

## Importance of Educational Practices in the Care of Elderly People with Diabetes Mellitus

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### Abstract

**Objective:** To investigate how the elderly perceive the educational practices performed by nurses and how the family context interferes in the care of the elderly affected by diabetes mellitus.

**Methods:** Descriptive research, with a qualitative approach, carried out in a basic health unit (BHU) in a city in the interior of Bahia, comprising a population of 57 elderly people diagnosed with diabetes mellitus.

Results: Using the thematic content analysis technique, two categories emerged: Health education; The Family does not take care.

**Conclusion:** The nurse is the professional link between the information and the care action, so it is seen as a facilitator when implementing strategies for the creation of new knowledge and its effective execution. Family work with the elderly makes it possible for them to feel supported and supported not only in the pathological process, but in its entirety. Family members provide support in adhering to treatment because they are in contact with the elderly, thus acting as collaborators of self-care for strengthening health information.

**Keywords:** Health Education; Family Relationships; Primary Health Care; Comprehensive Health Care; Health Services for the Elderly

### Introduction

Chronic Noncommunicable Diseases (NCDs) represent an important public health challenge, according to the World Health Organization (WHO) 73% (928 million) of deaths in Brazil were due to some NCDs [1].

Among the most significant NCDs is Diabetes Mellitus (DM) it is estimated that 415 million people worldwide have diabetes, which represents one in each 11 adults live with this chronic condition, although 1/3 of these cases remain undiagnosed [2]. In the last 10 years the number of Brazilians diagnosed with DM has grown 61.8%, the Ministry of Health estimates that more than 12 million Brazilians live with this pathology, which represents 8.9% of the total population [3].

The most common type of DM is type 2 DM (DM2) representing 90 to 95% of cases, characterized by defects in action, insulin secretion and in the regulation of hepatic glucose production, with high rates of morbidity and mortality, which may result in physical, social and economic complications [4].

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From the point of view of public health, the human, social and economic implications resulting from DM are complex, having great socioeconomic impact, especially after the emergence of chronic complications, and consumes an important portion of the resources of the individual and society, in addition to causing great suffering due to the reduction of physical fitness and functional capacity [4].

Thus, individual and/or group health education actions are essential in the prevention, evaluation and control of DM [5]. In our health system, these actions are developed by the primary care team, being essential to provide opportunities, share experiences and socialize knowledge, which enable conscious decision-making and greater autonomy in self-care by the individual and his family [6,7].

### Aim of the Study

Thus, the following study aimed to investigate how the elderly perceive the educational practices performed by nurses and how the family context interferes in the care of the elderly affected by DM.

### Method

Descriptive research with a qualitative approach, with the setting of a Basic Health Unit (UBS) located in a city in the interior of Bahia. The study included 57 elderly people diagnosed with DM and registered at the Service for Monitoring and Control of Hypertension and Diabetes at UBS.

The following inclusion criteria were used: being an elderly person diagnosed with DM registered at the Service for Monitoring and Control of Hypertension and Diabetes at UBS and as an exclusion criterion, he did not have the cognitive ability to answer the interview. Cognitive capacity was assessed indirectly during the interview, observing the coherence of responses and when the elderly person had difficulty in understand, assimilate and relate the questions to the verbalized responses to the interview was terminated.

The interviews took place in two modalities, in the waiting room of the BHU with 25 elderly people being interviewed and at home with 32 elderly people. The difference in location was due to the need to avoid confusion bias, due to the existence of home care and a significant number of elderly people registered with the Hypertension and Diabetes Monitoring and Control service who did not attend nursing consultations. All interviews were conducted between May and July 2017.

The technique used in the referred study was the semi-structured interview and the data collection instruments an interview questionnaire built by the researchers subdivided different moments (blocks), composed of sociodemographic and educational profile, information on behavior and health conditions, general questions about DM and family apgar.

The interviews that took place at the BHU were carried out with the elderly who were waiting for care or who had already been attended by the DM's monitoring nurse. Initially, the research was presented, where the elderly were informed about the objectives and that they would not receive any remuneration to participate, being able to give up at any time, and when they accepted, signing the Informed Consent Form (ICF) was required, thus giving I start the interview.

The interviews that took place in the households were carried out with the approach of the Community Health Agent, the collection procedure was maintained in the same way as those carried out in the UBS. All interviews were recorded using a digital recorder, with the interviewees' knowledge and consent, they were heard and filed on a computer, in mp4 format, in the Windows Media Player Software and transcribed in Microsoft Word.

For data analysis we used the Thematic Content Analysis, proposed by Bardin [5]. Where the collected material followed the following steps: first it was pre-analyzed in order to systematize the ideas for the precise development of the material's display, where it followed the validity rules, among them exhaustiveness; homogeneity; representativeness and pertinence.

Subsequently, we carried out the exploration of the empirical material with the exploration of it, in which it was possible to make the cuttings in context and record units in semantic order, representing the theme through a word or in the sentence format.

Then, the cutouts were separated, considering the harmonies and divergences in such a way that the aggregation and classification of the units were performed sequentially, as well as their enumeration. After organizing and coding the material, it was possible to perform the classification and aggregation of data in themes/categories.

The analysis of the Family APGAR was performed through the sum of points obtained in the instrument scores, the domains adaptation, companionship, development, affectivity and resolving capacity were evaluated with the following score: always (2), sometimes (1), never (0). Scores from 0 to 4 represent high family dysfunction; 5 and 6 moderate family dysfunction and score from 7 to 10 have good family functionality.

This study contemplates Resolution No. 466/12 of the National Health Council<sup>6</sup>, of the Ministry of Health, being approved by the Ethics and Research Committee of the State University of Southwest Bahia (CEP/UESB), under Opinion No. 2,032,593, in order to preserve the anonymity of the participants, the questionnaires were listed with alphanumeric figures preceded by the letter P (participant).

### Results and Discussion

The study was developed with 57 elderly people diagnosed with DM, the average age of the participants was 71.21 years, when compared to the sexes, there was a predominance of women with 46 elderly women. Regarding the educational level, 21 elderly people had no education, with regard to marital status, 23 elderly people were married; the participants' domestic unit was mostly composed of extended families, that is, 46 elderly people lived with other relatives in the family nucleus, mainly grandchildren and 52 elderly people lived in their own home; and 48 elderly people survive on a family income of up to one minimum wage.

Regarding health-related characteristics 30, they have lived with DM for more than 11 years; 42 elderly people reported using oral hypoglycemic agents for glycemic control. 24 of the elderly reported having pain in their daily life in a "mild, moderate or severe" degree; 53 elderly people have another pathology concomitantly with DM, the most frequent being Arterial Hypertension present in 47 elderly people.

After analyzing and interpreting the empirical data, two thematic categories were constructed: (1) Health education and (2) The family in caring for the elderly with DM. The emic content of each is shown below.

#### Health education

In the current arrangement of health services, the nursing professional is primarily responsible for transmitting knowledge and health guidelines, especially those related to the health-disease process, which will provide self-care and consequently an improvement in quality of life [8-10]. Thus, the elderly were asked what guidelines they received during consultations with the Diabetes Monitoring Program with this professional, they demonstrated knowledge and expressed the guidelines related to healthy lifestyle and medication adherence.

"It is the food to do the diet properly, go for a walk, these little things, she is very good at guiding us" (P06).

"It's about food, even fruits, [...] eating everything, but not much and having 6 meals a day" (P28).

It was observed that the self-care practices developed by the elderly started from nursing information and were developed on a daily basis, simple actions such as food reeducation and medication adherence cause positive impacts on life and living, as they will be adapting

to their reality more consciously. Foot care is a simple and individual action, which provides an important factor in the prevention of other diseases, and some elderly people have shown knowledge and concern with continuous care.

“She told me that I had to cause closed shoes, be careful not to do the nail [...]” (P33).

“[...] cutting a nail, but not stripping the nail, I make my nail myself, not to anyone because I’m afraid” (P52).

The individualized form of guidance by nursing results in the creation of a bond and trust, because for some elderly the nurse is the link with their self-care, favoring the process of empathy and fine attention, however for others the way of guiding them was seen with negativity and it implied acts of authority with verbalization of norms and not the individual.

“She gives all the guidance and anything that is abnormal if we feel bad that we can look for her anytime [...]” (P09).

“I went now, she told me, I didn’t go other times, she was upsetting me, those words she used to say to not callus on my feet, then I ‘I’m not going no more” (P21).

“[...] they think we know everything, we have the disease, but they know things, but they never do that legal explanation [...]” (P22).

The professional must know the elderly far beyond their pathology, assessing their differences and complexities taking into account the social, cultural and economic context to which they are inserted [10], since each one presents singularities and differentiated needs to stimulate the performance of the self-care. We can see that the dialogues of participants P21 and P22 are in line with those of P13, this difference in perception may be linked to the interaction of the professional with the referred elderly, the form of dialogue is essential for the construction of the bond followed by the effective transmission of information.

When asked if they were able to carry out the nursing guidelines, few expressed following all, aspects such as medication adherence and care with food were the most positive, however the practice of physical activity was neglected due to some health problem that prevented it, the claim of lack of time or lack of interest.

“The sugar until yes, the dough is also the bread, now walking is that I’m not walking because of the pain in my knee” (P01).

“Many yes, now there are some things that we let pass a little, mainly the walk, my food I can always do within the order, but the walk is more difficult because I don’t have time” (P06).

The effective awareness that DM is a chronic disease that refers to continuous and disciplined care, implies the need for knowledge and application of the elderly in order to control the disease, in addition to being able to live with the pathology without the appearance of its complications, in this way the nurse plays the role of facilitator and advisor during their process of living.

However, there are several factors that influence the therapeutic path, among which we can see that the very complexity of the disease and its universe of care generate misunderstanding of how care is performed. Consequently, the nurse must be attentive to the creation of dialogue strategies in order to facilitate the understanding and detection of which measures are adequate and really effective.

Individually, therefore, the awareness that the well-being and the prevention of future injuries depend on the execution of the knowledge learned and developed by them.

“Not all, sometimes because we forget, and sometimes even conditions, but we do it without being harmed, we have to have health, we have to look for health” (P16).

The elderly recognize dialogue as a process of collective construction of knowledge, the exchange of information with neighbors, colleagues and even in the unit itself while waiting for the consultation are seen as a fertile field of learning and exchange of information.

“When we are in a group (of neighbors) talking one thing says something, another says another, at home with my children. At the unit, we always say something and also hear something while waiting” (P06).

“When we are talking like this we talk about diabetes when we are at the clinic, even when the agent is passing by the doctors by the nurses, we always talk about what is not” (P38).

As it constitutes a set of practices and knowledge oriented towards disease prevention [11], health education is an important instrument for the consolidation of knowledge, as it acts in the perspective of contributing to physical, psychological and social improvement, factors that will impact on the autonomy and consequently on the quality of life of the elderly. The statements refer us to informal group activities, where the exchange of information occurs in an empirical way, when developed through the mediation of the health professional, erroneous information is corrected and not strengthened.

The nurse, when developing group educational actions, enables a new form of care, establishing a relationship of trust and reflective dialogues between the professional and the elderly, aiming at raising awareness about their health, in addition to providing an exchange of individual experiences, where chronic coping it will be shared among the members [12,13]. Thus, the groups act beyond the issues inherent to chronic illness and permeate issues of the elderly's experiences, doubts and uncertainties, as well as in the creation of strategies in order to reach the most resistant with themes that interest them.

In this way, the role of the nurse would be to guide the discussions and propose relevant and common interest themes, taking into account their population group, their individual experiences and their previous knowledge, in fact, the elderly become more empowered and develop self-care. more conscious and correct way, because it would stop performing it mechanically or with doubt, besides acting as an agent of its own health.

### The family in caring for the elderly with DM

Family support plays a fundamental role in care, as it helps in maintaining and controlling health by acting as a tool that guides and enables effective strategies for coping with the disease [14]. Nutritional and pharmacological therapy were emphasized as important points of family support, since many elderly people cannot follow the therapeutic itinerary without the help of a family member.

“[...] I have a girl who helps me she works and when she leaves in the morning she already has everything ready for me, put the pills on the table, coffee ready on the table, lunch ready there, I just warm up” (P14).

“[...] telling me that you can't go without taking medicine, eating the wrong things, [...] help me and guide me” (P16).

Adherence to treatment requires time, information, training and support for it to occur satisfactorily, as the home is the main place of care, family members must act as support, favoring an environment conducive to self-care, as the personal motivation of the elderly it must always be renewed so that he can accept his chronic condition and identify the presence of family members as a fundamental strategy for improving his quality of life [15].

In-house educational processes were raised by the elderly, in the domestic context, children and grandchildren are engaged in the transmission and guidance of information aimed at well-being.

“Certainly all of them, guiding me what I should do, what I shouldn't, that I should walk these things like that” (P47).

“Help, looking for the best for me goes to the internet looking for what I can or cannot eat” (P49).

Adoption of strategies for the transmission of information must be carried out, as the elderly person must face the whole process in a participatory and non-imposing way [16], in some moments constant family care can be interpreted as excessive that interfere with their freedom of choice, some elderly people represented their family members as strict and overprotective, a fact that in the long term results in a negative impact on the maintenance of treatment.

“It helps a lot that it harms me, because if I have something to eat ‘My mother, you know you can’t’” (P09).

“[...] there are times when I even jump a little. I have a daughter who is a nutritionist [...] every day she calls me and gives me the recipe for what I can eat” (P42).

The promotion of the health of the elderly is closely linked to interpersonal relationships, where family members are seen as support for enabling better quality of life, by helping the process of living with the disease by supervising the general health status [17], therefore, important ally of health professionals to favor quality care due to their constant vigil.

“They don’t like it, tell me to follow the nurse’s example here” (P07).

“The son, the daughter gets ‘Mainha, you have to be careful because you know that diabetes kills’, I said ‘I know my daughter’, we last for many years, but it also kills [...]” (P12).

Encouraging self-care and reinforcing guidelines offered during consultations, the family plays a liaison role between strengthening the bond with the health professional, especially nursing, favoring access to health services and contributing to treatment adherence [18]. Because of its singularities, the educational process is complex and must be individualized, family members act as facilitators because they are intensifying learned knowledge and establishing a change in attitude, thus the professional must meet the needs of the elderly, understanding how their family nucleus impacts on their process of education. health-disease.

On the other hand, the absence of family support constitutes a scenario that hinders the care process, resulting in fragility where the elderly can express negative feelings, showing that family harmony interferes in their chronic coping process, causing physical, emotional and social stress in their family contexts.

“No. Because they don’t even understand what diabetes is, nobody has it” (P51).

“Almost nothing, no one cares” (P15).

“You neither know nor speak, you know not. I don’t even tell my family that I have diabetes [...]” (P22).

In assessing the functionality of the family, 17 elderly people obtained scores that demonstrated high or moderate family dysfunction, knowing the family functionality constitutes an important role for global care, especially in the case of elderly people with chronic diseases. Individuals who have some degree of family dysfunctionality are more exposed to difficulties in their health and disease process, as they do not find the necessary support for chronic coping [19].

We can see that the elderly who reported not having support from family members for the care of DM, were mostly those who had some degree of family dysfunction, in this particular they showed fragility not only in their self-care, but also physical exhaustion and emotional caused by the lack of support in care.

The elderly who showed good family functionality in their reports showed a greater adaptation of the family to their daily demands and needs, which had greater receptivity and reciprocity with the new health demands where family communication is valued in the search to solve or minimize daily problems and those caused by health problems. Knowing family functionality through the perception of the elderly is an important assessment for understanding how they perceive and value the family dynamics towards different family members, especially those of greater proximity, since they are responsible for daily care [20-22].

### Final Considerations

The absence of educational activities represents a weakness in the health service, since there are many difficulties faced during the therapeutic process, which happens continuously and causes several changes in life habits. We observed, however, that the elderly carry out informal group activities at the time of waiting for the monthly consultation or between friends, because during the dialogues with other individuals they exchange experiences and health information, even if in a restricted way it ends up strengthening individual confidence by recognizing that the difficulties encountered for self-care are shared with other people.

The nurse consists of the professional link between the information and the care action, where he must use the consultation with a crucial point, because it is during these moments that he will act in strengthening the bond, in individualized care, and in a space of reflections on the conducts performed aiming at a better treatment adequacy, in this way the professional is seen as a facilitator when implementing strategies for the creation of new knowledge and the effective execution of them.

Family work with the elderly makes it possible for them to feel supported and supported not only in the pathological process, but in its entirety. Family members provide support in adhering to treatment because they are in contact with the elderly, acting as collaborators of self-care to strengthen health information. It is essential that health services create ways to include the family in the therapeutic process, as it is what makes chronic coping more effective, since elderly people who have some degree of family dysfunction reported greater difficulty in therapy.

Based on the above, the knowledge produced with that study allows a reflection on the importance of family action and the implementation of effective educational activities for better adherence to treatment and, consequently, improvement of self-care, as both cases represent new possibilities for coping with DM.

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