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ORIGINAL ARTICLE

FOOD GUIDANCE FOR DIABETICS IN THE FAMILY HEALTH STRATEGY ORIENTAÇÃO ALIMENTAR PARA OS DIABÉTICOS NA ESTRATÉGIA SAÚDE DA FAMÍLIA GUÍA DE ALIMENTOS PARA DIABÉTICOS DE LA ESTRATEGIA SALUD DE LA FAMILIA

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ABSTRACT

Objective: analyzing the nutritional guidance received by diabetics in the Family Health Strategy. **Method:** an exploratory, descriptive study with a qualitative approach conducted with 16 type 2 diabetics who underwent assistance with the teams of the Family Health Strategy in the municipality of Piauí/PI. The data were produced through individual interviews, processed in IRAMUTEQ software and analyzed by Hierarchical Classification Descending. The project was approved by the Research Ethics Committee, CAAE 15720913.1.0000.5210. **Results:** there were identified six semantic classes: food guidance to the diabetic in the Family Health Strategy, the diagnosis of diabetes, the community health worker as a central element in the monitoring carried out for diabetics, food guidance conducted by nutritionist, assistance provided by the Health Strategy Family and drug treatment for diabetic patients in the Family Health Strategy. **Conclusion:** the nutritional guidance was held in a restrictive and prescriptive way, contrary to the current guidelines, as well as a greater appreciation of the drug in treatment by patients. **Descriptors:** Nutrition; Diabetes Mellitus; Health; Power Supply.

RESUMO

Objetivo: analisar a orientação alimentar recebida pelos diabéticos no âmbito da estratégia saúde da família. **Método:** estudo exploratório, descritivo, com abordagem qualitativa realizado com 16 diabéticos do tipo 2 que realizavam acompanhamento junto a equipes da Estratégia Saúde da Família em município do Piauí/PI. Os dados foram produzidos por meio de entrevistas individuais, processados no *software* IRAMUTEQ e analisados pela Classificação Hierárquica Descendente. O projeto teve a aprovação pelo Comitê de Ética em Pesquisa, CAAE 15720913.1.0000.5210. **Resultados:** identificaram-se seis classes semânticas: Orientação alimentar ao diabético na Estratégia Saúde da Família, O diagnóstico do diabetes, O agente comunitário de saúde como elemento central no acompanhamento realizado aos diabéticos, Orientação alimentar realizada pelo nutricionista, Assistência prestada pela Estratégia Saúde da Família e Tratamento medicamentoso ao diabético na Estratégia Saúde da Família. **Conclusão:** a orientação alimentar foi de realizada de forma restritiva e impositiva, em desacordo com as diretrizes atuais, além de uma maior valorização do medicamento no tratamento, por parte dos pacientes. **Descritores:** Nutrição; Diabetes Mellitus; Saúde; Alimentação.

RESUMEN

Objetivo: analizar la orientación nutricional recibida por los diabéticos en la Estrategia Salud de la Familia. **Método:** un estudio exploratorio, descriptivo, con un enfoque cualitativo realizado con 16 diabéticos tipo 2 que se sometieron a seguimiento con los equipos de la Estrategia Salud de la Familia en el municipio de Piauí/PI. Los datos se produjeron a través de entrevistas individuales, procesados en el *software* IRAMUTEQ y analizados por Clasificación Jerárquica Descendente. El proyecto fue aprobado por el Comité de Ética en la Investigación, CAAE 15720913.1.0000.5210. **Resultados:** se identificaron seis clases semánticas: orientación acerca de la alimentación al diabético en la Estrategia Salud de la Familia, el diagnóstico de la diabetes, el trabajador de salud de la comunidad como un elemento central en la supervisión llevada a cabo para los diabéticos, orientación de alimentos realizada por la nutricionista de la Estrategia Salud de la Familia y el tratamiento farmacológico para los pacientes diabéticos en la Estrategia Salud de la Familia. **Conclusión:** la orientación nutricional se llevó a cabo de manera restrictiva y prescriptiva, en contra de las directrices actuales, así como una mayor apreciación de la droga en el tratamiento por los pacientes. **Descriptores:** Nutrición; Diabetes Mellitus; Salud; Alimentación.

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INTRODUCTION

Diabetes Mellitus is a group of metabolic diseases characterized by hyperglycemia associated with complications, disorders and failure of various organs, particularly eyes, kidneys, nerves, brain, heart and blood vessels. It may result from defects secretion and/or insulin action involving specific pathogenic processes, for example, destruction of pancreatic beta cells (insulin-producing) in insulin resistance, the insulin secretion disorders, among others¹.

The prevalence of diabetes mellitus (DM) in the world is increasing at an alarming rate. The next twenty years, it is estimated an increase of 54% in the prevalence of diabetes mellitus among adults worldwide (284 million in 2010 to 438 million in 2030)².

In Brazil, according to the monitoring carried out by the program monitoring risk and protective factors for chronic diseases through telephone survey (VIGITEL), held in 2012, the average occurrence of diabetes in the adult population is of 5,2%. This prevalence increases with age and diabetes reaches 18,6% of the population over the age of 65 years old³. In PIAUÍ the prevalence is of 7,6% to diabetes mellitus type2⁴.

In diabetes treatment, medical resources are used generally in a second stage of the therapy. Among the medicinal agents available for diabetes therapy are included insulin and oral hypoglycemic⁵.

The healthy diet is very important for people with diabetes. It follows a proper diet plan that can represent all the difference in glucose control. Ideal for diabetic patient is to get a consultation and guidance with an experienced dietitian in the management of diabetes. Nutritional intervention aims to disease prevention, protection and promotion of a healthier life, leading to overall well-being of the individual⁶.

The health care provided to diabetic is critical to improving his quality of life. Under this approach, the Family Health Strategy (FHS) plays a key role in this process. The design that supports the FHS proposes a "new vision" of social construction of health and intervention processes in the actions and promotion policies, prevention, rehabilitation and recovery. Acting practices on the environment and lifestyle, optimizing access to and quality of health services, choosing the family and its social space as a basic core approach. FHS practices have a foundation, the principle of completeness, responding well to the demands, adapting to the care

offers the subjects in order to identify the context in which it gives the meeting of these subjects in team⁷.

Given the importance that food guidance has the effect of changing the eating habits of people with diabetes and how this process needs to be worked in the context of patients followed in the FHS and it is expected that the results may contribute in the future to improve the quality of care provided this group, this study aims to:

- Analyzing the nutritional guidance received by diabetics in the Family Health Strategy of a city in the State of Piauí.

METHOD

This is an exploratory, descriptive study of a qualitative approach developed in the municipality of Alto Longa Piauí, in the period from August to December 2013. The study included 16 patients of diabetes mellitus type 2, followed by the teams of county FHS. The number of patients interviewed was defined by non-probability sample of convenience. The inclusion criteria of the research participants were patients of diabetes mellitus type 1 and 2, residents in an area linked, over the age of 20, and showing ability to meet the objectives of the study and signed the Informed Consent form.

The instrument used for data collection was the semi-structured interview, composed of the social demographics of diabetics (age, gender, income, marital status, and work outside the home). In the second part of the interview there were used questions related to the knowledge and experiences of patients about diabetes.

The interviews were conducted in shifts morning/afternoon, the adequacy of staff working hours and patients at the health post. The interviews were recorded and transcribed.

Having the content obtained through the data collection instrument there was followed by its analysis with the help of the program IRAMUTEQ (R Interface pour les Multidimensionnelles of Textes et Analyses of Questionnaires).

Data were organized based on the statements of the participants and analyzed based on the theory of social representations, according to the Hierarchical Ascending Classification (CHD), ie the ratio between the semantic classes, to which their respective meanings set themselves originated from personal experiences and the sharing of knowledge among the subjects of this research. After Hierarchical Ascending

Classification (CHD) Simple, they were considered for inclusion in each class elements whose frequency was greater than the average number of occurrences in the corpus and that the association with the class determined by Chi-square value was less than 2.

The present research had the project approved by the institution where the study was conducted and by the Research Ethics Committee of UNINOVAFAPI University Center, CAAE 15720913.1.0000.5210, in May 2013. All participants signed an informed consent form and prior to their inclusion in the study, as envisaged in the resolution 466/12 of the National Health Council of the Ministry of Health¹⁰. There were no refusals to participate in the study.

RESULTS AND DISCUSSION

In all, there participated 16 subjects in the study. The age of the subjects varied between the genders were interviewed 07 men aged

50-72 years old in females were 09 women with range would be of 30-80 years old. With regard to the educational level of respondents, prevailed with 1st elementary incomplete (09), illiterate (05), incomplete high school (02). Regarding marital status, 11 were married, 01 single, and 01 divorced and 03 widowers. Only 03 of respondents said they were working, the rest is not working. Of the total respondents, 15 subjects had a family income 1-2 MW and 01 received less than 01 minimum wage.

With regard to data analysis, the corpus of content comprises the representations that emerged from the speeches of diabetics, from what we have experienced over the care received by the FHS. The program IRAMUTEQ recognized separation of 183 segments in a total of 221, which indicates the same level of utilization 82.81% of this study, the corpus and divided into six classes, as shown in Figure 1.

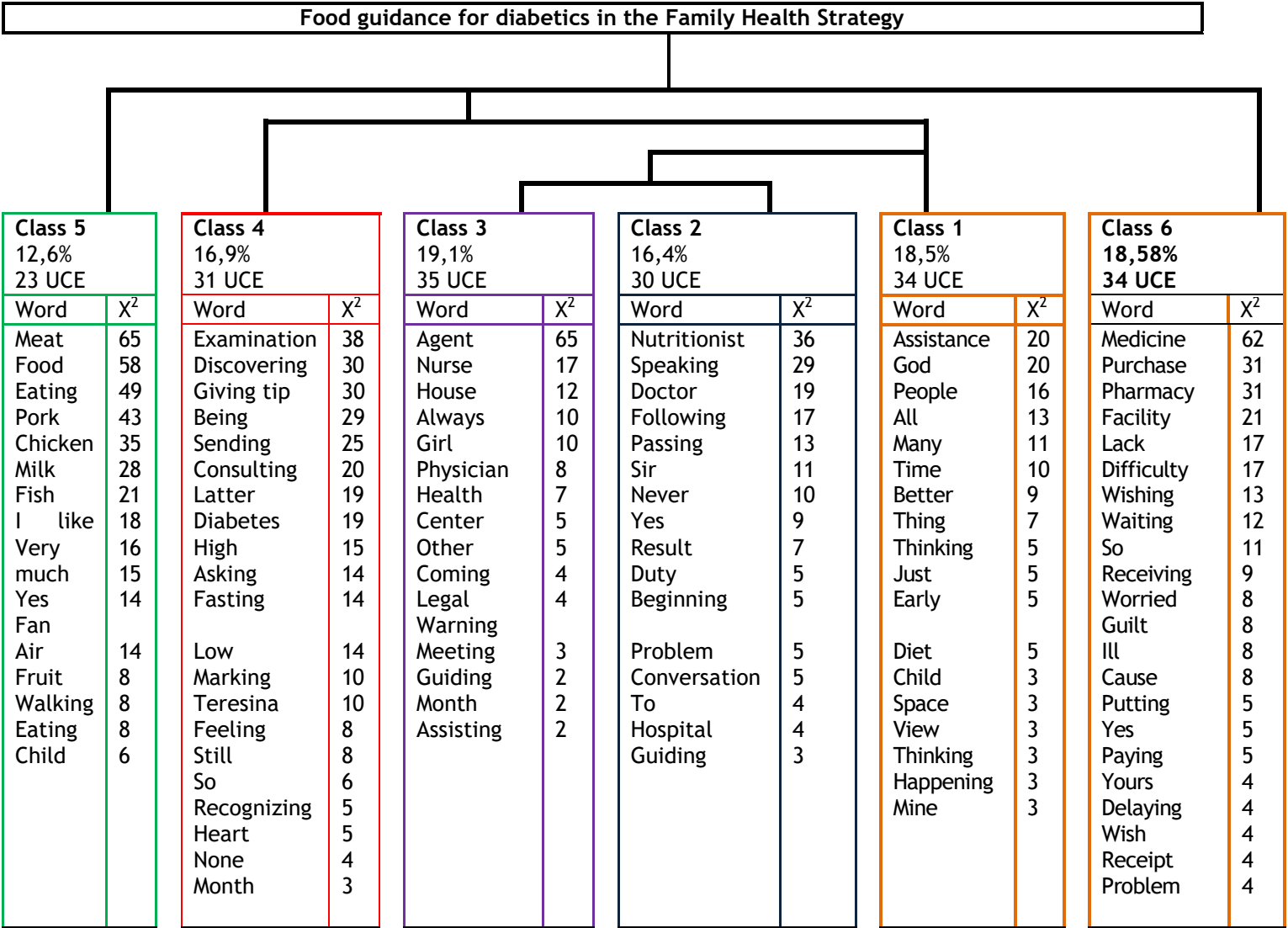


Figure 1. Dendrogram of the social representations of the diabetic patients.

After analyzing the software, it proceeded with the identification and analysis of textual fields and interpretation of the meanings naming them with their senses into categories: food guidance for diabetics in the Family Health Strategy; the diabetes diagnosis; the community health worker as a

central element in the monitoring carried out for diabetics; orientation food performed by a nutritionist; assistance provided by the Family Health Strategy; drug treatment for diabetic patients in the Family Health Strategy.

♦ Class 5: Food guidance to the diabetic in the Family Health Strategy

Class 5 concerns to the attention of participants on the diet for diabetes resulting food guidance received from the FHS team, with 23 segments of text representing 12.6% of total extracted from the corpus segments. The words that compose it showed high levels of significance, which make a relevant discussion for understanding the investigated object.

The speech of respondents shows that their knowledge about proper nutrition for diabetes occurs to a limited extent. The speeches are very similar, indicating the direction restriction to food to be ingested. It seems that the health professional himself, to try a more meaningful patient adherence to treatment, use simplistic guidelines whose keynote is the prohibition. The general purpose for diabetic food should not be prohibitive, but formed by a varied, balanced menu within a predetermined limit.

In food terms, one should take into account the eating habits of individuals, their socioeconomic status and access to food. However, the expected changes are not easy to perform, because they involve values rooted in the regional culture, space and social-food traditions of the man.⁹

The attention to the fact that the power is not limited to an act which satisfies biological needs, more than that, it is social and cultural values, covered in symbolic aspects that embody the tradition in the form of rituals and taboos¹⁰.

As it has been checked, to prevent the patient from ingesting popular foods with frequent consumption, such as pork and red meat, it can determine a low frequency to treatment. There is no longer an indication of the reduction of these foods for diabetics, lower than recommended for the general population⁶.

According to the Guidelines of the Brazilian Society of Diabetes (SBD) - 2013-2014¹², nutritional therapy for diabetes is to target the good nutritional status and improve the quality of life as well as preventing and treating complications and comorbidities associated. Foods like vegetables, legumes, whole grains, fruit and skim milk, associated with fiber intake should be encouraged, within the context of a healthy diet. The sucrose may be replaced by other carbohydrates or nutritive sweeteners not as expected recommendation. Trans fatty acids should be reduced in consumption as well as the cholesterol (<200 mg/day). Consuming

two or more servings of fish per week, except for the fried preparations, should be recommended¹¹.

Eating habits and physical activity exerts a powerful influence on the energy balance and are considered the main factors, modifiable, determinants of diabetes.

♦ Class 4: The diagnostic of diabetes

In this class the subject exposes the importance of diagnosis. In most cases the confirmatory diagnosis of diabetes made in the capital of the State of Piauí, Teresina. Not always patients have financial support to carry out the tests and move to the capital. So often it becomes complicated the diagnosis of disease. Confirmation of the diagnosis of diabetes mellitus is a very deep mark in family life, sharing the "before" and "after" the discovery of the disease¹².

Confirmation of the diagnosis suggests a new routine for the family. Positive coping can be found from the time when there was the search for information and trying to adapt the familiar routine, and can provide better quality of life for diabetics¹³.

The discovery of diabetes is a traumatic event that involves fears, uncertainties, limitations, and concerns that will never be forgotten. It is always rescued because it is like a watershed since after the discovery of family restructures to primarily meet the member's needs. There are common and frequent emotional reactions, not only before the diagnosis of diabetes mellitus (DM), but also in conviviality and management of the disease, identified in patients with DM type 1 and 2. Emotional reactions need to be better understood by professionals, since many of these are manifested through inappropriate behaviors that interfere with good glycemic control, which affects health, social relations and, by extension, the carrier quality of life¹⁵.

Diabetes becomes the center of family life. Family life begins to revolve around the individual's care. Family members change their behavior turning to one thing in common; become more united and cooperative, working towards the same goal and leaving the rest of everyday concerns in the background¹⁴.

Having a chronic disease requires from the carrier a new learning, needing to develop skills to deal with the disease which comprises modifying habits to achieve good glycemic control.

♦ Class 3: The community health agent as a central element in monitoring conducted to diabetics

Associated with their full forms, the words of this class show the monitoring conducted by the Health Strategy Team family, perceiving that the community health worker is the most cited in the reports, as the most frequent figure on conducted monitoring, followed by nurses and finally, doctors, as evidenced below.

The testimony of patients denotes a fragmented care conducted by the team of the FHS, where the Community Health Agent (CHA) is the figure most present in the service provided and sometimes denoting his multiple functions within the team.

The profession of the CHA appeared in Brazil in 1991 had no qualification or professional regulation. Its regulation occurred with the enactment of Law 11.350 of October 05th, in which the activities of the CHA and fighting agent endemic diseases; he is now governed by the provisions of the law¹⁶. The CHA is a person's own community that meets the residents of each house, paying attention to all the specific questions related to health: accompanying guides, registers and develops educational activities to promote health and disease prevention, as team planning. Actions are developed through home visits and actions taken in the community¹⁷.

The work dynamics of community health workers is complex and has several special features, enhanced by the fact that these workers experience the reality of the neighborhood where they live and work. However, an important factor to point out is that despite of this; their qualification occurs based on biomedical references, which transforms them into bearers of many contradictions¹⁸.

Thus the Family Health Team (FHT) plays a key role in the care of these patients in that it can act on individual and collective level, implementing prevention and diabetes management programs that emphasize educational activities, as well as assistance realization of early diagnosis, scaling up treatment and care for chronic complications¹⁹.

It is worth mentioning the importance that all team members have the monitoring of diabetics, the faults mentioned in the speeches in which the interviewees refer to the absence of some professionals of the minimum staff of FHS, as doctors and nurses, and underscore the need for improved assistance provided to this group.

♦ Class 2: Food guidance by nutritionist

This class consists of 30 text segments (16,4% of the corpus) extracted from the

speeches of the subjects of this research. The class denotes guidance on food that is made by professional nutritionist, although some lines referring to the absence of a trader in the care received.

The FHS has a great importance in stimulating and guidance with regard to the development of actions that promote nutritional education. The diet segment is the mainstay of treatment; however, it is a great challenge to FHTs, since most individuals have difficulty to modify eating habits.

According to SBD guidelines (2013-2014) nutritional monitoring carried out by expert favors glycemic control promoting reduction of 1% to 2% in glycated hemoglobin levels, regardless of the type of diabetes and diagnosis of time. The establishment of an eating plan for management of patients with DM associated with changes in lifestyle, including physical activity is considered first-line therapies¹².

For effective diabetes education requires training, knowledge, pedagogical skills, communication skills and listening, understanding and negotiating skills by the multidisciplinary team of health²⁰.

Moreover, the network of social support, trusting relationship with health professionals, may also influence the behavior of self-care and self-control, increasing treatment frequency and improved glycemic control²¹.

The monitoring of the diet should be performed by a multidisciplinary team, where a professional nutritionist is of paramount importance that will prescribe an individualized eating plan, according to the unique needs of each individual. Through a detailed history, looking suit tastes and desires of people with diabetes, so that their treatment is made possible.

The dietitian is a health professional whose training aims at acting in the Unified Health System (SUS). The absence of the nutritionist in the Primary Health Care System is not due to a failure in professional tasks set out in the legislation that regulates the profession, either to a lack of technical ability to participate in the health teams of the Brazilian states. It is a historical, structural issue in health policy²².

So, there is a need for a nutritional counselor or educator involved in education or advisory information related to nutrition and/or aspects that lead to acceptance of a new food behavior especially to patients of diabetes mellitus. Nutritional intervention aims to disease prevention, protection and

promotion of a healthier life, leading to overall well-being of the individual⁷.

The FHS is clearly a new field of work for the nutritionist. Add to this professional FHS is an act which aims to ensure basic services to the population to ensure a healthy diet and thus prevent disease, promote and restore health²³. The purpose of the Center for Support to Health (NASF) can be a good strategy for inclusion of this professional, since it can be deployed in municipalities that have until 1 FHS team²⁴.

♦ Class 1: Assistance given by the Family Health Strategy

This class consists of 30 text segments (16,4% of the corpus) extracted from the speeches of the subjects of this research. Based on its typical words and word segments of the contents reflects the assistance provided by the FHS team, and the action of the guidelines by patients.

Before some lines may notice that some diabetic patients are comfortable with the service provided by the FHS staff; however, have difficulties in carrying out the proposed treatment.

The FHS is seen as a strategy for reorienting the care model, operationalized through the implementation of multi-professional teams in Basic Health Units. These teams are responsible for monitoring a defined number of families located in a defined geographical area. The teams work with health promotion, prevention, recovery, rehabilitation of most frequent diseases and disorders, and in maintaining the health of this community¹⁹.

The dynamics proposed by the FHS, focuses on promoting quality of life and intervention on the factors that put them at risk, allows more accurate identification and better monitoring of diabetics²⁵. Health professionals should involve the person with diabetes mellitus in all phases of the educational process, then, to assume responsibility for therapeutic role, you need to master knowledge and develop skills that instrumentalize for self-care²⁰.

One of the biggest problems perceived in clinical practice, both by the health professional and the patient is that the treatment of diabetes is complex and difficult to perform, resulting in difficulty in controlling the disease²⁶.

The professional should seek the individual their needs regarding the disease, providing the required information and following up decision-making, thus being able to improve the living conditions of the person and help

increase treatment frequency, *"the health care of an individual with chronic illness should encompass a relationship of affection, respect, training, dedication and commitment of the professionals involved in their treatment."*²⁷.

♦ Class 6: Drug treatment to diabetic in the Family Health Strategy

The class six is composed of 34 segments of text (18,6% corpus). This is the class that is most stood; however, not being more significant than the determined assembly (Figure 2). It is directly related to class five and indirectly related to Classes 1, 2, 3 and 4.

Associated the words of this class show the importance that patients give the medical treatment of diabetes and the difficulties they face to receive it in the health service.

The speeches of patients show a greater appreciation to drug treatment over other components of care, in addition to difficulties in acquiring these for continuity of care. This fact may be explained by culture already established in the health services where the use of the drug is considered the most important step in treating the disease. While recognizing the importance of this, it should be emphasized that in chronic diseases like: diabetes, diet, exercise and other changes in lifestyle are important for the restoration of these, as well as to provide them a better quality of life.

Behavioral changes and acceptance to drug treatment are essential to prevent acute and chronic complications. Professionals should negotiate priorities, monitor compliance, encourage participation and enhance patient effort in the management of self-care. Even when there are behavioral changes and acceptance to drug treatment, to maintain the metabolic control for a long time is difficult, because it depends on a variety of complex components involving diabetes care²⁸.

The focus of the education approach must involve the subjective and emotional aspects that influence treatment adherence, going beyond cognitive processes. Finally, it is essential that the light health education into account the reality and the experience of patients because often the health information is provided vertically, without allowing greater participation of patients and without considering what these already know and what they would like to know. In this approach, it aims to transform the guy who takes a passive position in the conduct of their treatment in a participatory individual²⁹.

In Brazilian society, the problems identified with respect to medicine access are significantly important, especially when one takes into account diabetes mellitus. In relation to diabetes, about 5 million have the disease; only 2.6 million are patients are registered in the Unified Health System (SUS). Consequently, access to drugs used to treat such ailments is compromised, since, despite being constitutionally guaranteed, not all patients have this access made possible³⁰.

The difficulties encountered by people with DM to perform the treatment under the guidance of a multidisciplinary team are a present problem in clinical practice²⁸.

CONCLUSION

Nutritional guidance provided to diabetic occurred in a restrictive and prescriptive way by the FHS team, resulting in the devaluation of the diet by the patient as an important component of treatment. Additionally, the assistance was given fragmentary, revealing the absence of team members in the process. The drug was the most expensive item in the treatment, in particular the absence of the Basic Health Units.

The health professional can be a facilitator and a mobilizing agent in the accession process to the treatment. It acts in awareness, behavior change, capacity development and ability of the individual to self-care. The professional must be qualified with advanced knowledge about the disease, providing favorable conditions for group procurement process for diet, physical activity, group to receive medication, knowledge and possible behavioral changes.

Care for the user must include explanations that are of understanding, especially regarding the use of appropriate foods. The various dietary restrictions imposed by the disease, the high cost of dietetic foods, as well as the lack of food control hinders acceptance by the diabetics to this care.

Nutritionists are qualified to work in the FHS, with a view to promoting health in all stages of life, addressing aspects of healthy eating, the issue of food security, citizenship and the fundamental human right to food. Also, it is important to discuss the importance of everyone, as well as the State, in ensuring the right to health, specifically food security.

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