RESEARCH | PESQUISA

Perspectives of individuals with diabetes on selfcare: contributions for assistance

Perspectivas de indivíduos com diabetes sobre autocuidado: contribuições para assistência

Perspectivas de personas sobre autocuidado de la diabetes: aportes para asistir

Elen Ferraz Teston[1]
Catarina Aparecida Sales[2]
Sonia Silva Marcon[2]

1. Universidade Estadual do Paraná. Paranavaí, PR, Brazil.
2. Universidade Estadual de Maringá. Maringá, PR, Brazil.

Abstract

Objective: To know the perspectives of people with type 2 diabetes mellitus on self-care actions. **Methods:** Qualitative study, carried out in a municipality in the north of Paraná. The data were collected in the months of June and July of 2014, through home interviews and, after that, submitted to content analysis. **Results:** Some individuals recognize that adopting self-care actions is their responsibility, although these actions are not always put into practice. Others attribute the non-performance of these actions to external factors related to the organization of the health service, the family environment and the work environment. **Conclusion and implications for practice:** The perspective of self-care actions is a challenge to care, since the individual needs to recognize the fundamental role that he plays in the development of these actions so that the nurse can support him in the process of change.

Keywords: Nursing; Self-care; Type 2 Diabetes Mellitus.

Resumo

Objetivo: Conhecer as perspectivas de pessoas com Diabetes Mellitus tipo 2 sobre as ações de autocuidado. **Métodos:** Estudo qualitativo realizado em um município do norte do Paraná. Os dados foram coletados nos meses de junho e julho de 2014, por meio de entrevista domiciliar e, após, submetidos à análise de conteúdo. **Resultados:** Alguns indivíduos reconhecem que a adoção de ações de autocuidado é de sua responsabilidade, embora nem sempre as coloquem em prática. Outros atribuem a não realização dessas ações a fatores externos relacionados à organização do serviço de saúde, ao ambiente familiar e de trabalho. **Conclusão e implicações para prática:** A perspectiva frente à realização de ações de autocuidado se constitui em um desafio à assistência, pois o indivíduo precisa reconhecer o papel fundamental que desempenha no desenvolvimento dessas ações a fim de que o enfermeiro possa apoiá-lo no processo de mudança.

Palavras-chave: Enfermagem; Autocuidado; Diabetes Mellitus tipo 2.

Resumen

Objetivo: Conocer las perspectivas de personas con Diabetes *Mellitus* tipo 2 sobre las acciones de autocuidado. **Métodos:** Investigación cualitativa realizada en una ciudad del norte del estado de Paraná. Los datos fueron recolectados en los meses de junio y julio de 2014, por medio de entrevista domiciliaria y, después, sometidos al análisis de contenido. **Resultados:** Algunos individuos reconocen que la adopción de acciones de autocuidado es de su responsabilidad, aunque no siempre las pongan en práctica. Otros atribuyen la no realización de estas acciones a factores externos relacionados a la organización del servicio de salud, al ambiente familiar y laboral. **Conclusión y consecuencias para la práctica:** La perspectiva frente a la realización de acciones de autocuidado constituye un desafío a la atención, pues el individuo necesita reconocer el papel fundamental que desempeña en el desarrollo de estas acciones a fin de que el enfermero pueda apoyarlo en el proceso de cambio.

Palabras clave: Enfermería; Autocuidado; Diabetes Mellitus tipo 2.

Corresponding author:
Elen Ferraz Teston.
E-mail: elen-1208@hotmail.com

Submitted on 08/24/2016.
Accepted on 03/24/2017.

DOI: 10.5935/1414-8145.20170043

INTRODUCTION

The incidence and prevalence of type 2 diabetes mellitus (DM2) has increased worldwide due to its association with risk behaviors and factors - inadequate diet, sedentary lifestyle, smoking and obesity.[1] Studies show that the disease is responsible for impairments that are reflected negatively in the quality of life of the affected individuals and in the increase of premature deaths, besides generating enormous costs in the control and treatment of its complications.[1-3]

Given the complexity of this chronic disease, it is essential to recognize the central role that individuals play in the management of their illness and in the performance of self-care actions.[3] Investment in these actions includes a coping strategy that requires the preparation, investment and persistence of health professionals and, in particular, nurses, in view of the long-term results. Self-care refers to the individual's ability to monitor their health condition and alter their cognitive, behavioral, and emotional responses necessary to maintain a good quality of life.[4]

Orem's Theory of Self-Care, which is the theoretical framework of the present study, presupposes that all human beings have the potential to develop intellectual and practical skills, as well as the essential motivation for self-care.[5] This theory values the responsibility of the individual regarding their health and recognizes that prevention and education are important aspects in nursing interventions. According to Orem, the person is a functional being and is integrated with the whole and is motivated to achieve self-care.[5]

It is worth highlighting the important role of nurses in the process of stimulating self-care actions, since it is incumbent upon them to recognize the influential behaviors in the execution of such task, to talk about the individuals' needs in terms of their chronic illness and to propose a planned care based on priorities defined through effective negotiation between individuals and specialists.[4-7]

Thus, professionals involved in planning care for individuals with DM2, especially nurses, need to recognize self-care actions as a key tool for promoting better living conditions, despite the disease.[8] However, studies that address this issue are restricted to the attribution of health professionals in assisting individuals to become active in the management of the disease from health education actions, a strategy that in itself has not been associated with greater adherence to treatment and consequent clinical improvement of the disease.[9,10] It is highlighted that one of the reasons for the failure of such intervention is that health education can affect the objective capacity of disease control, not necessarily affecting the subjective perception of the individual in relation to self-care actions.[9] In addition, some external factors, such as the personal context, social situation, work environment and even the care provided by health professionals, can also influence the control of the disease.[4]

The members of the nursing team have a great participation in the care of people with DM2, since, besides being more present in the health units, they are also more accessible to the population, thus favoring the establishment and the strengthening of the bond which, in turn, can influence the process of behavior change and adherence to self-care actions. Therefore, it is very important that these professionals recognize and value self-care actions already performed by the people, as well as identify likely barriers that are preventing or that may prevent the effective realization of these actions.

This strategy stimulates and motivates individuals to change, in addition to making it possible to increase the probability of accomplishment of the actions from the benefits and barriers identified.[5] However, due to the subjective and social connotations that the disease has for individuals,[11] it is essential that health professionals demonstrate their willingness to understand the behavior and even the perceptions of people with DM in relation to their care needs.

Undoubtedly, the aforementioned aspects require a new posture from nurses, as well as a change in the way of approaching people with DM2. This approach should be guided by dialogue and care shared with patients, so that the actions proposed are meaningful for the person and, therefore, more easily incorporated into their daily lives.

In view of the above, considering the important role of nurses in relation to the stimulus and adherence to self-care actions and, consequently, to better control the disease, the purpose of this study was defined as: to know the perspectives of people with DM2 on self-care actions.

METHODS

This is a qualitative study, carried out with 18 people with DM2, undergoing outpatient treatment for at least two years and enrolled in the Basic Health Units of a small municipality located in the northern region of the state of Paraná. This municipality has a total of 20,269 inhabitants[12] and 100% of this population is assisted by the Family Health Strategy (FHS).

This study is also part of a cross-sectional study of a quantitative nature entitled "Assistance to People with DM in Primary Care: evaluation of the service, health condition, coping with the disease to implement care strategies". Contact with the interviewees of this study was based on a list provided by the FHS teams, containing the names of individuals with DM2, enrolled in Hiperdia, aged 40 years or older, because although the disease may affect individuals of any age, Its diagnosis is more frequent after 40 years.[3]

Study participants were intentionally selected, throughout a cross-sectional study that used a quantitative approach. The inclusion criteria adopted were the interest and availability evidenced during the interviews. Participants were asked to answer the following guiding question: Talk about your care for DM. The following support question was also used: What care do you consider important to keep your illness under control?

The data were collected in the months of June and July of 2014, through an individual interview, recorded in audio format, with an average duration of 40 minutes, and all were performed at the participant's home, without the presence of other people.

The search for information happened until the objective of the study was reached and no new information emerged in the interviews, characterizing the saturation of the information. The data contained in the field diaries, recorded immediately after the interviews, were also used during data analysis to facilitate the understanding of the context during the interviews.

The interviews were transcribed in full and analyzed according to the methodological framework of content analysis, thematic modality,[13] followed by the phases of pre-analysis, material exploration, treatment of results and interpretation. In the pre-analysis, floating and exhaustive readings were carried out to raise the relevant points against the study objectives. In the material exploration phase, the coding was done, process through which raw data were systematically transformed and aggregated into two units: self-care actions depend on the individual; and self-care actions depend on external factors. In the last phase the categorization was performed. It consisted of the classification of the elements according to their similarities and differentiation, with the subsequent regrouping according to common characteristics, thus originating two categories: Actions recognized by individuals as necessary for DM2 control; and Barriers to self-care and disease control.

The study was approved by the Standing Committee on Ethics in Research with Human Beings of the State University of Maringá (Opinion no. 449,686). All study participants signed the Consent Term in two ways. Subjects = were identified with the letter P (participant) followed by a number corresponding to the order of the interviews; the letters M or F to indicate male or female gender; And two Arabic numerals - one referring to age and the other to the time of diagnosis.

RESULTS

The 18 interviewees, equally distributed between the sexes, had between four and seven years of study; ten of them were aged between 60 and 69 years, and the others between 40 and 59 years. Most lived with a partner (13); had monthly income of two minimum wages (10); diagnosis of DM2 for more than 10 years (11), and used oral medication only (14). The other four used combination therapy, namely insulin and oral medication. Six of them already had complications due to DM2, such as retinopathy (four), nephropathy (one) and diabetic foot (one). Ten had comorbidities, and hypertension was reported by nine of them. From the analysis of the data, two categories that will be presented next emerged.

Actions recognized by individuals as necessary for DM control

In this category, it is observed that some people recognize that they are responsible for the development of self-care actions for DM control.

> *I think that, for taking care of diabetes, all you need is to be willing to do it. It requires willpower too... It's just like a child when he is learning to walk: he has difficulties, he falls, but then he gets up and tries to walk alone... It's necessary to control alimentation, make physical exercise, and reduce stress. (P2, M, 52 years, eight years of DM)*

> *[...] I start working at five o'clock in the morning, so I have breakfast at my work along with my co-workers. I cannot binge on the food they eat ... I take four salt and water crackers and a fruit for eating mid-morning and I also bring a coffee bottle from home and ask the cooking lady at work to make some for me, but without sugar, so I put sweetener, which I also bring [...]. (P15, M, 48 years, four years of DM)*

> *I try my best to eat fruits and vegetables and walk, because if I don't follow what I know is good for my health, I am deceiving myself. This is an option I made, and it just depends on me. (P6, M, 65 years, 20 years of DM)*

However, it is observed that some individuals, even recognizing the importance of their role in disease control, cannot behave proactively:

> *[...] For taking care of diabetes the person firstly has to make a choice, which is to give up the good things in life. And you can't think that you depend on others to take care of yourself... If you have a strong will, you will do everything right in terms of alimentation and you will be able to control it. I still haven't been able to choose this path (laughs). (P16, F, 59 years, 10 years of DM)*

Some of those who have active behavior towards the habits necessary for DM control are not perseverant over time, and often give up self-care actions because they do not see results in the short term:

> *To take care of diabetes you need to exercise, take care of food, take the right medicine and insulin, and that is something that has to come from the person's consciousness. I used to do all this, but today I don't do it anymore and I don't like to talk about it either. I'm already living as if I didn't have it anymore (diabetes); I eat everything I feel like eating. (P7, F, 66 years, 15 years of DM)*

> *Caring is very difficult and sometimes I get confused if it helps, because I have already stopped drinking beer, eating sugar and started walking for a week; and when I checked my diabetes, it was still high... then I ended up going back to normal. (P8, M, 48 years, four of DM)*

Barriers to self-care and disease control

Nine individuals pointed out the organization and work process of health services as factors that make it difficult to perform self-care actions and consequent disease control.

To control diabetes we needed health professionals to talk to us in order to guide us... I've been taking the diabetes medicine for eight years. I get to the post, show the card and they give me the medicine. Then you think these are the type of people who want us to control something. Sometimes I spend two months without picking the drugs up because they give me too many pills. When I can't go there I tell my husband to go and get it. These days he came with the idea that I had to take two pills a day, then I got confused... But I carry on, because I'm not feeling anything. (P4, F, 62 years, 12 years of DM)

People can only manage diabetes when they have a follow-up of the health personnel. Here everyone complains; all we have is a 20-minutes meeting a year, where the nurse talks about diabetes and high blood pressure... Then I ask: how about those who don't have the money to pay private consultation? do they have to take care of diabetes with this type of service we get? (P9, F, 62 years, 13 years of DM)

Participants also highlighted the fact that the service and the recommendations of health professionals are not personalized and keep little relation to the reality of life they have.

[...] You go to the doctor and he prescribes a lot of things: you can eat this, you can't eat that, you have to exercise. I work as a maid and can't choose what to eat, and my physical exercise is my work. (P5, F, 55 years, six years of DM)

The doctor of the medical post told me to eat a fruit in the middle of the morning and in the afternoon, but I work as a bricklayer all day, which is a raw and dirty work. How can I just eat fruits?! If it depends on this to improve diabetes I'm dead. (P10, M, 54 years, 12 years of DM)

[...] Once I even had an appointment with a nutritionist, to see if I could manage diabetes, but she suggested a lot of expensive things that I don't like to eat. That lasted a week and I gave up. (P12, F, 57 years, five years of DM)

For the subjects of the research, the shortage of consultation with specialists is also a complicating factor:

To take care of diabetes, you need to have more doctor's appointment; because I waited almost a year in line to get the consultation with a specialist and he sent me to an ophthalmologist and when I got there he said that I searched him too late, that there was nothing left to do... And I still have the Impression that the carelessness was mine. (P1, F, 69 years, 15 years of DM)

If you need an appointment with an endocrinologist, you have to pay or wait for about two years. That's why there are so many diabetic patients and the number is increasing more and more. (P18, M, 60 years, 16 years of DM)

And, finally, they made reference to the type of relationship between doctor and patient.

It gives me a chill on the spine when I have to go to the diabetes doctor... It makes me nervous because he keeps nagging me because of the value of the glycated hemoglobin test (laughs). He scolds me, so I get nervous and that's why diabetes goes up. Not to mention that he keeps threatening me, [saying] that I'm going to lose my kidney. (P17, F, 67 years, 15 years of DM)

We go to the doctor and he keeps demanding from us. He looks at the results and the sermon begins: I didn't do this, I didn't do that. There's no way I can take it all so strictly... (P3, M, 67, 17 DM)

In the personal context, the participants pointed to the family and work environment as factors that negatively influence the adoption of self-care measures related to DM.

If I lived alone, it would be a lot easier for me to take care of myself and control my diabetes, because my daughters don't even care if I have this (cry). They make those foods that I know I can't eat and they offer me; they say I'm boring, then I get nervous and eat. There is one of them who also says, "come on, eat it! You'll die anyway"... Is this a joke you do? (P11, F, 60 years, 11 years of DM)

I can't take care of diabetes because I cook for the whole house, and the boys work hard. So I have to make some food to make them strong; otherwise they can't stand a day of service. (P14, M, 68 years, 18 years of DM)

What makes it harder for me to control diabetes is that I work at my dad's bar and I really like candies (...) It seems that just because I know I can't eat them, I keep counting the minutes to go to work so I can eat... In order to take care of diabetes, I needed to get another job. (P13, M, 46 years, five years of DM)

DISCUSSION

The management of a chronic disease, such as DM2, requires a series of self-care behaviors that are directly influenced, according to Orem, by intrinsic and extrinsic factors[5] - for example, the way in which the individual recognizes and means the disease in his life and the environment in which it is inserted.[14] In the planning of care for the individual with DM2, a review study points out the importance of considering, in addition to clinical and biological questions, ways of stimulating the individual to participate in the decision-making process

related to his own health. This is because the individual will better understand the possible damages and benefits of each action from the recognition of the options available within the real context of life.[15]

This recognition does not only mean that individuals accept that they have DM2, but also re-signifies this pathology, integrating it into their routine, the family environment and outside it. Throughout this process of re-signification, individuals experience numerous difficulties and stressing situations - for example, in relation to diet in the workplace, or even at home - and only when they understand the risks and importance of following the necessary care they can incorporate them into their daily lives.[16-18]

Thus, when attending and accompanying individuals with a chronic illness, nursing professionals should consider their beliefs, preferences and their stage of motivation to make changes in health behaviors. Therefore, the self-care actions planned together (nurse and patient) will be supported by the actual condition of coping with the disease that affects the individual.

It was observed in some testimonies, among them that of P2, the recognition of their responsibility for their own care. A study carried out with 18 Dutch professionals demonstrated that they consider that the recognition by individuals in terms of their responsibility towards self-care actions is an essential factor in the control of the disease and in the improvement of the quality of life. It has also pointed out that high motivation is related to effective changes in lifestyle.[19]

Therefore, it is necessary for individuals to recognize that, although they sometimes require sacrifice, energy and commitment, the implementation of changes in their daily lives, including in the work environment, is important, as they will be beneficial to health, as observed in the Testimony of P15. Thus, nurses must reinforce the importance of positive behaviors, besides supporting individuals in the decisions related to self-care. However, according to Orem,[5] personal decision is a central factor for self-care actions.

Knowledge on the disease, even being a primary factor for the good life of individuals with DM2, is not a sufficient factor in determining the adoption of positive self-care behaviors.[20] It is observed in P17 that, although aware of the necessary changes in their life habits for proper control of the disease, these are not incorporated into their daily lives. In this specific case, the behavior in question is related to the frustration resulting from a complication of DM2, which is retinopathy.

From this condition, the nurse identifies and recognizes opportunities that make possible the resignification of the disease by the individual. Although physiological factors may contribute to this complication, the recognition of difficulties in maintaining the necessary actions to control the disease constitutes an influential factor in the experience of this condition by individuals.

Faced with this, an important challenge for nurses is recognized: that of identifying not only barriers to treatment, but also apprehending the reason for their occurrence. This will allow the development of more successful clinical approaches that may, in fact, help the patient to live better with the chronic illness. Self-care is one of the objectives of nursing care, since it enables the direct participation of people, especially those who live together with a chronic condition, and in their management, stimulating them, from individual conceptions, to make decisions In favor of their own health.[21]

Another important aspect to be considered by nurses is the awareness that the effects of behavior changes will only be observed in the long run. This is because it is common for individuals to expect immediate results, and when this does not occur they may become discouraged in keeping the changes implemented. Therefore, the use of supported self-care helps to maintain patients' motivation, despite their frustrating attempts, because during the joint planning of care actions, patients are informed that unsuccessful attempts are part of the change process. Therefore, in this process, nurses should value the small changes in the individual's behavior and encourage them to continue with their intention to achieve positive results in favor of their future health condition.[5,22]

Regarding self-care actions, individuals pointed out some barriers that they consider influencing the adherence process. For example, P4, in his testimony, points out the existing gap in the performance of the FHS, since the organization of the service does not prioritize the frequent "monitoring" of the patient with DM2. This way, the assistance provided is reduced to the activity of dispensing medicines and unscheduled medical consultations. Therefore, nurses need to know service users, to favor their commitment to the treatment, adapting them, when possible, to the particular conditions of life, as well as to plan the care from a sensitive, comprehensive and supportive manner. This will allow individuals to recognize their role as protagonists in relation to their health and illness and feel supported during the process of changing habits.[5,23]

It is also considered that the actions of the nursing team cannot be restricted to the traditional way of transmitting information, as referred by P9, since this model of intervention has been shown to be ineffective.[8] These actions should be conducted in order to encourage and promote the development of individuals' self-care skills for their own health.

The use of ready-made "recipes" at the moment of feeding orientation, for example, is another obstacle to self-care. It occurs when professionals do not consider the financial conditions of individuals or the difficulties resulting from the type of service that these people perform. In doing so, they disregard any particularity of the patients, their degree of motivation in the face of the need for behavior change, and not knowing the meaning of the disease in the patients' lives.

Regarding this, the orientation must occur after the establishment of a strong bond, in order to provide the "agreement" in relation to the proposed self-care measures.[1] In a study carried out with individuals with DM2, in the public health system of a city of Goiás, the authors found that the fixed and prohibitive dietary recommendations favored the establishment of a vicious circle, that is, the low adherence did not favor the obtaining of benefits, which, in turn, also discouraged it.[24]

A similar situation occurs with individuals who recognize the importance of self-care for DM2 control, but do not perform it. However, the major problem related to the lack of control of the disease is not recognizing the chronic condition and the need to look for ways to integrate it into their daily lives. In this sense, it is important to consider the personal characteristics and general expectations regarding the disease in the planning of care, in order to qualify the results of the interventions proposed by the health professionals.[25]

On the other hand, it should be noted that structural problems are common in services for chronic diseases,[26] among which the difficulty in obtaining consultation with specialists, according to the P1's report, is highlighted. However, numerous control measures can be oriented and implemented by the health team before individuals need a specialist evaluation. This requires the team to address the true behavioral determinants that culminate in increased incidence and disease prevalence, rather than prioritizing partial solutions to chronic disease, which is usually multifactorial.

It should be noted that an influential factor in the lack of specialist consultations is related to the overload of referrals generated by the FHS physicians, who are sometimes not prepared for the care of individuals suffering with DM2 in Primary Care. In this sense, a study carried out with 13 physicians from health districts of Goiânia pointed to gaps related to the preparation of medical professionals who work in the care of people with DM; for example, the lack of specific criteria adopted by them for the diagnosis of the disease, in addition to treatment focused on medication and diet. The authors of this study also found that, for the study participants, the difficulties of individuals with DM for adherence to treatment involve, on the one hand, access to consultations, examinations and medication, and on the other, the financial condition of individuals and the little willingness to change their health behaviors.[27]

Therefore, there should be a network of assistance strengthened and engaged, that allows the operation of the service and culminates in quality assistance. Risk stratification, for example, is a tool that allows for the organization of care, as well as it contributes to the reduction of the demand for consultations with specialties.[28]

The attitude of the professionals, in addition to the relationship they develop with patients, is another aspect related to the service and that interferes in the control of the disease. In the report of P17, it is observed that her relationship with the medical professional is asymmetric and fearful, and this makes it difficult to establish a therapeutic plan as predicted by the strategy of self-care supported. Thus, it is worth emphasizing the importance of measures that include stress control to the treatment recommended for this disease, with the purpose of improving glycemic levels and preventing the appearance of complications.[29]

When the therapeutic plan is not discussed, but imposed on patients, the chance that they will adopt and follow it on a daily basis diminishes. This fact reveals the importance of professionals understanding the way in which individuals deal with the chronic illness, in order to jointly plan the possibilities of care from what patients already do and the discussion in terms of feasible means and strategies to be implemented. Thus, the inclusion of components that facilitate behavior change can be favored by setting goals together - health professionals and individuals.[30]

It is important to emphasize that the physician's demands and the adoption of the laboratory standard as a central measure of care do not contribute to establishing a link between patients and professionals and, therefore, to implement self-care actions. Thus, even if individuals know the importance of laboratory parameters in controlling the disease, if they are not motivated and are not properly stimulated, they will not be able to make effective changes in their daily life in order to produce positive changes in the laboratory tests.[31]

Another factor reported to be influential in adopting self-care measures is the poorly collaborative attitude of close family members and people, including those in the work environment. In spite of the difficulties experienced in these contexts, it is especially important to mention those that have occurred during meals; since it should be considered that the act of eating is part of family life and involves social issues.[32] In view of this, the essential role played by the family in the chronic illness of individuals is highlighted, and it is necessary to recognize the importance of food in the quality of life of patients over the years, and the family, as a conditioning aspect of self-care, according to Orem,[5] may or may not favor the implementation of necessary changes.[24]

The current work condition was also referenced as an influential factor in self-care actions, as reported in P13. However, when analyzing the report, signs of anxiety are identified that are known to influence inappropriate eating practices,[33] among which the increase in the will to eat because the patients know that they cannot. In this way, we can see a gap to be worked out by health professionals, especially by nurses, mainly because individuals recognize that the improvement of their current health condition depends on the motivation and commitment related of their own behavior.

In this sense, a strategy that can be used by nurses is the supported self-care, which aims to prepare and empower individuals to self-manage their health and develop behaviors that control the evolution of the disease. This can occur from the development of support strategies that include assessing health status, setting small goals to be achieved, and jointly develop care plans.[5]

Finally, changes in the behavior of individuals with DM2 in relation to the chronic illness are considered necessary, as well as in the organization of the care, so that individuals can identify in the service the necessary support to develop and maintain their own care and, consequently, the control of the disease. In addition, the effectiveness of care is attributed to the recognition of joint responsibility - nurse-patient - for self-care actions.

It is reaffirmed here the need for nurses to assume the role of facilitators of the process of empowerment of the individuals with a chronic illness, so that these individuals can make adequate decisions regarding the control of the disease and postpone the appearance of its complications. Welfare practices, which focus on disease, must be overcome, so that rules and routines become flexible, and nurses can make their clinical practice centered on users effective.

As a limitation of the present study, the need for caution is emphasized in extrapolating the results to other sociocultural realities, since these lack external validity.

CONCLUSIONS AND IMPLICATIONS FOR PRACTICE

The perspectives of individuals with DM2 on self-care are influenced by intrinsic and extrinsic factors. Some individuals recognize and take the necessary actions to control the disease, for example, food education, physical activity practice and stress management. Others, although they know and recognize the importance of these actions, do not comply with them, or when they comply with them, they are not persistent, because they are influenced by self-care constraints, such as personal decision; and external factors, such as the organization of the health service and the existence of family conflicts.

Although some physiological mechanisms negatively influence the way in which the disease is manifested and is faced by individuals, recognition of the importance of behaviors that favor self-care is an essential aspect for the improvement of the quality of life and, consequently, disease control. Therefore, planning care for the individual with DM2, or any other chronic condition, is a challenge for the health team, especially for nursing, since it requires the respect and inclusion of individuals' perspectives.

The use of supportive self-care assumptions may be an effective strategy in identifying the main barriers to DM2 control, since it both respects the individual's time in the implementation of behavioral changes, and it also helps them to perform self-care actions that are appropriate to their health conditions. This will allow clinical approaches that will help patients cope better with this chronic condition. To do this, nurses need to recognize, through dialogue, the self-care actions that individuals consider to be already performing, value the small changes and to allow individuals themselves to identify the need to make them more effective.

ACKNOWLEDGEMENT

Thanks to the National Research Council (CNPq) for the financing (Universal Announcement 487109/CNPq, 2013-9).

REFERENCES

1. Ievers-Landis CE, Walders-Abramson N, Amodei N, Drews KL, Kaplan J, Levitt Katz LE, et al. Longitudinal Correlates of Health Risk Behaviors in Children and Adolescents with Type 2 Diabetes. J Pediatr. [internet]. 2015; [cited 2014 dez 12]; 166(5): 1258-64. Available from: http://www.ncbi.nlm.nih.gov/pubmed/25702853. doi: 10.1016/j.jpeds.2015.01.019.
2. Deerochanawong C, Ferrario A. Diabetes management in Thailand: a literature review of the burden, costs, and outcomes. Global Health [internet]. 2013; [cited 2014 dez 22]; 9:11. Available from: http://www.ncbi.nlm.nih.gov/pubmed/23497447. doi: 10.1186/1744-8603-9-11.
3. Coulter A, Entwistle VA, Eccles A, Ryan S, Shepperd S, Perera R. Personalised care planning for adults with chronic or long-term health conditions. Cochrane Database Syst Rev [internet]. 2015; [cited 2015 Jan 08]; (3):CD010523. Available from: http://www.ncbi.nlm.nih.gov/pubmed/25733495. doi: 10.1002/14651858.CD010523.pub2
4. Hass L, Maryniuk M, Beck J, Cox CE, Duker P, Edwards L, et al. National standards for Diabetes self-management education and support. Diabetes care [internet] 2013; [cited 2015 Jan 17]; 36(supl):100-08. Available from: http://care.diabetesjournals.org/content/35/11/2393.full. doi: 10.2337/dc14-S144
5. Orem DE. Nursing: concepts of practice. St. Louis: Mosby; 2005. 82p
6. Funnell MM, Brown TL, Childs BP, Haas LB, Hosey GM, Jensen B, et al. National standards for diabetes self-management education. Diabetes Care [internet]. 2012; [cited 2015 Fev 02]; 34(supl. 1):89-96. Available from: http://care.diabetesjournals.org/content/35/11/2393. doi: 10.2337/dc10-S089
7. Oliveira DLLC. Nursing and its reliance on self-care: emancipatory investments or practices of submission? Rev Bras Enferm [internet]. 2011; [cited 2015 Fev 14]; 64(1): 185-88. Available from: http://www.scielo.br/scielo.php?pid=S0034-71672011000100027&script=sci_arttext&tlng=es. http://dx.doi.org/10.1590/S0034-71672011000100027
8. David GF, Torres HC, Reis IA. Atitude dos profissionais de saúde nas práticas educativas em Diabetes Mellitus na Atenção primária. Cienc. cuid. saude [internet]. 2012; [cited 2015 Mar 10]; 11(4):758-66. Available from: http://periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/21658. doi: 10.4025/cienccuidsaude.v11i4.21658
9. Dean AJ, Walters J, Hall A. A systematic review of interventions to enhance medication adherence in children and adolescents with chronic illness. Arch Dis Child [internet]. 2010; [cited 2015 Abr 02]; 95(9):717-23. Available from: http://adc.bmj.com/content/95/9/717.full. doi: 10.1136/adc.2009.175125
10. Wells JR. Hemodialysis knowledge and medical adherence in African Americans diagnosed with end stage renal disease: results of an educational intervention. Nephrol Nurs J [internet]. 2011; [cited 2015 Ag 12]; 38(2):155-62. Available from: http://www.ncbi.nlm.nih.gov/pubmed/21520694
11. Vargas D. Attitudes of clinical nurses toward personal characteristics of alcoholics patients. Rev Bras Enferm. [internet]. 2010; [cited 2015 Set 6]; 6(36):1028-34. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672010000600024. http://dx.doi.org/10.1590/S0034-71672010000600024
12. Instituto Brasileiro de Geografia e Estatística (IBGE). 2010. Acesso em: 21 Set 2015. Available from: http://cidades.ibge.gov.br/xtras/perfil.php?codmun=411210
13. Bardin L. Análise de conteúdo. Lisboa, 2011. 280p
14. Berglund MMU. Learning turning points in life with long-term illness visualized with the help of the life-world philosophy. Int J Qualitative Stud Health Well-Being [internet] 2014 [acesso em: 07 out 2015]; 9: 22842. Available from: http://www.ijqhw.net/index.php/qhw/article/view/22842. http://dx.doi.org/10.3402/qhw.v9.22842

15. Ismail-Beigi F, Moghissi E, Tiktin M, Hirsch B, Inzuxxhi SE, Genuth S. Individualizing glycemic targets in type 2 diabetes mellitus: implications of recent clinical trials. Ann Intern Med. [internet]. 2011; [cited 2015 Set 10]; 154(8):554-9. Available from: http://annals.org/article.aspx?articleid=746938. doi: 10.7326/0003-4819-154-8-201104190-00007

16. Wilkinson MJ, Nathan AG, Huang ES. Personalized decision support in type 2 diabetes mellitus: current evidence and future directions. Curr Diab Rep. [internet]. 2013; [cited 2015 Out 2]; 13(2):205-12. Disponível em: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3593795/. doi: 10.1007/s11892-012-0348-6

17. Gordon C, Walker M, Carrick-Sen D. Diabetes knowledge in patients' adult offspring. Nurs Times [internet]. 2014; [cited 2015 Nov 02]; 110(26): 24-6. Available from: http://www.ncbi.nlm.nih.gov/pubmed/25087268

18. Sugiyama T, Steers WN, Wenger NS, Duru OK, Mangione CM. Effect of a community-based diabetes self-management empowerment program on mental health-related quality of life: a causal mediation analysis from a randomized controlled trial. BMC Health Serv Res. [internet]. 2015; [cited 2015 Nov 17]; 15: 115. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4375843/. doi: 10.1186/s12913-015-0779-2

19. Raajimakers LGM, Hamers FJM, Martens MK, Cagchus C, Vries NK, Kremers SPJ. Perceived facilitators and barriers in diabetes care: a qualitative study among health care professionals in the Netherlands. BMC Family Practice [internet]. 2013 [acesso: 02 Nov 2015]; 14:114. Available from: http://www.biomedcentral.com/1471-2296/14/114. doi: 10.1186/1471-2296-14-114

20. Al Wadaani FA. The knowledge attitude and practice regarding diabetes and diabetic retinopathy among the final year medical students of King Faisal University Medical College of Al Hasa region of Saudi Arabia: a cross sectional survey. Niger J Clin Pract [internet]. 2013 [cited 2015 dez 13]; 1692:164-8. Available from: http://www.ncbi.nlm.nih.gov/pubmed/23563455. doi: 10.4103/1119-3077.110133

21. Beverley EA, Ritholz MD, Brooks KM, Hultgren BA, Lee Y, Abrahamsom MJ, et al. Qualitative study of perceived responsibility and self-blame in type 2 Diabetes: reflections of physicians and patients. Journal of General Internal Medicine [internet]. 2012 [cited 2015 dez 20]; 27(9):1180-87. Available from: http://www.ncbi.nlm.nih.gov/pubmed/22549299. doi: 10.1007/s11606-012-2070-0

22. Wikinson MJ, Nathan AG, Huang ES. Personalized decision support in type 2 diabetes mellitus: current evidence and future directions. Curr Diab Rep [internet]. 2013[cited 2016 Jan 10]; 13(2): 205-12. Available from: http://www.ncbi.nlm.nih.gov/pubmed/23160795. doi: 10.1007/s11892-012-0348-6

23. Chiauzzi E, Rodarte C, DasMahapatra P. Patient-centered activity monitoring in the self-management of chronic health conditions. BMC Med. [internet]. 2015 [cited 2016 Jan 12]; 13: 77. Available from: https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-015-0319-2 doi: 10.1186/s12916-015-0319-2

24. Pontieri FM, Bachion MM. Beliefs of diabetic patients about nutritional therapy and its influence on their compliance with treatment. Cienc. saude colet. [internet]. 2010 [cited Jan 20]; 15(1):151-60. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232010000100021&lng=en&nrm=iso&tlng=en. http://dx.doi.org/10.1590/S1413-81232010000100021

25. Fisher L, Hessler D, Masharani U, Strycker L. Impact of baseline patient characteristics on interventions to reduce diabetes distress: the role of personal conscientiousness and diabetes self-efficacy. Diabet Med. [internet]. 2014 [cited 2016 Fev 01]; 31(6): 739-46. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4028368/. doi: 10.1111/dme.12403

26. Carlos S, Irala J, Hanley M, Martínez-González MA. The use of expensive technologies instead of simple, sound and effective lifestyle interventions: a perpetual delusion. J Epidemiol Community Health. [internet]. 2014 [cited 2014 Fev 12]; 68(9): 897-904. Available from: http://jech.bmj.com/content/early/2014/06/24/jech-2014-203884.full. doi: 10.1136/jech-2014-203884

27. Reis OM, Bachion MM, Nakatani AYK. Preparo de médicos para o atendimento a diabéticos no Programa Saúde da Família e suas percepções sobre as dificuldades de adesão ao tratamento. Acta Sci. Health Sci. [internet]. 2005 [cited 2016 Fev 27]; 27(2):119-29. Available from: http://periodicos.uem.br/ojs/index.php/ActaSciHealthSci/article/view/1376/786. doi: 10.4025/actascihealthsci.v27i2.1376

28. Secretaria de Estado de Saúde do Paraná. Oficinas do APSUS-Formação e Qualificação Profissional em Atenção Primária à Saúde. Oficina 6. Acesso em: 12 de Janeiro de 2015. Available from: http://www.saude.pr.gov.br/modules/conteudo/conteudo.php?conteudo=2970

29. Ferreira NC, Bavaresco DV, Ceretta LB, Tuon L, Gomes KM, Amboni G. Estresse em pacientes com Diabetes tipo 2. Rev Inova Saúde [internet]. 2015 [cited 2016 Mar 02]; 4(1): 88-98. Available from: http://periodicos.unesc.net/Inovasaude/article/view/1949/2253. http://dx.doi.org/10.18616/is.v4i1.1949

30. Mantwill S, Fiordelli M, Ludolph R, Schulz PJ. Empower-support of patient empowerment by an intelligent self-management pathway for patients: study protocol. BMC Med Inform Decis Mak. [internet]. 2015 [cited 2016 Mar 13]; 15: 18. Available from: http://www.ncbi.nlm.nih.gov/pubmed/25890197. doi: 10.1186/s12911-015-0142-x

31. Khagram L, Martin CR, Davies MJ, Speight J. Psychometric validation of the Self-Care Inventory-Revised (SCI-R) in UK adults with type 2 diabetes using data from the AT. LANTUS Follow-on study. Health and Quality of Life Outcomes [internet]. 2013 [cited 2016 Abr 12]; 11:24. Available from: http://hqlo.biomedcentral.com/articles/10.1186/1477-7525-11-24. doi: 10.1186/1477-7525-11-24

32. Barsaglini RA, Canesqui AM. Food and diet in the diabetes chronic condition management. Saúde Soc. [internet]. 2010 [cited 2016 Abr 14]; 19(4): 919-32. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-12902010000400018. doi: 10.1590/S0104-12902010000400018

33. Willig AL, Richardson BS, Agne A, Cherrington A. Intuitive eating practices among African-American women living with type 2 diabetes: a qualitative study. J Acad Nutr Diet [internet]. 2014 [cited 2016 Mai 12]; 114(6): 889-96. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-12902010000400018&lng=en&tlng=pt. doi: 10.1016/j.jand.2014.02.004.