Revista Brasileira em Promoção da Saúde
e-ISSN:1806-1230
Original Article
DOI: 10.5020/18061230.2019.9518

MEANINGS AND DIETARY PRACTICES AMONG OLDER ADULTS DIAGNOSED WITH TYPE 2 DIABETES MELLITUS

Significados e práticas dietéticas entre idosos diagnosticados com diabetes mellitus tipo 2

Significados y prácticas de dietas entre mayores con diagnóstico de diabetes mellitus del tipo 2

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ABSTRACT

Objective: To understand the meanings and dietary practices among older adults with type 2 diabetes mellitus (T2D). **Methods:** This qualitative study was conducted between September 2016 and March 2017 using through semi-structured interview with 20 older adults diagnosed with Type 2 Diabetes Mellitus (T2D) living in the city of Jequié, Bahia, Brazil. The information was submitted to thematic content analysis and the following categories emerged: T2D older adults' decisions regarding dietary requirements; Meanings given by T2D older adults to prescribed diets; "I get out of line": flexibility in dietary practices; Facilities and difficulties in diet management. **Results:** Although the older adults understand the importance of diet, they behave in several different ways in relation to dietary requirements, ranging from full adherence to non-adherence. Diet is perceived as difficult, tasteless, controlled, disgusting and does not consider their preferences, thus causing feelings such as sadness, feelings of weakness and death. The older adults are flexible towards dietary requirements and seek to adapt to their health condition. Diet management was shown to be centralized and complex given the need for a cultural break. **Conclusion:** The older adults reinterpret and adapt the biomedical explanations as they value culture, sociability and sensory pleasure. Intersectoral, interdisciplinary and innovative practices are recommended for more effective diet management outcomes.

Descriptors: Diabetes Mellitus; Chronic Disease; Diet, Food, and Nutrition; Health Knowledge, Attitudes, Practice.

RESUMO

Objetivo: *Compreender os significados e as práticas dietéticas entre pessoas idosas com diabetes mellitus tipo 2 (DM2).* ***Métodos:*** *Pesquisa qualitativa, realizada entre os meses de setembro de 2016 e março de 2017, por meio de entrevista semiestruturada com 20 idosos diagnosticados com DM2, residentes na cidade de Jequié, Bahia, Brasil. As informações foram tratadas pelo método de análise de conteúdo, modalidade temática, na qual emergiram as seguintes categorias: Decisões dos idosos com DM2 frente às recomendações dietéticas; Significados atribuídos à dieta prescrita por idosos com DM2; "Saio da linha": flexibilidade*

Received on: *05/27/2019*
Accepted on: *10/21/2019*

nas práticas dietéticas; Facilidades e dificuldades no gerenciamento da dieta. ***Resultados:*** *Apesar dos idosos compreenderem a importância da dieta, diversas são as formas como agem diante das recomendações dietéticas, desde a adesão total até a não adesão. A dieta é percebida como de difícil tolerância, sem sabor, controlada, repugnante, desvinculada das preferências, capaz de causar sentimentos como tristeza, sensação de fraqueza e morte. Os idosos flexibilizam as recomendações dietéticas, buscando adaptar-se a sua condição de saúde. O manejo da dieta demonstrou ser central e complexo, haja vista a necessidade de uma ruptura cultural.* ***Conclusão:*** *Os idosos reinterpretam e adaptam as explicações biomédicas, pois valorizam a cultura, a sociabilidade e o prazer sensorial. Práticas intersetoriais, interdisciplinares e inovadoras são recomendadas para resultados mais efetivos no gerenciamento da dieta.*

Descritores*: Diabetes Mellitus; Doença Crônica; Alimentos, Dieta e Nutrição; Conhecimentos, Atitudes e Práticas em Saúde.*

RESUMEN

Objetivo: *Comprender los significados y las prácticas de dieta entre mayores con diabetes mellitus tipo 2 (DM2).* ***Métodos:*** *Investigación cualitativa realizada entre los meses de septiembre de 2016 y marzo de 2017 a través de entrevista semiestructurada con 20 mayores con el diagnostico de DM2, de la ciudad de Jequié, Bahia, Brasil. Se ha tratado las informaciones a través del análisis de contenido en la modalidad temática de la cual emergieron la categorías a continuación: Decisiones de los mayores con DM2 delante las recomendaciones de dieta; Significados de la dieta delante las recomendaciones de dieta; Significados de la dieta para los mayores con DM2; "Salgo de la línea": flexibilidad en las prácticas de dieta; Facilidades y dificultades para la gestión de la dieta.* ***Resultados:*** *Aunque los mayores comprendan la importância de la dieta, son muchas las formas cómo reaccionan delante las recomendaciones de dieta desde la adhesión total hasta la no adhesión. Se percibe la dieta como de tolerancia difícil, sin sabor, controlada, repugnante, desvinculada de las preferencias, capaz de causar sentimientos como la tristeza, la sensación de flaqueza y de muerte. Los mayores flexibilizan las recomendaciones de dietas buscando adaptarse a su condición de salud. El manejo de la dieta ha demostrado ser central y complejo una vez que hay la necesidad de una ruptura cultural.* ***Conclusión:*** *Los mayores reinterpretan y adaptan las explicaciones biomédicas pues valoran la cultura, la sociabilidad y el placer sensorial. Las prácticas intersectoriales, interdisciplinares e innovadores son recomendadas para resultados más efectivos en la gerencia de la dieta.*

Descriptores*: Diabetes Mellitus; Doença Crônica; Alimentos, Dieta e Nutrição; Conhecimentos, Atitudes e Práticas em Saúde.*

INTRODUCTION

Type 2 diabetes mellitus (T2D) has been highlighted as a high-cost public health problem for patients, families, societies, and the Unified Health System (*Sistema Único de Saúde - SUS*). This is due to population aging, increased urbanization, increased prevalence of obesity and physical inactivity, and increased survival of people with T2D[1].

The prevalence of diabetes increases with advancing age. According to the International Diabetes Federation, there are 326.5 million people of working age (20-64 years old) and 122.8 million people aged 65-99 years with diabetes[2]. Diabetes can be classified into type 1 (T1D), type 2 (T2D), gestational and other forms of presentation. However, the most common form seen in 90-95% of cases is T2D, which is characterized by defects in insulin action and insulin secretion[1].

Diabetes is included among the diseases classified as non-communicable diseases (NCDs), which are characterized as being multifactorial, developing throughout life and being long-lasting. Thus, due to the impossibility of cure, NCDs are subject to control through the acquisition of healthy habits, the use of medicines and the reformulation of daily life by adapting routines to obtain control over the disease and quality of life, thereby preventing or postponing complications. Dieting is one of the forms of control related to lifestyle and it is used in the management of diabetes as a central element both for understanding its cause and for explaining the degree of control over the disease[3].

Considering the relevance of food and the impact it has on the daily lives of people with type 2 diabetes mellitus, the analysis of dieting has focused on the difficulties for change, the moral pressure to which those undergoing treatment are subjected[4] and the subjectivity found in the explanatory models[5]. People living with T2D realize that eating behaviors are barriers that must be overcome so they can get better health and a successful treatment[5].

It should also be considered that systemic arterial hypertension and diabetes mellitus stand out because they are major public health problems and are among the top five global risk factors for mortality worldwide[6]. Furthermore, according to the National Health Promotion Policy (*Política Nacional de Promoção da Saúde - PNPS*), the autonomy and uniqueness of patients should be taken into account because the way they choose to live depends not only on individual or community will or freedom, they are conditioned and determined by the social, economic, political and cultural contexts in which they live[7].

This study is justified by the impact of T2D control through nutritional recommendations and by the fact that older patients with T2D may be eating incorrectly. In addition, these patients may not have proper knowledge on the theme. Thus, the approach to nutritional management of patients with T2D should not only be focused on the diet; it should also have a subjective style and feature a behavioral look to place the patient at the center of care.

Thus, the question that should be asked to investigate this problem is: what are the meanings and dietary practices related to the older patient with T2D? Given that, this study aimed to understand the meanings and dietary practices among older adults with type 2 diabetes mellitus.

METHODS

This qualitative descriptive study[8] derived from a matrix research project called Health care meanings and practices among older adults with diabetes (*Significados e práticas de cuidados em saúde entre pessoas idosas com diabetes – SIPRACID*) conducted from March 2016 to December 2018 by professors and undergraduate students of the State University of Southwestern Bahia, Brazil.

The study participants were 20 male and female older adults with a medical diagnosis of T2D receiving care at the Hypertensive and Diabetic Patients Registration and Monitoring System – Hiperdia. Inclusion criteria were: age 60+, medical diagnosis of T2D for a minimum of one year and enrollment in Hiperdia. Hiperdia is intended to register and monitor people who have a diagnosis of arterial hypertension and/or diabetes mellitus seen at the outpatient network of the Unified Health System (*Sistema Único de Saúde - SUS*), which allows the production of epidemiological information aimed at the acquisition, dispensation and distribution of medicines to patients registered in a given area as well as reducing the morbidity and mortality related to these health problems[9].

Exclusion criterion was: cognitive impairment identified through the mini-mental state examination (MMSE). This instrument was developed based on the need for a standardized, simplified, short and rapid assessment of mental health status – specifically of symptoms related to dementia – in the clinical context[10].

The health care center chosen for the selection of participants is located in the urban area of the municipality of Jequié, Bahia, Brazil. It is a place for field health care practices of university, college and technical school students. It has also delivered care to people with diabetes for almost twenty years and now serves 459 people enrolled in Hiperdia. The care for people with diabetes takes place in the morning and afternoon shifts with the participation of nurses, clinical physicians, nutritionists and community health workers. The actions developed are predominantly biomedical and are carried out individually or with the participation of the family following guidelines contained in the protocol of the Ministry of Health[11].

Most of the participants were individually contacted in person and invited to participate in the study at the Hiperdia waiting room. However, other recruitment methods are used in a complementary way, such as: home visits to people with type 2 diabetes mellitus who were located based on registration data available at the center; indication by other older participants; and through a community health worker who provided updated data on the names and respective addresses of older adults with T2D living in the area they covered.

Data were collected from September 2016 to March 2017 through semi-structured interviews[8] using a questionnaire with questions about aspects related to diet in the management of T2D among the older adults, such as: social licenses, the person responsible for buying and preparing food, and preferences, rejections, meanings, resistances, difficulties and facilities for managing diet.

The interviews were terminated after data saturation was achieved, that is, when the researchers noted that the statements about the topic became constant[12]. The interviews lasted from 30 minutes to 80 minutes and took place at the participants' households on days and times agreed between the participants. The interviews were recorded using a digital voice recorder and then transcribed verbatim. Only a few corrections were made to make them more readable.

The data were interpreted according to the steps of Thematic Content Analysis[13]. The information was successively and quickly read and notes on structuring and converging elements, related themes and contradictions were taken. After that, the related themes were grouped into different files to facilitate the identification of subsets of data on the elements that portrayed older adults' interpretation of the subject analyzed[13].

The analysis of the interviews yielded four thematic categories: T2D older adults' decisions regarding dietary requirements; Meanings given by T2D older adults to prescribed diets; "I get out of line": flexibility in dietary practices; and Facilities and difficulties in diet management.

In order to preserve the identity of the interviewees, the letter "I" (interviewees) was used followed by a numerical number according to the chronological sequence of the interview. The study was approved by the Research Ethics Committee of the State University of Southwestern Bahia, Approval No.: 1.535.559, and the older adults gave their written informed consent. Those who were illiterate used their fingerprint to sign the consent form.

RESULTS AND DISCUSSION

After analyzing the interviews and dividing clusters of meanings, the following categories emerged:

T2D older adults' decisions regarding dietary requirements

This category, T2D older adults' decisions regarding dietary requirements, shows that after confirmation and communication of the diagnosis of T2D, the person is told to adopt a new lifestyle in which diet has great relevance and impact on their disease control. The diet is prescribed by the nutritionist and is also recommended during consultations with other members of the health care team. However, the older adults reacted differently to the guidelines, ranging from total or partial compliance to complete non-compliance with the dietary requirements as shown in the following statements:

> *"I do not take sugar, I take sweetener. I do not eat fat or fried foods." (I16)*
>
> *"I follow the diet. Every now and then I eat a piece of cake, but not every day, it is every now and then." (I13)*
>
> *"I do not deprive myself of anything. I do not consider it an obligation to follow a diabetes diet. It is not difficult to eat, because I eat pasta, I eat everything: rice, beans... beans with meat." (I8)*

The results demonstrate that even in people initially willing to change their eating style the willingness to change changes during the disease. It is intense in the beginning, when the diagnosis of T2D is obtained, but it tends to be less rigorous over time, as reported by the participants:

> *"I do not follow it strictly. At first I followed it, but then I started to fail to do so. Sometimes I eat a little more." (I5)*

The changes in diet reported were associated with the quantity, quality and preparation of food:

> *"My food is either cooked or grilled. I have some food restrictions. My rice is not brown, but it comes with nothing. There is no salt or anything. If you add meat and fat to the beans, then I will not eat it." (I17)*

In view of the dietary recommendations necessary to control the disease, patients are required to make decisions and demonstrate they are greatly responsible for the treatment. However, not everyone are immediately willing to change behavior and when this attitude is not understood the chances of frustration and impatience on the part of the professional and failure to adopt a new lifestyle on the part of the patient increase. People with T2D need to be willing to change and aim to maintain it. However, it is necessary to respect their autonomy and encourage them to find feasible solutions to the problems that prevent them from reaching the goals set.

The participants in the present study said they had lived with T2D for sixteen years or more. Therefore, the initial phase had already passed, and they had a long experience with the disease. Moreover, the dynamics of life evoke daily decisions related to dietary guidelines.

Our findings were also similar to those reported in a study carried out with 45 patients with T2D in Mexico, in which three stages of changing eating habits were found: initial, accommodation-adaptation and crisis. In the Mexican study, the researchers found that the first conflicts related to changing eating habits among patients with T2D are experienced when the diagnosis is confirmed and a diet is prescribed, which is when they can adopt different patterns: disbelief in and rejection of treatment; acceptance, with immediate change of diet, and subsequent abandonment after a short time; or abandonment of the diet after a long time[14].

Education and a healthy lifestyle (dieting and physical activity) are part of the therapeutic approach for all patients with diabetes. In some cases, adequate glycemic control can be obtained exclusively by changing lifestyle without the daily need for pills or insulin[1].

This scientific evidence reinforces the importance of health professionals in supporting patients in the process of changing their lifestyle, especially in the initial stage of the disease or in confirming the diagnosis.

Meanings given by T2D older adults to prescribed diets

This category, meanings given by T2D older adults to prescribed diets, shows that the participants recognize the central role and relevance of the diet in the control of T2D:

> *"But I think that, diabetes, if I handled the diet properly, I would have already been cured." (I20)*

This idea originates partially from the association of T2D with inappropriate eating behavior, which is characterized by excessive consumption of food, especially of carbohydrate (sugar), as shown in the following statement:

> *"But I asked: 'Doctor, did I get diabetes because of sweets?' Then she said no, because the body has the ability to extinguish sugar. It just does not extinguish it when the person is diabetic." (I2)*

Thus, it is clear that for some of the participants the main food restriction needed to control T2D is that of sugar/sweets:

> *"I eat potatoes, bananas, yam, cassava... I like these things and I eat them. But I make my coffee black and have it with a sweetener." (I1)*

For the older adults who participated in this study, a restricted and adequate diet for the control of diabetes means something hard, difficult to tolerate, tasteless, desperate, disgusting, disconnected from their preferences, and capable of causing sadness, weakness and death:

> *"The diet is so different that you cannot sustain it. You feel weak, you feel hungry, then it beats you. [...] The pan is there, full of brown rice, but what is in it? It is Scarlet eggplant! Disgusting, isn't it? While the others have a pan of chicken, a tray of roasted chicken, you see the Scarlet eggplant and have to eat it with beans [...]. 'Yes, doctor, now I am going to die, can't I eat any more?' We think that if we stop eating, we will die." (I20)*
>
> *"The food loses its flavor." (I18)*

The older adults interviewed recognized the key role of the diet in their lives as they associated inadequate diet to the cause and lack of control of T2D. Sweets were said to be irresistible because of the habit of consuming them since childhood.

From the biomedical perspective, the excess consumption of sweets is a marker of unhealthy eating patterns. Sugar is a very high-calorie food and, if consumed in large quantities, it can lead to overweight and obesity, which are important risk factors for diabetes[15]. However, the diabetic older adults interviewed in this study said that sweets were appreciated foods that had been part of their eating habits throughout life and hence symbolized pleasure, satisfaction and joy. Thus, abolishing or suppressing their consumption was conflicting.

Negative meanings given to prescribed diets by older adults with T2D have also been reported in other studies involving the participation of adults, which proves to be a meaning that is shared by those living with the disease regardless of age or sex[14,16].

These meanings must be analyzed considering the social value attributed to freedom as part of the human essence. Being free to eat what you want when and how much you want is a much appreciated aspect as food is a key element for enjoyment and well-being in old age because it is impregnated with affection, emotion, joy and sociability[17].

Therefore, the restriction of freedom and pleasure contributes to the construction of negative meanings ("difficult to tolerate", "tasteless", "disgusting", "disconnected from preferences", "sadness", "feeling of weakness" and "death") and is a constant conflict. Sometimes the diseased wins and other times he/she is defeated by taste and pleasure because it is very complex for them to give up on food that they were happy to eat[18].

For the older adults analyzed, the dietary restrictions necessary to control chronic diseases, such as T2D and arterial hypertension, can be seen as one more restriction among the losses inherent to old age, which are seen as "small deaths" imposed by illness. In the present study, the association between death and diet had a real connotation for the participants who believed it was due to the weakness and scarcity of nutrients needed by the body when a strict restriction was adopted. However, it also appears in the trajectory of chronic illness as a figurative element capable of redefining existence based on experiences that refer to attributes of concrete death, such as rupture, interruption and sadness[19].

In the present study, the term diet was associated by the interviewees with the negative connotation of restriction, tasteless food, control, displeasure, and food for sick people or at risk of becoming ill, that is, people with a condition that makes them different from others. Thus, the idea that dieting is bad, dissociated from pleasure and linked to the nutritional value needed by the biological body – but often isolated from the social body – seems to be socially constructed.

"I get out of line": flexibility in dietary practices

This category, "I get out of line": flexibility in dietary practices, allows us to state that there is a clear difference between the diet prescribed by the nutritionist (also guided by other health professionals) and the diet adopted in everyday life. Although the professionals are recognized for their knowledge and competence, the choice of whether to follow the diet falls (in part) to the patient. Thus, the legitimacy of biomedical knowledge does not guarantee strict "obedience". The diet as it is thought and lived by the older participants demonstrates several nuances of interpretation: limited eating, not abusing, not exaggerating, picking, nibling, eating a little, not overeating, trying out:

> *"If I have a birthday party to go, I will go and eat (laughter). Now, if the cake is too sweet, I try it, but I do not eat it." (I14)*

Therefore, when asked if they are following the diet, they respond positively based on their explanatory model for the treatment and the way they adapt it to their reality:

> *"I follow the diet and every now and then I eat a piece of cake, but it is not every day, it is every now and then." (I13)*

Regarding the flexibility and adaptation of dietary prescriptions, they claim to comply with them almost always because they consider that it is not threatening to eat from time to time, "once in a while". They confess: "I 'skip' it, it is not 100%, I do not follow it strictly, I eat a little more, I get out of line, I eat just a little piece", as seen in the statements:

> *"But overeating, nah, I do not overeat. Now, from time to time I skip it a little, I eat something different (laughter) [...] My daughter-in-law makes feijoada and I eat it, do you know why? Once a week it's okay, right?" (I6)*

As for diet management, it is possible to notice partial compliance with prescriptions more often than total rejection of them. Those who "slip" call themselves "pesky", "sloppy". They assume that they commit "sins" with regard to food that result in uncontrolled glycemia:

> *"It is because I am 'pesky'. I eat things that I shouldn't." (I7)*
>
> *"I have been kind of sloppy and I have eaten everything and thus it went up a little bit more. Because I was there in the farm, eating homegrown bananas, hard jackfruit (laughter), then it (blood glucose) went up, went to 180." (I3)*

However, the awareness of transgression does not always lead to a change in behavior because for many it is tolerable and understandable that they do not continuously resist such a strict prescription:

> *"It (diabetes) drops a lot, goes back to normal. But people who have diabetes take advantage of it when it is low and go back to eating because they thinking they are cured." (I20).*

In order to escape the judgment and pressure from the professionals, they adopt as a strategy to miss consultations and not tell the truth:

> *"Now in February I am going to the doctor's. I did not go there last December and January because I know I did it wrong, I ate too much of what I couldn't; I went to the farm, I ate jackfruit in the farm." (I20)*

Of the older adults with T2D analyzed, those who did not reported or showed less difficult justified their lack of appetite. Most of them said that following the diet was a very difficult task. The manifestation of crises or life-threatening complications require them to adhere to the diet in order to guarantee survival.

The reasons presented by the older adults in the present study to transgress dietary recommendations were many and they coexisted. However, their statements show a certain degree of knowledge about foods with high and low glycemic index when defining and polarizing them as right and wrong, what they should and what they should

not, what they can and what they cannot. Thus, the problem seems to be located beyond the exclusive field of information, which was also demonstrated in a study carried out in Northeastern Brazil[20].

Still in the Brazilian context, researchers in a city in Rio Grande do Sul found that motivation to adopt healthy eating habits among people with chronic diseases is a challenge for health professionals due to the association of diet with complex elements, such as family traditions of eating, feeling of discomfort in the social environment and easy access to industrialized high-calorie foods[21].

In the present study, we observed a rejection of whole foods, which is explained by the fact that these foods were not usual during the life of the participants. This favored their perception of bad and unusual taste. Similar results were found in a study conducted in Ceará, which found a low consumption of whole foods[22]. However, other factors may favor the refusal of whole grains, such as beliefs about these foods, economic issues and the lack of experience with the preparation method. On the one hand is the whole food – ideal, natural, less processed, healthier and rich in nutrients. On the other hand is the industrialized food – more processed, with less fiber content and higher glycemic index. This dichotomy and the choice are conflicting and were observed in the participants' statements when referring to pasta, rice and whole grain bread or pasta, white rice and bread rolls. Healthier foods, rich in fiber and low in sugars, are more expensive[20] and low-income people, such as those who participated in the present study, have difficulties including them in their daily meals.

Social events, such as birthdays, weddings, family reunions on weekends, holidays, meetings with friends or church events, were challenging for the older adults. In these circumstances, people serve large quantities of foods which although excluded from the dietary prescription have a great symbolic value, as is the case with the wedding cake, sweets and feijoada with the family. The permissive practice of "social licenses" refers to the association between food and sociability among older adults with T2D. In this perspective, in addition to nutritional and biological aspects, food and commensality evoke family life, the strengthening of social ties, affection and a form of hospitality[23].

Facilities and difficulties in diet management

In this category, facilities and difficulties in diet management, the study participants demonstrate that diet management becomes easier when they have decreased appetite:

> *"Also, I am eating almost nothing. I do not even want to see that white rice! When I had appetite, I ate two bread rolls with butter and now I am not eating any!" (I7).*

Regarding difficulties in following the dietary prescription, they listed multiple factors of psychosocial, cultural, economic and personal nature, such as: participation in social events, living alone, gender, resisting preferences, anxiety, negative beliefs that associate diet with death, liking sweets, preparing a different meal for other family members, scarcity of resources, rejection of whole foods and cultural food disruption. Such difficulties for managing the diet were presented by the group of older people analyzed:

> *"Oh, when I have a birthday party to go I eat a piece of cake. Not much, you know, but I eat it." (I5)*
>
> *"When I get my money, I go to the market, pay my bills and buy more. Then, I can only buy more in the next month." (I3)*
>
> *"It is because my nature of eating these whole things is bad. I do not like them." (I4)*
>
> *"There was a patient who starved to death, he did not eat everything because he was afraid, and he died. He was already slimming on a diet." (I8)*
>
> *"The mistakes I make are just the ones I told you: I eat cocoa and coconut candy and dulce de leche." (I20)*

Of the people interviewed, the women stated that they prepared their own food:

> *"I make my own food. Sometimes I start cooking early in the morning and I only stop at 10 am." (I12)*

The men interviewed did not cook, as this task was always performed by some woman (wife, sister or niece), and, according to them, they adapted their meals as prescribed: hypocaloric, hyposodium and hypolipidic.

In the present study, normality was achieved by adapting the diet and allowing consumption of foods in smaller quantities. The difficulties encountered in maintaining self-care in family reunion situations were also reported by the older adults.

Living alone and not having the presence of a family member under the same roof constituted difficulties in resisting restricted foods, such as sweets. The presence of a family member seems to reinforce the role of heterovigilance and motivate older adults with T2D to follow the prescribed diet. Also, the presence of another person can motivate people to eat as they will have someone to share their meals with. Significant people tend to have a positive influence in terms of cooperation and encouragement, although some people can also play neutral or inhibiting roles. In other contexts and age groups, men contributed to changes in women's nutritional behaviors. This was demonstrated in a study whose participants were Latin women aged 18+ years with T2D living in Los Angeles, California, Las Vegas and Nevada, who said that their husbands had the greatest influence on their attitudes and choices[24].

Another aspect highlighted in the present study was that preparing and serving different meals to other family members constituted tempting situations for deviant behavior, thus requiring great effort to resist. In the interviews carried out in this study, older women with diabetes said that they always participated in the preparation of their food – they either shared the activity with other family members or performed it alone. For the older men with diabetes, the preparation of meals was the responsibility of women in the family (wife/daughter/niece).

It should be noted that none of the participants reported eating diet or light foods. This does not necessarily imply that they are not consumed. But the lack of spontaneity in reporting their consumption leads to the assumption that they are not part of everyday life, either for economic reasons, for individual preference, or for cultural reasons. A diet food is a product that is free from one of its components, which may be food without sugar, or alternatively or concomitantly, without fat, without salt or without protein. The Brazilian legislation considers light food to be one that has at least 25% less calories than the conventional similar product[25]. A study carried out in Brazil found that diet and light products are consumed by upper class families since low-income consumers find barriers to consume them due to their high cost in relation to conventional products[25].

The idea shared by the older adults interviewed was that it is very difficult to follow the diet as it imposes a cultural break with food preferences such as manioc flour, dried meat, feijoada, cassava, homemade sweets prepared with regional fruits, among other foods remembered with nostalgia and that are culturally Northeastern foods. It should be noted that despite professional guidance on diet in the treatment of T2D, the decision is always made by the patient and it is up to professionals to promote empowerment and autonomy so that the person with T2D can make better choices in relation to their food and hence achieve better quality of life for the additional years of life.

The present study was limited by the involvement of only one group of older adults with diabetes who attended a single health care center in a municipality in the countryside of Bahia. Despite these limitations, it is believed that this study represents an advance in describing T2D older adults' perceptions of dietary practices and their meanings. Voicing out their perceptions contributed to the achievement of principles defined by the PNPS[11], such as participation and autonomy, which may favor the creation of social spaces to address the theme.

Moreover, this study may guide the planning of health promotion actions and more effective care practices for the management of T2D in older adults, not only in that municipality, but in other places in the country, which may particularly strengthen the promotion of healthy eating habits[11].

However, further studies should be carried out with more heterogeneous groups of participants in order to obtain a broader view on the subject and assess the effectiveness of innovative educational programs in the field as well as foster the importance of dialog between managers, workers and the community so that they can reflect on the population's morbidities with a view to developing networks of commitment and co-responsibility regarding the promotion of the population's quality of life and health care.

FINAL CONSIDERATIONS

This study made it possible to understand dietary practices and their meanings among older adults with diabetes. Despite understanding the importance of dieting for the treatment of T2D, older adults' decisions regarding dietary recommendations are fluctuating, varied and unique. With regard to the meanings attributed to the prescribed diet, these are related to negative feelings and their practices showed flexibility.

The older adults with T2D also presented facilities and difficulties in managing their diet. Management proved to be central and complex, just like in other age groups.

The older adults analyzed demonstrated that they value sensory pleasure, that is, it is very important for them that the food is tasty, attractive and favors sociability. Being older and having T2d implied the need to change eating

habits adopted throughout life, a process in which eating went from a pleasurable to anguishing practice, which is why it is viewed with sadness and as another loss experienced in old age.

It is recommended that health professionals involved in the care of people with T2D and their caregiving family receive training and permanent education focused on human specificity and integrality. Moreover, the actions developed should be guided by intra and intersectoriality, interdisciplinarity and innovation. We also suggest the development of educational actions to promote health, both individually and collectively, so that the experiences of social events can be heard and problematized in order to help them find more effective solutions to the problems they face on those occasions.

CONFLICTS OF INTEREST

There are no relationships in this manuscript that could potentially imply conflicts of interest.

FUNDING SOURCES

A fonte de financiamento do artigo se deu pela Fundação de Amparo à Pesquisa do Estado da Bahia.

The funding source for the study was the Bahia State Research Support Foundation (*Fundação de Amparo à Pesquisa do Estado da Bahia***).**

CONTRIBUTIONS

Nathiele Brasileiro de Souza Rocha and **Andréa dos Santos Souza** contributed to the study conception and design; the acquisition, analysis and interpretation of data; and the writing and/or revision of the manuscript. **Caliana Beatriz de Aguiar Barbosa** contributed to the study conception and design; and the acquisition, analysis and interpretation of data. **Edméia Campos Meira, Juliana da Silva Oliveira** and **Isleide Santana Cardoso Santos** contributed to the acquisition, analysis and interpretation of data; and the writing and/or revision of the manuscript. **Laiza Carvalho Costa** contributed to the writing and/or revision of the manuscript.

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How to cite: Rocha NBS, Souza AS, Barbosa CBA, Meira EC, Oliveira JS, Santos ISC, et al. Meanings and dietary practices among older adults diagnosed with type 2 diabetes mellitus. Rev Bras Promoç Saúde. 2019;32:9518.