish because it is rowdy and doesn't heal. (E10)*

The healing power of wounds was related to the use of allopathy, phytotherapy and folk remedies:

*I believe that because of these dressings (field diary: ointments for medical advice), we are being careful, we are healing. (E13)*

*I have already passed barbatimão (Stryphnodendron adstringens), picão (bidens pilosa), erva de santa maria (Chenopodium ambrosioides L.), matruz, tanchagem (Plantago tomentosa Lam. (Plantaginaceae)), once watching television the doctor said that urucum cured this wound, so I did urucum, it was wonderful. (E7)*

*These days my daughter bathed with pomegranate rind, but our bathing is to put it in a glass and use it like a serum. (E6)*

Spirituality was perceived as having a high power to heal the disease and the wound:

*Our faith is to get well, I will get better if God wants me to, I trust more in God than in medicine. (E4)*

### **Beliefs about complications**

The perception of disease severity and susceptibility to complications led participants to believe in the importance of care and disease control. From the set of DM complications, they knew the complications related to the heart, kidneys, amputations and the ability to lead to death:

*I have to control the glucose, otherwise it complicates the heart, it causes amputation, kidney problems. (E8)*

*If you do not take care of it, you will die and if you eat everything, you will also die, if you leave it, you will pass away. (E4)*

*In my case, I have this wound on my leg, God save me, but if I do not take care of it, I can even amputate. (E6)*

Experiences with complications prompted recognition of the severity of the disease and regret for the lack of care:

*If, on the first day, I was already resting with my foot up, if I already bought the saline solution, but no, I kept walking a lot, I just used soap and water, I kept wearing shoes, it's dust, bacteria too, it was getting infected. In a week, if I had taken care of it, I would be free from three and a half years of suffering.* (E8)

## DISCUSSION

The elaborated categories dialog with the TCM as they seek to represent its dimensions. The role of beliefs in understanding the genesis of disease and complex wounds is related to the perception of susceptibility and severity of the disease.

The emotional and hereditary components related to the genesis of DM and wounds, in addition to excess blood sugar, as a cause of DM, were also found in international studies<sup>6,8-9</sup>, which demonstrates that belief, a symbolic representation, influences the experience with the disease.

The fact that they attribute the genesis of DM and wounds to heredity and emotional factors may corroborate the process of naturalization of illness and, consequently, for non-adherence to measures that involve changes in lifestyle proposed by health professionals.

On the other hand, the beliefs of those who attributed the genesis of the wound to the ineffective control of the disease corroborate the perception of severity and the stimulus to adopt the recommendations of health professionals in their daily lives and reduce the possibility of complications.

Regarding the emotional component, studies indicate that emotional state control may impact glycemic levels<sup>10-11</sup>, but its management is not always easy, due to the multiplicity of interrelated components. From this perspective, health professionals should seek to develop dialogicity, with a view to resolving conflicts, relieving stress and, consequently, improving the psycho-emotional health of people who live with chronicity and with all the limitations that this condition may bring.

Coping with barriers to managing the disease and wound is related to difficulties in adopting the recommendations of health professionals and in the way participants perceive the effectiveness of their care.

The difficulty of abandoning the consumption of sweets allows us to consider that DM, as a chronic condition, establishes codes of conduct for these people from the diagnosis of the disease. Such codes can be translated as rules for living, but people often do not feel prepared for these behaviors and, thus, keep old habits, especially food habits that are rooted in their sociocultural context. Thus, these people end up living their daily lives under the dilemma “Wanting and being able to do”<sup>5,12</sup>

From this perspective, the rules established for living with the disease can provoke negative feelings and encourage transgressive behaviors, based on the search for experiencing moments of pleasure and

freedom. Health professionals need to be aware that, in the face of a chronic condition, periods of fluctuation in adherence are expected; therefore, there is a need for them to be sensitive to understand the limits of patients, and ready to solve possible doubts and to support the self-care process.<sup>8,12</sup>

The financial difficulties found in this study were perceived as barriers to treatment, as well as those found in other studies, as they made it difficult to eat and perform physical activities.<sup>6,13</sup>

In this context, health professionals are expected to have the competence to adapt the guidelines to the living conditions of each person, be sensitive to these difficulties and provide support to facilitate the acquisition of resources and inputs for the proper management of the chronic condition.

Beliefs about harmful foods, such as fish, dark green leafy vegetables and certain fruits constituted barriers to be faced in the care of the disease and wound management. A study carried out with people with chronic wounds of different etiologies also pointed to beliefs about the relationship between fish consumption and wound healing.<sup>14</sup> These people claimed that “reimoso” (harmful) fish, which, according to them, are “leather fish that have no scales”, they have the ability to provoke inflammation, because, below the leather would be the paddle that carries the impurities. It can be inferred that

popular beliefs are capable of awakening in people explanations based on knowledge of the sociocultural context that may gain meaning and become truths.

It was noticed that the treatment recommended by the popular system based on the use of plants and spirituality was valued, since it helped them to reduce the negative consequences of the disease and provided a cure.

Studies corroborate this result, as people with DM and wounds also used teas, plants, fruits, bark and believed in the power of religion/faith for treatment and healing.<sup>15-16</sup>

From this perspective, herbal medicine is a practice that is part of common sense, disseminated in popular culture through counseling, popular practices and healers. Faced with this, it is necessary that health professionals know and respect phytotherapy as a complementary treatment and, above all, that they can guide patients so that there is no harm to health.<sup>15</sup>

Spirituality was also perceived as a force capable of transcending the sick state and promoting healing in the participants. Spirituality is related to faith in God and helps people feel stronger and more secure, able to face the unpleasant situation they are experiencing, thus demonstrating a positive belief.<sup>17-18</sup>

Furthermore, when there is a perception of the severity of complications,



this may corroborate for better control of the disease and for the strength in overcoming the difficulties inherent to care.<sup>4</sup> The beliefs found in this study, referring to the perception of death, amputation, cardiac and renal complications, may constitute motivating beliefs for care. The results corroborate studies that found that, after the appearance of wounds, the participants became aware of the importance of foot care for amputation prevention.<sup>8,13,19</sup>

It was also noticed that many health professionals work in the guidance process in a prescriptive way, indifferent to people's feelings and use the patients' fear to achieve the proposed therapy, which translates into an ineffectiveness of dialogue, interpersonal relationship, autonomy and fragility in the longitudinal follow-up.<sup>19</sup>

In this context, nursing, as a care profession, must be sensitive to people's beliefs, respecting their values and understanding their moments of transgression. Therefore, relational technologies should be adopted in health education actions to know and affirm positive beliefs and warn about those that can lead to damage in treatment, considering the influence of beliefs on self-care and adherence to treatment.<sup>8</sup>

It is added that, although professionals encourage people to take care of themselves, this practice, without professional

intervention and longitudinal monitoring, is not enough to prevent complex wounds.<sup>20</sup>

## CONCLUSION

Beliefs about the genesis of DM and wounds can lead people to the naturalization of the illness process, in such a way that they consider changes in lifestyle unnecessary. However, these changes are essential for disease control and wound healing.

The DM and the wound impose on the participants the rules to live that, sometimes, are transgressed for the sake of pleasure. While emotional factors, eating habits and unfavorable financial conditions have constituted barriers, the belief in the effectiveness of popular and professional treatment and in the ability to heal through spirituality were motivators for the management of the disease and the wound. The appearance of complications and the risk of death reflect the perception of the disease severity.

By adopting the Health Belief Model, it was possible to apprehend the singularities of people in the perception of their illness that were related to the genesis of the disease and the wound, the barriers to treatment and wound healing, the ways of caring and the disease severity. Aligning scientific knowledge with popular knowledge provides the cultural competence of the health professional and contributes to

the improvement of the line of care for the person with DM and wounds, since it allows understanding the beliefs related to the disease and care, with a view to planning care coherent and consistent with the sociocultural context.

The number of participants and the outdated register of people with DM and wounds may be considered limitations of this study. It is suggested the development of studies with participants with similar clinical conditions from other geographic regions, in order to know the cultural diversity that permeates the care with DM and complex wounds.

## REFERENCES

1. International Diabetes Federation. IDF diabetes atlas [Internet]. 8th ed. [Bruxelas]: IDF; 2017 [citado em 20 dez 2020]. The global picture: prevalence and projections; p. 43-46. Disponível em: [https://www.diabetesatlas.org/upload/resources/previous/files/8/IDF\\_DA\\_8e-EN-final.pdf](https://www.diabetesatlas.org/upload/resources/previous/files/8/IDF_DA_8e-EN-final.pdf)
2. Sociedade Brasileira de Diabetes. Diretrizes da Sociedade Brasileira de Diabetes 2019-2020 [Internet]. São Paulo: Clannad; 2019 [citado em 18 nov 2020]. Disponível em: <http://www.saude.ba.gov.br/wp-content/uploads/2020/02/Diretrizes-Sociedade-Brasileira-de-Diabetes-2019-2020.pdf>
3. Ferreira MC, Tuma Júnior P, Carvalho VF, Kamamoto F. Complex wounds. Clinics [Internet]. 2006 [citado em 25 out 2022]; 61(6):571-78. doi:<http://dx.doi.org/10.1590/S1807-59322006000600014>
4. Rosenstock IM. Historical origins of the health belief model. Health Educ Monogr. [Internet]. 1974 [citado em 25 out 2022]; 2(4):328-45. doi:<https://doi.org/10.1177/109019817400200403>
5. Moreira AKF, Santos ZMSA, Caetano JA. Aplicação do modelo de crenças em saúde na adesão do trabalhador hipertenso ao tratamento. Physis (Rio J.). [Internet]. 2009 [citado em 25 out 2022]; 19(4):989-1006. doi:<https://doi.org/10.1590/S0103-73312009000400005>
6. Hjelm K, Apelqvist J. Influence of beliefs about health and illness on self-care and care-seeking in foreign-born people with diabetic foot ulcers: dissimilarities related to origin. J Wound Care [Internet]. 2016 [citado em 25 out 2022]; 25(11):602-16. doi:<https://doi.org/10.12968/jowc.2016.25.11.602>
7. Bardin L. Análise de conteúdo. Lisboa: Edições 70; 2013.
8. Meriç M, Ergün G, Meriç C, Demirci İ, Azal Ö. It is not diabetic foot: it is my foot. J Wound Care [Internet]. 2019 [citado em 25 out 2022]; 28(1):30-37. doi:<https://doi.org/10.12968/jowc.2019.28.1.30>
9. Barg FK, Cronholm PF, Easley EE, Davis T, Hampton M, Malay S, et al. A qualitative study of the experience of lower extremity wounds and amputations among people with diabetes in Philadelphia. Wound Repair Regen. [Internet]. 2017 [citado em 25 out 2022]; 25(5):864-70. doi:<https://doi.org/10.1111/wrr.12593>
10. Wong EM, Afshar R, Qian H, Zhang M, Elliott TG, Tang TS. Diabetes distress, depression and glycemic control in a Canadian-Based Specialty Care Setting. Can J Diabetes [Internet]. 2017 [citado em 25 out 2022]; 41(4):362-65. doi:<https://doi.org/10.1016/j.jcjd.2016.11.006>
11. Helgeson VS, Van Vleet M, Zajdel M. Diabetes stress and health: is aging a strength or a vulnerability? J Behav Med. [Internet]. 2020 [citado em 25 out 2022]; 43(3):426-36. doi:<https://doi.org/10.1007/s10865-019-00106-4>

12. Silva JA, Amorim KPC, Valença CN, Souza ECF. Experiências, necessidades e expectativas de pessoas com diabetes mellitus. *Rev. Bioét.* [Internet]. 2018 [citado em 25 out 2022]; 26(1):95-101. doi:<https://doi.org/10.1590/1983-80422018261230>
13. Okoro T, Sikirica V, Casillas L, Brion T, Devine J, Ong V, et al. Elicitation of disease concepts in patients with diabetic foot ulcers: a qualitative study. *J Wound Care* [Internet]. 2020 [citado em 25 out 2022]; 29(5):38-45. doi:<https://doi.org/10.12968/jowc.2020.29.5.up5a.S38>
14. Alcoforado CLGC, Espírito Santo FH. Saberes e práticas dos clientes com feridas: um estudo de caso no município de Cruzeiro do Sul, Acre. *REME Rev Min Enferm.* [Internet]. 2012. [citado em 05 jan 2021]; 16(1):11-7. Disponível em: <https://cdn.publisher.gn1.link/remem.org.br/pdf/v16n1a02.pdf>
15. Chibante CLP, Santo FHE, Santos TD, Porto IS, Daher DV, Brito WV. Saberes e práticas no cuidado centrado na pessoa com feridas. *Esc. Anna Nery Rev Enferm.* [Internet]. 2017 [citado em 25 out 2022]; 21(2):1-8. Disponível em: <https://www.scielo.br/j/ean/a/dfnLmbkDWth7sV5gBzjcYgq/?format=pdf&lang=pt>
16. Casique L, Muñoz Torres TJ, Castro García BY, Centeno González Z, López Franco R. Cuidado cultural familiar al paciente diabético que consume alcohol y/o tabaco. *Cult. Cuid.* [Internet]. 2017 [citado em 25 out 2022]; 21(49):124-33. Disponível em: [https://rua.ua.es/dspace/bitstream/10045/72937/1/CultCuid\\_49\\_14.pdf](https://rua.ua.es/dspace/bitstream/10045/72937/1/CultCuid_49_14.pdf)
17. Indrayana S, Guo S-E, Lin C-L, Fang SY. Illness Perception as a Predictor of Foot Care Behavior Among People With Type 2 Diabetes Mellitus in Indonesia. *J Transcult Nurs.* [Internet]. 2019 [citado em 25 out 2022]; 30(1):17-25. doi:<https://doi.org/10.1177/1043659618772347>
18. Coulibaly A, Alves VP. As crenças religiosas e espirituais no enfrentamento de desafios advindos das feridas crônicas em idosos. *Rev. Kairós* [Internet]. 2016 [citado em 25 out 2022]; 19(22):323-39. doi:<https://doi.org/10.23925/2176-901X.2016v19iEspecial22p323-339>
19. Godoy-Corona A, Illesca-Pretty M, Cabezas-González M, Hernández-Díaz A. Foot ulcers: perception of patients with Type 2 diabetes. *Rev. Fac. Med. (Bogotá)* [Internet]. 2018 [citado em 25 out 2022]; 66(2):187-94. doi:<https://doi.org/10.15446/revfacmed.v66n2.65045>
20. Pereira LF, Paiva FAP, Silva SA, Sanches RS, Lima RS, Fava SMCL. Ações do enfermeiro na prevenção do pé diabético: o olhar da pessoa com diabetes mellitus. *J Res Fundam Care. Online* [Internet]. 2017 [citado em 25 out 2022]; 9(4):1008-14. doi:<http://dx.doi.org/10.9789/2175-5361.2017.v9i4.1008-1014>

RECEIVED: 03/25/21  
 APPROVED: 10/14/22  
 PUBLISHED: Oct/22