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SATISFAÇÃO COM A EQUIPA, COM A CONSULTA E COM O GRUPO DE DIABETES EM PESSOAS BRASILEIRAS SATISFACTION WITH THE TEAM, CONSULTATION AND WITH THE DIABETES GROUP IN BRAZILIAN PEOPLE SATISFACCIÓN CON EL EQUIPO, CONSULTA Y CON EL GRUPO DE DIABETES EN PERSONAS BRASILEÑAS

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### **RESUMO**

**Introdução:** A prevalência da diabetes tipo 2 está a aumentar em todo o mundo. Esta é uma doença crónica, associada a graves complicações, resultando em elevadas taxas de morbilidade e mortalidade (*International Diabetes Federation*, 2014).

Objetivo: Determinar o grau de satisfação das pessoas com diabetes tipo 2 em relação à equipa, à consulta e ao grupo de diabetes.

**Métodos:** No presente estudo descritivo, a amostra, não probabilística por conveniência, é constituída por 30 pessoas com diabetes tipo 2, dos quais 37% do género masculino e 63% do feminino, com idades compreendidas entre 42 e 69 anos com uma média de 57,20 anos que frequentam uma Unidade de Saúde e o Grupo de Diabetes em Arapiraca, Alagoas, Brasil. O instrumento de recolha de dados utilizado incluiu a *Escala de Relacionamento com a Equipa, Escala de Satisfação com a Consulta de Diabetes e a Escala da Satisfação com o Grupo de Diabetes todas de Cunha & Soares, (2015).* 

**Resultados:** Os resultados indicam que: tendencialmente 40,0% dos doentes relatam um bom relacionamento com a equipa; sendo a prevalência de doentes muito satisfeitos com a consulta de 76,7%. Contudo a satisfação com o grupo de diabetes não é consensual pois 40,0% dos doentes sentem-se insatisfeitos e com igual valor (40%) estão muito satisfeitos).

**Conclusões**: Os resultados apontam para a importância da avaliação da satisfação dos doentes com diabetes em relação à equipa, consulta e grupo, assumindo-se como um critério e um indicador de avaliação da qualidade dos cuidados de saúde, ajudando os profissionais a satisfazer as necessidades das pessoas a vivenciarem a situação de doença crónica.

Palavras-Chave: Diabetes Mellitus tipo 2; Satisfação; Consulta; Grupo; Equipa.

### **ABSTRACT**

**Introduction:** The prevalence of type 2 diabetes is increasing worldwide. This is a chronic disease associated with serious complications, resulting in high morbidity and mortality (*International Diabetes Federation, 2014*).

**Objective:** To determine the degree of satisfaction of people with type 2 diabetes in relation to the team, the consultation and the diabetes group.

**Methods:** In the present descriptive study, the non-probability sampling consists of 30 people with type 2 diabetes, of which 37% are male and 63% are female, aged between 42 and 69 years with an average of 57.20 years attending the Health Unit and the Diabetes Group in Arapiraca, Alagoas, Brazil. The data collection instrument used was the Relationship with Team Scale; Satisfaction during Diabetes Consultation Scale; and Satisfaction with Diabetes Group Scale Cunha & Soares (2015).

**Results:** The results indicate that 40.0% of the patients have a good relationship with the team, most of the patients (76.7%) are very satisfied with the query. However, the diabetes group satisfaction is not consensual, thus, 40.0% of patients feel dissatisfied while another 40% are very satisfied.

**Conclusions:** The results highlight the importance of the satisfaction of diabetes patients to the team, consultations and the group, helping them to meet their needs and their experience in the situation of chronic disease, as a professional evaluation criteria and a quality indicator.

Keywords: Type 2 Diabetes Mellitus; Satisfaction; Query; Group; Team

### **RESUMEN**

**Introducción:** La prevalencia de la diabetes tipo 2 está aumentando en todo el mundo. Es una enfermedad crónica, asociada a graves complicaciones, resultando en altas tasas de morbilidad y mortalidad (International Diabetes Federation, 2014).

**Objetivo:** Determinar el grado de satisfacción de las personas con diabetes tipo 2 en relación al equipo, a la consulta y al grupo de diabetes.

**Métodos:** En el presente estudio descriptivo, la muestra, no probabilística por conveniencia, está constituida por 30 personas con diabetes tipo 2, de las cuales el 37% del género masculino y el 63% del género femenino, con edades comprendidas entre 42 y 69 años con una media de 57,20 años que frecuentan una Unidad de Salud y el Grupo de Diabetes en Arapiraca, Alagoas, Brasil. El instrumento de recogida de datos utilizado incluyó la Escala de Relación con el Equipo, Escala de Satisfacción con la Consulta de Diabetes y la Escala de la Satisfacción con el Grupo de Diabetes todas de Cunha & Soares, (2015).

**Resultados:** Los resultados indican que: el 40,0% de los pacientes reportan una buena relación con el equipo; siendo la prevalencia de pacientes muy satisfechos con la consulta del 76,7%. Sin embargo, la satisfacción con el grupo de diabetes no es la misma pues el 40,0% de los pacientes se siente insatisfechos y con igual valor (40%) están otros muy satisfechos.

**Conclusiones:** Los resultados apuntan a la importancia de la evaluación de la satisfacción de los pacientes con diabetes en relación al equipo, consulta y grupo, asumiéndose como un criterio y un indicador de evaluación de la calidad de la atención de salud, ayudando a los profesionales a satisfacer las necesidades de las personas a experimentar la enfermedad crónica.

Palabras Clave: Diabetes Mellitus tipo 2; Satisfacción; Consulta; Grupo; Equipo.



# **INTRODUCTION**

Diabetes is a chronic metabolic endocrine syndrome that is characterized by increased glucose circulating in the blood (hyperglycaemia), resulting from the lack or deficiency of insulin production by the pancreas and/or the inability of the insulin produced to perform its role properly and successfully (National Diabetes Observatory, 2013). This results in an adjustment of the metabolism, physiological changes, in all parts of the body (General Directorate of Health, 2012).

This pathology has a multifactorial origin and the causes that trigger it are still fully unknown. Nevertheless, it is believed that it is probably related to the combination of genetic factors with changes in environmental risk factors (e.g. exposure to certain viral, bacterial or chemical infections) that may trigger autoimmunity phenomena or accelerate the destruction of pancreatic beta cells that are already in progress (Hockenberry & Winkelstein, 2014). In this regard, it is an autoimmune disease that develops after an attack of the immune system against the beta cells of the pancreas, which are the cells responsible for producing insulin (Schmidt, Hoffmann, Diniz et al., 2014). Known as autoimmune diseases, this happens when a certain agent, which may be a virus, a bacterium or a food factor, produces a response of antibodies that is sent to some tissue in the body. Roughly speaking, diabetes can be considered a heterogeneous disease, with a variable presentation and aetiology. Moreover, the increase in the prevalence of obesity and type 2 diabetes mellitus has become increasingly alarming. Nonetheless, the predominant form in children and adolescents is Type 1 diabetes, mediated by the immune system (Schmidt, Hoffmann, Diniz et al., 2014).

The General Directorate for Health (2012) documents the existence of four etiologically distinct clinical types of diabetes mellitus:

- Type 1 diabetes mellitus, which accounts for 5-10% of all diagnosed cases of diabetes, being the most common metabolic disorder in a very young age. It results from the destruction of the  $\beta$  cells of the pancreas, with absolute insulinopenia, making insulin therapy essential to ensure survival. In most cases, the destruction of  $\beta$  cells occurs through an autoimmune mechanism, which is called autoimmune type 1 diabetes. In some cases, however, the existence of the immune process cannot be documented, known as Idiopathic type 1 diabetes (National Diabetes Observatory, 2013);
- Type 2 diabetes is the most frequent form of diabetes (with about 90-95% of cases) but less frequent in children, resulting from the existence of relative insulinopenia, with a greater or lesser degree of insulin resistance. This type of diabetes usually has a pervasive onset and presents milder symptoms. In general, it manifests itself in adults with a long history of excess weight and a family history of type 2 diabetes. Still, with the obesity epidemic affecting children, there is a significant increase in the incidence of diabetes in younger populations, including children and adolescents (Schmidt, Hoffmann, Diniz et al., 2014);
- Gestational diabetes is associated with any degree of glucose intolerance documented, for the first time during pregnancy, which may result in complications for the new-born child;
- other specific types of diabetes leading to situations in which diabetes is the result of an identified etiopathogenic process, such as: in cases of pancreatic β-cell defects; genetic defects in the role of insulin; diseases of the exocrine pancreas; endocrinopathies, induced by chemicals and/or drugs; infections; other genetic syndromes associated with the disease, as well as unusual forms of autoimmune diabetes (General Directorate for Health, 2012).

Epidemiological data for 2014 show that diabetes has killed 4.9 million people worldwide, with a percentage of 50% of people under the age of 60 (International Diabetes Federation, IDF, 2014). According to forecasts by the IMS Health Diabetes Mellitus Overview (2014) for 2035, there is a strong tendency of the number of diabetics to increase worldwide to a total of 592 million, which represents a worsening of cases of about 55 % of the population. The IDF (2014) estimates that, in 2014, 46% of people did not have a previous diagnosis. It is a metabolic disease that affects a large number of people. Diabetes is a major cause of chronic morbidity and loss of quality of life, in which a person has double the risk of dying when compared to another person of the same age who does not carry this disease. Still, an intensive control of glycaemia allows delaying the appearance of chronic complications for about 15 years (Almeida & Pereira, 2008). This pathology is identified as one of the main causes of blindness, renal failure, lower limb amputations, as well as mortality, considering that 70 to 80% of diabetic people die of cardiovascular disease (Zabetian, Sanchez, Narayan, Hwang & Ali, 2014).

Worldwide, according to the IDF (2014), undiagnosed diabetes accounts for nearly half of the world's population of diabetics, 175 million, and accounting for most of these cases of type 2 diabetes. The same organisation stresses the importance of early diagnosis, which increases the possibility of preventing complications (IDF, 2014).

For that matter, it is necessary to identify early complications that may occur and to recognize the symptomatology of each complication, so that one can intervene and act in the prevention and minimization of its occurrence through health education (Oliveira & Oliveira, 2010). Complications can be reduced if there is periodic monitoring of the organs that may be most affected (eyes, kidneys, peripheral nerves, and vascular system) (National Diabetes Observatory, 2013). This chronic illness suggests that the patient accepts the illness and treatment as a whole, including any negative feelings that may arise (anxiety, pain, fear of discrimination, fear of dying, etc.) and the economic and social costs that can interfere with quality of life. Moreover, diabetes



requires continued care that includes monitoring blood glucose, administering insulin, performing a healthy diet and regular exercise, maintaining good metabolic control, and providing physical growth and development, psychological and social wellbeing within normality patterns (World Health Organization, 2010).

Acute and chronic complications of diabetes cause high morbidity and mortality, resulting in high costs for the health systems. Thus, the economic and social epidemiological analysis of the increasing number of people with this pathology suggests the need to establish public health policies that minimize the difficulties of these people and their families, and support the maintenance of their quality of life (IDF, 2014). Thus, health education and the follow-up of type 2 diabetes patients are the key to the success of the results obtained. It is a reflexive and critical practice of a partnership between the health professionals of the diabetes consultation and the patients that allows an exchange of knowledge, so that they accept their health condition and are able to take care of themselves, bearing in mind their health condition. This will be one way of consciously obtaining the maximum control of the disease and the maximum power possible over one's life (Nurses' Order, 2011). Hence, the patient has to recognize himself/herself, (re)build his/her ideas and (re)formulate his/her attitudes in order to face and live with his/her illness (Freitas & Sabóia, 2007). Therapeutic education in diabetes consultation should be multidisciplinary. That is, each professional individual carrying out his/her role, yet all suitably qualified to teach the patient with diabetes, so as to act in a cooperative and integrated way to provide psychological support and comprehensive information about the disease and treatment, whether it be to the patient or to his/her caregivers (Ferrito, 2010; Pereira, 2012). In order to ensure continuity of care, the team should facilitate the transfer of appropriate information among all members (Ferrito, 2010). According to Oliveira and Oliveira (2010), the consultation of diabetes is a process of interaction between the health professional and the patient, which requires that the health professional be able to listen and the communication between the both of them is effective. It is necessary that a correct direction of the information is obtained, so that the reality of each patient is understood and oriented so that he/she can live with his/her chronic condition. In addition to an empathic relationship, a holistic view of the patient should be taken into account and qualified care should be provided in a humane way, thus ensuring satisfaction with the care provided in the diabetes consultation (Ferrito, 2010).

In this context, integrating *Patient Groups* may be a therapeutic strategy to consider. It should be noted that a therapeutic group does not only mean putting a group of people in the same physical space, but also creating social networks and sharing experiences. The groups are spaces where there is an environment that is conducive to the sharing of individual needs, problems and experiences, and where information moves between the technical experience of the professionals and the experience of the participants, looking for solutions together. The groups can be classified into three basic models: waiting room groups, closed groups and open groups, collective consultations, each of them with their own specific set of features and characteristics (Ferreira, Bianchini & Flores, 2011). According to those authors, the need and the problems of each participant, can be used in the group activities, as well as in the group's purpose, which should be very specific, with a multiprofessional coordination, meeting on a regular basis — at least three times a week, 50 minutes each time —using different procedures, such as: the motivational interview. The change of behaviours and the education stimulation among peers are the main clinical goals to negotiate with the participants, so you can have consensual activities.

Self care education groups help their patients find healthier ways to address their chronic illness. In addition to the collective healing groups, you can also have an individual care plan, since the group goals can change (Ferreira, Bianchini & Flores, 2011). In the end, the main goal is to verify the satisfaction of the team and diabetic patients with the consultation and group therapy.

### 1. METHODS

The study was based on a descriptive research aimed at determining the degree of satisfaction of type 2 diabetic patients in relation to the team, the diabetes consultation and the group. The non-probabilistic sample consisted of 30 people with type 2 diabetes, of whom 37% were male and 63% were female, aged 42-69 years with an average of 57.20 years, attending the Health Unit and the Diabetes Group in Arapiraca, Alagoas, Brazil. Further reading of the age variable was obtained by grouping the different age values into three age groups with amplitudes from 41 to 50 years (26.7%), 51 to 60 years (40.0%) and over 60 years (33.3% %). The majority of people with type 2 diabetes are married (60.0%) or have a partner (66.7%). Concerning the area of residence, all participants live in rural areas. The level of education of the sample is low, since 83.3% report not being able to read or write, which means functional literacy. There is a prevalence of mixed race patients (70%). The majority is Catholic (60%). Regarding family income, diabetic patients with a minimum wage prevail (60%), corresponding to the minimal wage in Brazil.

The data collection instrument used consisted of an ad hoc socio-demographic and clinical questionnaire composed of 11 questions, through which information was collected regarding sex, age, marital status, nationality, residence, literacy, religion and clinical information issues, namely: type of diabetes, disease duration, attending the Health Unit. The scales of Cunha & Soares (2015) built for this purpose were also used: Scale of Relationship with the Team; Scale of Satisfaction During the Diabetes Consultation, in which people assign their satisfaction during the consultation at the Basic Health Unit, using the words excellent, very good, acceptable, weak and very weak; Satisfaction Scale with the Diabetes Group, consisting of 26 questions in



which the person with type 2 diabetes indicated the degree of agreement about the diabetes group, their development in the group and the number of times they went to the Health Unit that they attend.

For the data collection, authorization was requested from the Municipal Health Officer, and a favourable opinion was obtained. The data collection instrument was applied to all of the individuals in the sample, being self-administered to those who were able to fill it out, assisted and administered by the researcher according to the needs. In the latter, the guestions were read by the researchers and possible doubts were explained, and their answers were then recorded. Regarding the place where they were applied, this was done before the consultation in the Health Unit, while the participants were in the waiting room, waiting for their consultation. The application of the data collection instrument was preceded by informed consent, guaranteeing all participants the anonymity, confidentiality and final purpose of the collected data.

### 2. RESULTS

### Satisfaction concerning the relationship with the team

The mean value for the overall score of the scale Relationship with the Team was 45.7 (± 4.1) points, with a minimum of 37 and a maximum of 56 points. (see Table 1).

Gender  $\chi$ n Min. Max. Sd CV% Sk Male 11 39,0 56,0 45,4 5,3 11,6 0,65 19 **Female** 37.0 52.0 45.8 3.4 8.2 -0.64 30 9.0 Total 37 56.0 45.7 4.1 0.13

Table 1. Statistics relating to the relationship with the team

The highest percentage of patients, 63.3%, have a positive relationship with the team. However, only 40.0% have a good relationship and a significant group (36.7%) do not have a good relationship with the health professionals. Regarding gender, it is verified that, among the men, almost half of the sample (45.5%) experienced a bad relationship with the team, whereas only 31.6% of women experienced the same (Table 2). Nevertheless, the statistical differences are not significant (p=0.73).

Table 2. Classification of the relationship with the team

	Gender Male		Female		Total		
Relationship with the team		n	%	n	%	n	%
Bad Relationship with the team ≤ 44,7		5	45,5	6	31,6	11	36,7
Reasonable Relationship with the team 44,8 – 46,6		2	18,2	5	26,3	7	23,3
Good Relationship with the team ≥46,6		4	36,4	8	42,1	12	40,0
	Total	11	100,0	19	100,0	30	100,0

# Level of satisfaction during the diabetes consultation

The mean value for the overall score of the scale Satisfaction during the Diabetes Consultation was 3.8 (± 0.57), with a minimum of 3.0 and a maximum of 5.0 points. (see Table 3).

Table 3. Statistics regarding the degree of satisfaction during the diabetes consultation

Gender	n	Min.	Max	$\bar{x}$	Sd	CV%	Sk
Male	11	3,0	5,0	3,8	0,75	19,0	0,32
Female	19	3,0	5,0	3,9	0,45	11,0	-0,50
Total	30	3,0	5,0	3,8	0,57	15,0	0,13



Predominantly (76.7%), the patients are very satisfied with the consultation. It should be noted that no participant was dissatisfied. With regard to gender, the majority of both men and women are very satisfied with the consultation, in which 63.6% represents the male participants and 84.2% the female participants, with no statistically significant differences (p=0.19) (see Table 4).

Table 4. Level of satisfaction during the diabetes consultation

	Gender		Male		Female		Total	
Satisfaction with the Diabetes Consultation		n	%	n	%	n	%	
Dissatisfied with the Diabetes Consultation ≤ 2,87		-	0,0	-	0,0	-	0,0	
Reasonably satisfied with the Diabetes Consultation 2,88 – 3,93		4	36,4	3	15,8	7	23,3	
Very Satisfied with the Diabetes Consultation ≥ 3,94		7	63,6	16	84,2	23	76,7	
	Total	11	100,0	19	100,00	30	100,0	

# Satisfaction with the diabetes group

The mean value for the overall score of the scale Satisfaction with the Diabetes Group was 52.6 (± 5.3), with a minimum of 44 and a maximum of 64 points. (see Table 5).

Table 5. Statistics regarding satisfaction with the diabetes group

Gender	n	Min.	Max.	$\bar{x}$	Sd	CV%	Sk
Male	11	44,0	62,	53,6	5,1	11,0	0,04
Female	19	44,0	64,0	52,2	5,4	10,0	0,79
Total	30	44,0	64,0	52,6	5,3	10,0	0,02

In the same proportion, 40.0% of the patients feel dissatisfied and another 40% are very satisfied with the diabetes group. To what concerns gender, it is verified that most men are very satisfied with the diabetes group (45.5%), while 42.1% of the women are dissatisfied. However, there are no statistically significant differences (p=0.89) (see Table 6).

Table 6. Level of satisfaction with the diabetes group

Gender	Male		Female		Total	
Satisfaction with the Diabetes Group	n	%	n	%	n	%
Dissatisfied with the Diabetes Group ≤ 51,3	4	36,4	8	42,1	12	40,0
Reasonably Satisfied with the Diabetes Group 51,4 – 53,9	2	18,2	4	21,1	6	20,0
Very Satisfied with the Diabetes Group ≥54	5	45,4	7	36,8	12	40,0
Total	11	100,0	19	100,0	30	100,0

### 3. DISCUSSION

The results achieved showed that the level of satisfaction with the majority of the patients (63.3%) had a positive relationship with the team. Nonetheless, it was also observed that in 36.7% of the patients, the relationship with the team is not positive. It should be noted that there was a prevalence of men (45.5%) who experienced a bad relationship with the team, whereas for women, it was only 31.6%. Patrício (2012) carried out a study on the patients' level of satisfaction with the team, and found a very positive degree of satisfaction, especially among female patients. In this study, the behaviours of aid, trust, dedication, intimacy and counselling were the positive characteristics identified in nurses. Negative aspects were due to excessive waiting time and the infrastructures, as it was not an exclusive area for young people. The author points out that one of the objectives



of health professionals in the diabetes consultation is to avoid situations of risk, especially the non-adherence to the therapeutic regimen.

Regarding satisfaction during the diabetes consultation, it was verified that the majority of participants (76.7%) were very satisfied with the consultation. In relation to gender, 63.3% of male participants and 84.2% of female participants are very satisfied with the consultation. These results corroborate the results of a research carried out by Sousa, Peixoto and Martins (2008), which aimed to determine the patients' level of satisfaction with diabetes mellitus in relation to the consultation. The authors observed mean values that indicate a good level of satisfaction with the consultation. In the study conducted by Chaves, Duarte, Mateus, Castro, Marques, Costa, et al (2012), on the satisfaction of adult patients in the diabetes consultation, 43.6% were "very satisfied" with the nursing consultation, 16.9% "satisfied" and 39.5% are "somewhat satisfied". When analysing the level of satisfaction in relation to the diabetes consultation, for each of the genders the authors observed that, in the female sex, quite a sample of peers were "somewhat satisfied" (46.2%) whereas in the male sex, the majority were "very satisfied "(49.5%). With respect to the results regarding satisfaction with the diabetes group, it was found that 60.0% expressed satisfaction, but 40.0% of the patients felt dissatisfied and another 40% shared being very satisfied with the diabetes group. In relation to gender, most of the men are very satisfied (45.5%), while 42.1% of the women were dissatisfied with the diabetes group. These results corroborate those found by Ferreira, Bianchini & Flores (2011), since in their study few patients were not satisfied with the team. Still, there is an analogy between the results found in the present study and those achieved by the authors cited in relation to gender, since it was also observed that men show a greater level of satisfaction when compared to women.

# **CONCLUSIONS**

Type 2 diabetes mellitus, due to the fact that it is a chronic disease for life, doesn't hurt, but causes feelings of apprehension about the future in the patients, and it is up to health professionals and therapeutic groups to educate/support the person so as to cope positively with the implications of the disease. Statistical inferences believe that the empowerment model should be adopted in the diabetes consultation when approaching the person with type 2 diabetes, as a facilitator of a therapeutically more adequate self-management of the disease. Strategies that improve the abilities of these patients and the ability to better manage and better adhere to the correct therapeutic regimen are necessary (Cunha, André, Granado, Albuquerque & Madureira, 2015). Therefore, the study has a patent on the planning of group clinical activities, which must manage a triad evaluation: physical exercise, feeding pattern and medication regimen; the specificities of each person, regarding functional literacy, learning abilities, economic resources for medication treatment and clinical specificities.

The consultation should provide information to the patient, so that appropriate care is given. Nonetheless, this support will only be of quality if the patient shows that he/she is satisfied with the provided care, and therefore must be monitored.

In addition to the proposed interventions, the present study show us that is crucial the inclusion chronic disease patients in the main population target for primary prevention practices, so these new group therapies can, for instance, produce better nutritional results and in the end, better quality of life.

We suggest further investigations, so the force of the study may be clarified.

Furthermore, nurse care in this context, must be further researched, because nurses are the best links between health care services and patients; therefore, nurses have privilege access to primary prevention methods and shall prevail negative impact in diabetes mellitus management.

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