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SOCIODEMOGRAPHIC AND CLINICAL PROFILE OF DIABETIC ELDERLY

PERFIL SOCIODEMOGRÁFICO E CLÍNICO DE IDOSOS COM DIABETES

PERFIL SOCIODEMOGRÁFICO Y CLÍNICO DE ANCIANOS CON DIABETES

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ABSTRACT

Objective: to characterize the profile of elderly people with diabetes followed up at the outpatient clinic of a hospital using socio-demographic and clinical data. **Method:** this is a quantitative, descriptive, cross-sectional study of 168 elderly people. Data was collected from interviews and consultations of the medical record, subjecting them to descriptive statistics techniques, and the Chi-square statistical test was performed, and the results were presented in the form of tables. **Results:** a threefold prevalence of the female sex (121 = 72%) was identified; the number of married couples was higher than the other categories (90 = 53.6%); half received a minimum wage (58 = 50%); the majority were in the range of 60 to 69 years (114 = 67.9%); the diagnosis time of diabetes was over ten years in 73 (43.5%) interviewed, with diabetic neuropathy being the most prevalent complication (97 = 58.1%). **Conclusion:** this study presents a holistic view of some aspects that are possible for interventions for the multiprofessional health team, which is responsible for the effective and integral assistance to meet the biological and psychosocial. **Descriptors:** Elderly; Diabetes Mellitus; Type 2 Diabetes Mellitus; Self-care; Health Personnel; Ambulatory Care.

RESUMO

Objetivo: caracterizar o perfil de pessoas idosas com diabetes acompanhados em seguimento ambulatorial de uma instituição hospitalar utilizando os dados sociodemográficos e clínicos. **Método:** trata-se de um estudo quantitativo, descritivo, transversal, realizado com 168 idosos. Reuniram-se os dados a partir de entrevista e consulta ao prontuário, submetendo-os às técnicas de estatística descritiva, sendo realizado o teste estatístico Qui-quadrado, e os resultados apresentados em forma de tabelas. **Resultados:** identificou-se a prevalência três vezes maior do sexo feminino (121=72%); o número de casados foi superior às demais categorias (90=53,6%); metade recebia até um salário mínimo (58=50%); a maioria encontrava-se na faixa de 60 a 69 anos (114=67,9%); o tempo de diagnóstico do diabetes foi superior a 10 anos em 73 (43,5%) entrevistados, sendo a neuropatia diabética a complicação de maior prevalência (97=58,1%). **Conclusão:** reporta-se, pela realização desse estudo, a uma visão holística de alguns aspectos que são passíveis de intervenções, para a equipe multiprofissional de saúde, a qual cabe-lhe a realização da assistência efetiva e integral visando a atender as necessidades biológicas e psicossociais. **Descritores:** Idoso; Diabetes Mellitus; Diabetes Mellitus Tipo 2; Autocuidado; Pessoal de Saúde; Assistência Ambulatorial.

RESUMEN

Objetivo: caracterizar el perfil de personas mayores con diabetes acompañados en seguimiento ambulatorio de una institución hospitalaria utilizando los datos sociodemográficos y clínicos. **Método:** se trata de un estudio cuantitativo, descriptivo, transversal, realizado con 168 ancianos. Se reunieron los datos a partir de entrevista y consulta al prontuario, sometiénolos a las técnicas de estadística descriptiva, siendo realizado el test estadístico Qui-cuadrado, y los resultados presentados en forma de tablas. **Resultados:** se identificó la prevalencia tres veces mayor del sexo femenino (121 = 72%); el número de casados fue superior a las demás categorías (90 = 53,6%); la mitad recibía hasta un salario mínimo (58 = 50%); la mayoría se encontraba en el rango de 60 a 69 años (114 = 67,9%); el tiempo de diagnóstico de la diabetes fue superior a 10 años en 73 (43,5%) entrevistados, siendo la neuropatía diabética la complicación de mayor prevalencia (97 = 58,1%). **Conclusión:** se reporta, por la realización de este estudio, una visión holística de algunos aspectos que son pasibles de intervenciones, para el equipo multiprofesional de salud, la cual le corresponde la realización de la asistencia efectiva e integral para atender las necesidades biológicas y psicossocial. **Descritores:** Ancianos; Diabetes Mellitus; Diabetes Mellitus Tipo 2; Autocuidado; Personal de Salud; Atención Ambulatorial.

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INTRODUCTION

It is known that Diabetes mellitus (DM) is a chronic, non-transmissible, complex disease associated with hyperglycemia, which occurs from deficiencies in secretion, insulin action, or both. The chronic metabolic imbalance associated with this disease includes patients at high risk for long-term macro and microvascular complications that, if not treated with high quality, lead to frequent hospitalization and high risk of cardiovascular diseases.¹

It is shown in epidemiological studies that the prevalence and incidence of diabetes in Brazil have increased each year. It is shown that Brazil leads the countries of Latin America with the highest occurrences of the disease, represented by 14.3 million Brazilians and prevalence of 8.0%, and can increase to 23.3 million in the next 25 years.²⁻³

Diabetes mellitus type 2 (T2D) can be understood by the occurrence of defects in insulin secretion associated with a substance resistance.⁴ It leads the individual, exposed to diabetes, if not adequately treated, to present, in the long term, chronic and irreversible complications such as neuropathy, nephropathy, retinopathy, acute myocardial infarction, vascular accidents and infections.⁴

Among the non-communicable chronic diseases, DM is an important cause of morbidity and mortality, especially among the elderly. It contributes, due to the accelerated pace of the aging process, to a greater tendency to sedentarism and inadequate eating habits, as well as other socio-behavioral changes, to the increasing levels of the incidence and prevalence of DM, as well as mortality due to the disease.⁴

T2D is one of the most common chronic diseases in the elderly, and the prevalence of individuals over 60 years of age with T2D is between 15 and 20%. It is pointed out, for other statistics, that one in four individuals over 60 years of age has T2D. Thus, the disease can be associated with increased age.⁵

They are involved, in the treatment for the control of T2D and to prevent chronic complications, changes in the day to day, with the incorporation of habits that include: self-monitoring of blood glucose; healthy eating; decreased use of industrialized products; daily practice of at least one physical activity and administration of medications at specified times (oral antidiabetics and/or insulin).

It is emphasized that psychological and social factors are included as something fundamental to be evaluated in the

management of DM. It is also emphasized that emotional factors, such as depression, anxiety and stress, should be evaluated when there is a decrease in glycemic control, since these factors are extremely important for the follow-up of treatment.⁶

It helps in the control of the clinical manifestations through the changes in the lifestyle, avoiding the possibility of complications. It is cautioned that when the individual is not properly instructed on how to perform self-care measures, treatment becomes fragile and the possibility of T2D-related complications becomes potent.⁷

It is necessary, to maintain metabolic control of diabetes, that the person with DM follow the recommendations of health professionals, creating a daily routine of self-care. The individual with DM should be aware that the disease is lifelong, with control being the essential element for obtaining a successful therapeutic regimen and avoiding possible complications.⁸

It is generated, in the individual, by the necessity of changes in the habits of life, a conflict, since they are essential the adaptation and the social, economic and clinical changes. The challenge for the health professionals is to raise the awareness of the person with T2DM in order to have control over their illness and, when it comes to the elderly, the challenge becomes even more difficult, since many do not understand or do not want to understand that there must be adaptations in their lifestyle.

This study was based on the epidemiological relevance and the acute and / or chronic complications that T2D can cause in the elderly, due to the following questioning: "What is the profile of the elderly with T2DM followed up in an outpatient clinic considering their sociodemographic and clinical characteristics?"

The study is justified due to the progressive increase of cases of T2DM in the elderly and for the purpose of knowing the characteristics of patients attending the service, so that health professionals can implement interventions in order to contribute to the adaptation of the elderly to their disease.

OBJECTIVE

- To characterize the profile of elderly people with diabetes followed up at an outpatient clinic of a hospital using socio-demographic and clinical data.

METHOD

This is a quantitative, descriptive, cross-sectional study conducted at the Endocrinology Outpatient Clinic of the Lauro Wanderley University Hospital (HULW), located in the city of João Pessoa, Brazil, which is responsible for medical, nursing and nutritional care to patients with DM. The referred service was chosen because it is a referral service for this type of care in the state of Paraíba, receiving patients referred from the Basic Health Units for the purpose of outpatient control of DM and its comorbidities.

The study population was composed by elderly people with T2D seen at the outpatient clinic of HULW Endocrinology. In order to know the number of patients with T2DM attended at the outpatient clinic, information was provided to the Nursing Coordination, which made available a list with the numbers of the patients attending in the year 2016. It was thus possible to identify that, from January to December 2016, 697 elderly people with DM were cared for. It was established, considering a maximum sampling error of 5% and confidence in a representative sample of 95%, that the sample size needed to be at least 126 patients to be evaluated in the HULW.

For the selection of the sample, the non-probabilistic type was used, in which the inclusion criteria were: to have a medical diagnosis of DM; be over 59 years of age and be accompanied at the outpatient clinic of Endocrinology of said service. In Brazil, the elderly are considered to be persons aged 60 years or over.⁹ It was selected as exclusion criterion: to present demential syndrome or any cognitive-behavioral alteration that would impede the understanding and response to the collection instruments through the evaluation of the specialist researcher in Geriatrics. A total of 168 patients were interviewed.

For the interviews, a questionnaire was designed by the researcher, addressing sociodemographic variables (age, sex, marital status, profession or function, monthly family income, family arrangement and religion) and clinical (time of diagnosis of DM, associated with the presence of diabetes complications).

In order to assist in the collection, training was given to the field researchers: five undergraduate students in Medicine of the 7th and 11th periods. To consult the information, the interviewees' records were consulted. The form was applied while the patients waited for the medical, Nursing or Nutrition consultation, in a place reserved to guarantee the privacy of the participants, in the morning and afternoon shifts, from Monday to Friday, during the months of February to March 2018.

Quantitative data were collected and typed using the double-digit validation technique in Microsoft® Excel® for Windows XP® spreadsheets for consistency assessment. After this validation, the data were statistically analyzed using SPSS (Statistical Package for the Social Sciences) - version 20.0. The techniques of descriptive statistics were applied with frequency measures, in absolute numbers and percentage, and the Chi-Square statistical test was performed using a significance level equal to 5% (or 0.05).

It should be emphasized that the ethical observances contemplated in the guidelines and norms regulating research involving human beings - Resolution No. 466/12 of the National Health Council, especially with regard to the free and informed consent of the participants, confidentiality and confidentiality of the data, continued being respected. The research project was submitted to the Ethics and Research Committee of the Lauro Wanderley University Hospital of the Federal University of Paraíba, and was approved by CAEE 76715517.6.0000.5183.

RESULTS

It can be seen, according to table 1, as follows, that, in the population investigated, there was approximately a three times greater prevalence of the female sex. It should be noted that the number of married people was higher than the other categories, half received up to a minimum wage and the majority of the sample had a Catholic religion, with almost 70% of those interviewed between 60 and 69 years old, half were retirees and about 60% of these elderly people lived with their spouse, child or grandchild.

Table 1. Distribution of the elderly according to sociodemographic characteristics. João Pessoa (PB), Brazil, 2018.

Variables	n	%	Test x ² (p- Value)
Gender			
Female	121	72.0	< 0,001
Male	47	28.0	
Marital status			
Married	90	53.6	< 0,001
Divorced	21	12.5	
Single	22	13.1	
Widow	35	20.8	
Income			
Up to one minimum wage	58	50.0	< 0,001
Two minimum wages	35	30.2	
Three minimum wages	15	12.9	
More than three minimum wages	8	6.9	
Religion			
Catholic	110	65.4	< 0,001
Evangelical	46	27.4	
Others	10	6.0	
Without religion	2	1.2	
Age			
60 to 69	114	67.9	< 0,001
70 to 79	43	25.6	
80 to 89	11	6.5	
Profession			
Retired	81	48.2	< 0,001
Domestic	31	18.5	
Others	56	33.3	
Family composition			
Alone	17	10.1	< 0,001
Wife	27	16.1	
Wife and + Child	28	16.7	
Child + Grandchild	44	26.2	
Others	52	31.0	

Test x²: Chi-square test. Source: Research Data, 2018.

The clinical characteristics of the elderly are shown in table 2, and it can be observed that this population, for the most part, has a diagnosis time of diabetes greater than ten years and had diabetic neuropathy as the

complication of were diabetic retinopathy and peripheral arterial disease, only 7% of patients had a smoking habit, and approximately half of the elderly had depression.

Table 2. Distribution of the elderly according to the clinical characteristics. João Pessoa (PB), Brazil, 2018.

Variables	n	%	Test x ² (p- Value)
Diagnostic time			
Up to one year	12	7.1	< 0.001
2 to 5	45	26.8	
6 to 10	38	22.6	
More than 10	73	43.5	
Associated diseases			
Nephropathy	31	18.6	< 0.001
Retinopathy	88	52.7	0.537
Diabetic neuropathy	97	58.1	0.045
Peripheral arterial disease	38	22.8	< 0.001
Diabetic foot	30	18.0	< 0.001
Amputation part of inf member.	10	6.0	< 0.001
Stroke	19	11.4	< 0.001
Aortic aneurysm	1	0.6	-
Coronary disease	30	18.0	< 0.001
Smoking			
Yes	12	7.1	< 0.001
No	156	92.9	
Depression			
No	131	78.0	< 0.001
Moderate	20	11.9	
Severe	17	10.1	

Test x² : Chi-square test · Source: Research Data, 2018.

DISCUSSION

It should be noted that the socio-demographic data are important to know the population and establish support goals and that, in this study, 72% of the sample was female, thus verifying a clear predominance of women. This fact is justified by the fact that women are more worried when they present symptoms and physical signs of diseases and, with this, seek health care more quickly, in addition, they are the main clients of the health services.¹⁰⁻²

It was identified that 53.6% of the interviewees were married. It was revealed, in a study carried out in the interior of São Paulo, that 57% of the elderly lived with their partner, an approximate value to this study, suggesting that this coexistence may be beneficial for the elderly, since it may contribute to care to health.¹³ Self-care is strengthened by the presence of a partner to share care with treatment, increasing the chances of success in treatment.¹¹

It should be noted that this research presented a worrying finding, since half of the individuals investigated received up to a minimum wage, insufficient income for the basic maintenance of the elderly,¹⁴ since, from the moment of retirement, this has significant financial loss, compromising their ability to maintain the necessary care for good nutrition, use of medicines, periodic examinations, factors that compromise the preservation of health and, therefore, control of the disease.¹⁵ It is recalled that among people with diabetes, 3/4 live in low- to middle-income countries,³ and, for the elderly population, one study found a statistically significant association between diabetes and low educational and income levels.¹⁶

It is shown, as far as religion and literature are concerned, that believing in a religious support reduces anxiety and emotional conflicts and strengthens attitudes of self-care, which favors adherence to treatment,¹⁷ because, regardless of religion, faith help in adherence to treatment.

It is pointed out that the largest age group of the elderly with T2D of this research was between 60 and 69 years. This finding was corroborated by another survey carried out in basic health care, of which 54.7% were in this same age group,¹⁸ however, in the study carried out in the State of São Paulo, the mean age represented was of 75.9 ($\pm$ 6.2) years, 69.8% were female and 32.6% were married.¹⁹ It can be understood, therefore,

that the chronicity of diabetes reflects in the high age groups.

It is added, when it comes to profession, that the majority were retired, which shows the prevalence of T2D in individuals who do not work. The family income and treatment are influenced by this factor because the elderly with diabetes take various medications and must follow a balanced diet, which demands expensive foods, often neglected due to lack of resources and, in addition, many elderly people contribute to household expenses.²⁰

It was verified that 55% of the elderly lived with their spouse, child or grandchild, and among the participants in another study, most of the elderly interviewed reported living with a relative, suggesting an intergenerational coexistence in their own residence.²¹

The T2D diagnosis time was longer than ten years in relation to the clinical variables, and this was already expected due to the high age of the study participants; in addition, the longer the diagnosis of T2D, the greater the severity of the disease and the possibility of chronic complications.²²

Diabetic neuropathy, followed by retinopathy, was the most common chronic complication found in the study. When the complications appear, feelings of fear and insecurity in the elderly with T2D are generated and, due to these feelings, the elderly person is driven to commit more to better perform the treatment.²³ It is believed that, even in this difficult time, the health professional should create strategies to facilitate and adjust the care that the elderly with T2D should have in relation to their treatment. In another study on DM, the prevalence of chronic complications in most of the research participants.¹¹

It was stated that most of the elderly with T2Ds do not use tobacco, although smoking is considered a risk factor for T2D,¹² however, since the participants are elderly, there were no questions if, at some point in their life, they maintained the habit of smoking. It is exposed that research performed with elderly people with DM in the Family Health Strategy in Recife, Pernambuco, Brazil, was in agreement with this finding, representing 56.8% of its non-smoker sample.²⁴

A significant sample of the elderly with DM with some degree of depression is reflected in the results of depression. In some studies, depression in people with DM is common, and the probability of developing the disease is twice as high as in the general population.²⁵ In addition, treatment is compromised by

depressive symptoms, making it difficult to self-care and its adherence, and, moreover, depression can cause glycemic alteration, compromising metabolic control.²⁶

CONCLUSION

It is reported that a sociodemographic and clinical profile of elderly people with DM is a holistic view of some aspects that are passive of interventions. It is therefore the responsibility of the health professional, as well as the multiprofessional team, to provide effective and comprehensive assistance to the elderly with T2D in order to meet their biological and psychosocial needs. It is possible, due to the commitment of the team together with the elderly with T2D, the chances of a more effective treatment. Therefore, the health professional must be enabled to deal with this public, stimulating changes in habits that will help them in positive attitudes in their care.

Due to the limitations found in this research, both the characteristics of the cross-sectional study, which does not explain the cause-effect relationship and the non-probabilistic analysis, do not allow an equal chance for all participants. It is hoped that the result of this study will arouse interest in the development of other researches, mainly in the accomplishment of randomized studies with the intention to confront these results, besides contributing to changes and reflections in the care practices.

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