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EMOTIONAL SUFFERING RELATED TO LIVING WITH DIABETES

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ABSTRACT

Objective: To identify the emotional suffering related to living with diabetes mellitus. **Methods**: A descriptive study of transversal cut with a quantitative approach performed in the period from September 2017 to March 2018. Participated in the study 308 users with diabetes, escorted in the endocrinology outpatient clinic of the University Hospital of the Federal University of Maranhão. For data collection, it was used a tool for the evaluation of emotional problems - Problems Areas in Diabetes (PAID). The data were presented by measures of absolute frequency, percentages, averages and standard deviation. **Results**: Among the dimensions assessed, emotional problems accounted for 14.5 ±8.8, problems with the treatment 2.0 ±1.9, problems with feeding 3.2 ±2.6 and problems with social support 0.9 ±1.9. The emotional suffering was identified in 25.3% of users. **Conclusion**: Emotional problem was the dimension that contributed most to emotional suffering. Implications for practice: identify the emotional suffering is the first step required to systematize multi professional care that prevent the emotional suffering in patients with diabetes mellitus in all its dimensions.

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INTRODUCTION

Between chronic non-communicable diseases (NCDS), leading causes of death in the world population, Diabetes Mellitus (DM) has achieved great economic and social impact in all countries. The workload associated with the disease involves approximately 1.5 million deaths per year and 89 million life years lost due to disability, with an overall prevalence estimated at 9% in 2014 (WHO, 2014). The increase in the prevalence of the disease is characterized today as an epidemic, which burdens not only the health services, but decreases the purchasing power and the quality of life of patients and their families. The prospect to suspend the increase in prevalence until 2025, as established by the nations worldwide, is minimal (NCD-RisC, 2016). In most developed countries, those that present the best human development indices, verifies that the DM figure between the fourth and eighth position among the major basic causes of death. Brazilian studies on mortality by DM, in the analysis of the multiple causes of death, i.e., when it mentions DM in the declaration of death, show that the mortality rate from this disease increases up to 6.4 times (Brazil, 2015). The World Health Organization pointed out Brazil as the eighth country with a higher prevalence of the disease (WHO, 2010; Brazil, 2015). To be a disease of a chronic and progressive character, diabetes requires a routine therapy and a continuous monitoring, causing difficulties, especially with regard to adherence to drug treatment and the food plan (Alencar, 2013). To recognize the problems presented and coped by these people in relation to live with diabetes mellitus allows a better understanding of the difficulties of disease management and coping with the challenges for control of NCDS (Oliveira, 2011). Thus, the objective of this study is to identify the emotional suffering related to live with diabetes mellitus.

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MATEIALS AND METHODS

A descriptive study of transversal cut with a quantitative approach conducted with diabetic patients in the endocrinology outpatient clinic of the University Hospital of the Federal University of Maranhão. Participated in the study 308 users with diagnosis of DM1 and DM2 of both genders,

Table 1. Average and standard deviation of total score and size of PAID in patients with Diabetes Mellitus, University Hospital, São Luis – MA, 2018

DIMENSIONS OF THE PAID (AMPLITUDE)	MEASURE SUMMARY			
	Average	±SD*	Median	(1st Q-3rd Q)
Total score (0-100)	25,7	±15,4	21,2	(13,7-40,0)
Emotional problems (0-48)	14,5	±8,8	12,0	(6,0-22,0)
Problems with treatment (0-12)	2,0	±1,9	2,0	(0-3,0)
Problems with feeding (0-12)	3,2	±2,6	3,0	(1,0-4,0)
Problems with social support (0-8)	0,9	±1,9	0	(0-1,0)

±SD = standard deviation. 1st Q = First quartile. 3rd Q = Third quartile Source: own elaboration

aged greater than or equal to 18, in the period from September 2017 to March 2018. For data collection, it was used a tool for the evaluation of emotional problems, adapted and validated in Brazil in 2014. The B-PAID, the Brazilian version of the scale PAID (Problems Areas in Diabetes), was originally developed in the Joslin Diabetes Center, located in Boston, Massachusetts, USA. This scale evaluates, from the perspective of the patients, the impact of diabetes and treatment in their lives. The PAID questionnaire comprises 20 questions that cover a wide range of emotional states often reported by patients with DM1 and DM2. The questions focus on aspects of quality of life and emotional problems related to living with diabetes and treatment, including concern, depression, guilt, anger and fear, and has been used in clinical practice as an instrument for measuring the suffering that patients usually feel to live with diabetes (Gross, 2010). The total score is obtained by the sum of responses in 20 items of paid and multiplied by 1.25. In this way, the score shows amplitude of 0 to 100, in which the maximum score configures itself as greater suffering. The possible options of answers are divided into a Likert scale of five points, ranging from: "This is not a problem=0", "Small problem=1", "Moderate problem=2", "Problem almost seriously= 3", "Serious problem=4". For association analysis the total score was categorized with the cutoff point greater than or equal to 40, indicating a high degree of emotional suffering (Gross, 2010).

The data collection was performed after the user is informed about the commitment of the researcher to keep the anonymity of the participants, guaranteeing them the right to participate or not, and also the right to withdraw from the study at any time they wished, even after agreeing signed a copy of the Informed Consent Form. The data were analyzed using the SPSS 18.0 software features (IBM, Chicago, IL, USA). The descriptive statistics was performed using measures of absolute frequencies, percentages, average and standard deviation. In compliance with the requirements demanded by the Resolution 466/2012 of the National Health Council, Research Ethics Committee of the University Hospital of the Federal University of Maranhão analyzed and approved the study, under opinion n. 1.297.555/2015.

RESULTS

The majority of participants in the study were female (68.5%), aged above 60 (54.8%). Of the total, 48.4% self-declared brown color, 48.4% were married or in a stable union. The most frequent level of education was the incomplete basic education (51%). It was also observed a concentration of patients have retired with a family income of 1 to 3 minimum wages (65.3%). The assessment of the cut-off point (PAID ≥40) classified 25.3% of the patients with a high degree of emotional suffering and 74.7% without suffering.

Among the dimensions, assessed emotional problems corresponded to 14.5 ±8.8, problems with the treatment 2.0 ±1.9, problems with feeding 3.2 ±2.6 and problems with social support 0.9 ±1.9.

DISCUSSION

The score PAID has been used in various contexts to identify the impact of DM in patients with the disease, its score ranges from 0 to 100 in four subdimensions, being its cutoff point ≥40 points. In the study, presented emotional suffering to 25.3% (score ≥ 40) and 74.7% were not score to indicate suffering, in accordance with the tool. Other studies also demonstrated low frequency of patients with emotional suffering, following the implementation of the PAID. In the researches of Miranda et al. (2010), performed with 17 patients who presented an average score of 17.2; and Souza et al. (2012), with 170 patients who received a higher frequency of patients with a score below 40, revealing a low suffering in both. Bernini *et al* (2017) found that the average score of 19 points, being that only one patient in their sample had maximum score and two had a score of zero. Among the four dimensions of the score, the one related to emotional problems was the one that had a greater standard deviation, therefore the most significant for the determination of the general score. In the study of Silva *et al* (2016) the size defined as the most problematic by the participants was referred to emotional problems related to DM. Studies show that the greater the emotional stress related to DM, in accordance with the scores of PAID and its sub dimensions, the greater will be the dissatisfaction of the person (Gross, 2007).

The problems presented related to diabetes are being investigated in several studies because they are associated with the increase of psychiatric disorders, uncontrolled glycemic, non-access to treatment and complications of diabetes. Many studies indicate specific emotions and feelings related to live with diabetes and its treatment (Polonsky, 1995; Peyrot, 2003; Nakahara, 2006; Nozaky, 2009; Reddy, 2013). According to Welch et al. (2000), the psychological distress related to diabetes affects all other dimensions of treatment to prevent the patient to assume self-care behavior. These sufferings, difficult to be expressed by patients, may pass unnoticed by health professionals or reflect negatively on the relationship with the team of treatment (Gross, 2010). The hostility and anger, feelings common in patients with chronic disease, can be designed in the team, in an attitude, behavior, and transgressor and silent, which makes the relation of help (Cavalcanti, 2009). In this way, it is essential to include in the assessment of the patient's psychological and social situation as part of the therapeutic approach of diabetes. The psychosocial screening and therapeutic follow-up should include attitudes about the disease, expectations for treatment and the results, general aspects of life and related to diabetes, resources (financial, social and emotional), psychiatric history

(depression and emotional problems related to diabetes, anxiety, eating disorders) and cognitive compromise when the self-management is precarious (Rodrigues, 2009).

Conclusion

Among the four dimensions of the score, the one related to emotional problems was the greatest standard deviation, therefore the most significant for the determination of the score line, problems with feeding, treatment and social support showed to have less impact on patients' lives. This study has limitations, since it does not attempt to identify the descriptive analysis of the items of the questionnaire in an isolated manner, but only a global analysis of the sub dimensions, preventing the detailing of the results by virtue of the tool.

REFERÊNCIAS

Alencar DC. *et al.,* 2013. Sentimentos de adolescentes com Diabetes Mellitus frente ao processo de viver com a doença. Rev Bras Enferm, 66(4): 479-84.

Bernini LS. *et al.,* 2017. Impacto do *diabetes mellitus* na qualidade de vida de pacientes da Unidade Básica de Saúde. Cad. Bras. Ter. Ocup, 25(3), 533-541.

Brasil. Ministério da Saúde. 2018. Departamento de Informática do SUS – DATASUS. Prevalência de diabete melito. Brasília: DATASUS. 2015. Available: <http://www.datasus.gov.br/idb>. Acess: 01 mai.

Cavalcanti N., Lyra R., Mazza F. 2009. Diabetes Mellitus: perguntas e respostas. São Paulo.

Gross CC. *et al.,* 2007. Brazilian version of the problem areas in diabetes scale (B-PAID):validation and identification of individuals at high risk for emotional distress. Diabetes Research and Clinical Practice, 76(3), 455-459.

Gross CC., Gross JL., Goldim JR. 2010. Problemas emocionais e percepção de coerção em pacientes com diabetes tipo 2: um estudo observacional. Rev HCPA, 30(4): 431-5.

Miranda LP. *et al.,* 2010. Qualidade de vida de idosos com Diabetes Mellitus cadastrados na estratégia saúde da família. *Revista Mineira de Educação Física*, Viçosa, 5:125-135.

NCD Risk Factor Collaboration (NCD-RISC). Worldwide trends in diabetes since 1980: a pooled analysis of 751 population-based studies with 4.4 million participants. Lancet Lond. Engl. 2016; 387(10027):1513–30.

Nozaki T. *et al.,* 2009. Relation between psychosocial variables and the glycemic control of patients with type 2 diabetes: A cross-sectional and prospective study. Biopsychosocial Medicine, 3(4).

Oliveira KCS., Zanetti ML. 2011. Conhecimento e atitude de usuários com diabetes mellitus em um Serviço de Atenção Básica à Saúde. Rev Esc Enferm USP., 2011, 45(4): 862-8.

Peyrot M. 2003. Depression: a quiet killer by any name. Diabetes Care, v. 26.

Polonsky WH. *et al.,* 1995. Assessment of diabetes-related distress. Diabetes Care, 18 (6), 754-60.

Ramos RSPS. 2012. Diabetes e fatores associados em idosos assistidos em serviço geronto-geriátrico. [Dissertação]. Recife: Universidade Federal de Pernambuco; 111 p.

Reddy J., Wilhelm K., Campbell L. 2013. Putting PAID to diabetes-related distress: the potential utility of the problem areas in diabetes (PAID) scale in patients with diabetes. Psychosomatics, 54 (1): 44-51.

Ribeiro CSA. 2016. Controle glicêmico e auto percepção do grau de adesão à insulina em pacientes com diabetes tipo 1 no Brasil. Fundação Oswaldo Cruz Centro de Pesquisas Gonçalo Moniz. (Tese de Doutorado).

Rodrigues FF. *et al.,* 2009. Knowledge and attitude: important components in diabetes education. Revista Latinoamericana de Enfermagem, 17(4), 468-73.

Souza ECS. *et al.,* 2012. Avaliação da qualidade de vida de portadores de diabetes utilizando a medida específica B-PAID. *Revista Mineira de Enfermagem*, Viçosa, 16 (4): 509-514.

Welch G W., Polonsky W H., Snoerk FJ., Pouwer F. 2000. Diabetes-Related Emotional Distress in Dutch and U. S. Diabetic Patients: Cross-cultural validity of the Problem Areas in Diabetes Scale. Diabetes Care, 23:1305-1309.

WHO. 2010. Doenças transmissíveis e não transmissíveis. Brasília.

WHO. 2014. Global Report on Diabetes.

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