

Diabetological Education in Patient Type 2 Obese and Overweight's: Center of Attention to the Diabetic

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Abstract

Introduction: The diabetes mellitus answers the prototype of chronic illness of high prevalence that is necessary sanitary cares and being fundamental the educational aspect to modify habits and acquire the seriously ill capacitance.

Objective: Demonstrating the efficacy of an educational intervention in patient Type 2 diabetic obese and on weight. In the monetary unit municipality in the Matanzas province in between the time of January to December 2016.

Method: Carried out a descriptive study collateral relative, that forms part of an action investigation it treats on showing the efficacy of an educational intervention in patient Type 2 diabetics obese and on weight in the center of attention to the diabetic, the university was undertook for 250 patients they entered in the center of attention to the diabetic, the sample remained agreed for 50 patient, by means of random sampling, the variables of the study were obtained after the application of a designed instrument (annexed 1 , annexed 2) using the method face to face, validated for the national institute of endocrinology.

Results: The age it predominated was given between the fourth and fifth decade standing out the female sex, the Index of Corporal Mass (IMC) reach to 20-24,9, the predominant illness went the HTA, before the intervention a great by the hundreds not knew about aspects related with the mellitus diabetes, by achieving revert this result one time concluded the educational intervention.

Conclusions: It is of vital importance in the diabetic patient, the educational component, since without it does not exist effective treatment to treat the diabetes in whoever of your forms for which can offer better quality of life and therefore increase the expectation in years.

Keywords: Diabetological Education; Type 2 Diabetes mellitus

Introduction

The diabetes mellitus is a problem of health that affectionate between the 2 and 5% of the worldwide population. It calculates that in the world there is 135 million of elder's diabetics 20-years and

that this number increases to the 300 million in a year 2025. About 30 million of inhabitants of the American continent are diabetic, 45% of them/it belongs to the area of Latin America and the Carib [1]. The Diabetes Mellitus (DM) is a heterogeneous syndrome that has become muddled people a chronic hyperglycemia, decided for a deficiency in the secretion of insulin, an insufficient effectiveness of your action, or both alterations [2].

The education for the health (EPS) tried to get that the peoples are better prepared to think for if same, take your own decisions and fix take in royalists. The objective to achieve is that the peoples are and live possible better [3].

The education for the health (EPS) is indispensable in the therapeutic boarding of the diabetic. We do not introduce the diet, the drill and the medication without informing to the patient on your importance and without motivating it in order that acquires protagonist move in the control of your illness. It is known that the corporal weight is an important factor to keep in mind to prevent or control the type diabetes mellitus 2, but this is not a simple problem of dietetic prescription or of restrictions it is nourishing. In the presence of the type diabetes binomial 2 (DM 2) and corporal overweight, the challenge is in achieving the comprehension and motivation to transform correctly the habits of feeding and the physical activity fixed during many years, so that, near the remainder of the therapeutic measures, contribute to a better metabolic control, a diminution of the complications to stop and long terms and a better quality of life [4,5].

Given the incidence of diabetic patients type 2 obese and on weight that are present at the rate of diurnal entrance in the center of attention to the diabetic has motivated to the author to carry out this investigation with the objective to show the efficacy of an educational intervention in patient diabetic type 2 obese and on weights, it explores the impact on the Index of Corporal Mass (IMC) of the peoples they live with this illness, decide the illnesses that more become a partner of the diabetic obese peoples and on weights and evaluate the modification of attitudes in the presence of the new learned knowledges in the CAD of monetary unit.

Materials and Methods

Carried out a descriptive study collateral relative that forms part of an action investigation it treats on showing the efficacy of an educational intervention in patient Type 2 diabetics obese and on weight in the Center of Attention to the Diabetic (CAD) in the monetary unit municipality, Provincia Matanzas of December -January of the 2016. University: Constituted for 250 patients that received diurnal entrance in the center of attention to the diabetic (CAD).

Sample: The same remain established for 50 patients by means of random muestreo simple, inclusion criterions and exclusion The criterions designed for the sample went the following:

Criterions of inclusion:

- Diabetes Type 2 obese and on weight.
- Diabetics that received diurnal entrance.
- All patients that found the day of the application of the instrument

Criterions of exclusion:

- Diabetics that did not resort to 2 or more classes.
- Those who not fulfilled the including signal thing.
- Diabetes Type 1

Instruments

For the obtaining of the primary data proceeded to the revision of the individual clinical records that find out of style in the center, applied an inquiry to the previous patient informed consent (annexed 1) using the method face to face, the who this validated for the national institute of endocrinology. In bibliographical revision the author was documented on some variables involved in the process of the diabetes just as diet, physical activity, those which was used in the instrument with which evaluated the knowledge on diabetes to the involucrate patients in the investigation (annexed 2), to evaluate the knowledge on diabetes. The variables of study went, age, degree of metabolic control, index of corporal mass, time of evolution of the illness, associated illnesses, knowledge on Diabetological Education.

Procedures: Sanguine Samples for Glycemia are taken on an Empty Stomach

The degree of metabolic control was certain according to 3 criterions, glycemia values on an empty stomach minors of 7,1 mmol/l for the patients controlled, acceptable until 7,5 and superior to these for the uncontrolled thing. We decide the index of corporal mass and group them according to the criterions of the OMS. To decide the Index of Corporal Mass (IMC) of the patient used the following formula: $I = \frac{\text{weight}}{\text{height}^2}$ for the patients that found

– 20 below weight

20-24,9 normal weighs

25- 29,9 on weight

30+ obese

To evaluate the knowledge in diabetes applied a questionnaire before and after the intervention, if responds more than 50% of the items, knows, if responds less than 50% of the items, knows little, if it answers: single 20% of the items.

They applied a group of interventions as part of the study those which grouped in: Educational and preventive interventions. Dynamics of group, interview individual, confer, physical follow-up and control, activity. In agreement with the results obtained in the application of the questionnaire (annexed 2) applied an educational program that is found validated for the institute of endocrinology which had a distributed 5-hours duration in 5 sections of work with a daily frequency, for the development of the same agreed 5 groups

of 10 patient everyone for which the program had a 25-weeks duration since work for groups. To evaluate the program applied the initial questionnaire. The imparted topics went:

TOPIC I: Conceptual aspects I on the diabetes mellitus

TOPIC II: Diabetological Education

TOPIC III: Metabolic control

TOPIC IV: Food for the diabetic

TOPIC V: Physical activity

Statistical Processing

To facilitate the confection of the base of data codified the variables. For the fulfillment of the objectives employed measured of summaries for quantitative data. For the processing of the information the software that is used went Microsoft Access. Excel Word. The results were presented in tables for your better comprehension reaching conclusions and recommendations.

Ethical Aspects

Previous at the beginning of the application of the same obtained the informed consent of each patient specially (annexed 1). All patients were informed that it would be very useful for the investigation it knows some aspects related with your degree of general information on the DM complications, that the derived information of this study uses to improve the explanations the diabetics receive to prevent future complications. After receiving this information is invited you to cooperate with the interview and it is emphasized that had full freedom to accept or not.

Results

Found that it had a predominance of the group of 45-54-years ages represented in a (20 %); the female sex (56 %); the time of evolution of the diabetes results from 6-10 years with 22 patients represented in a 44 % (table 1)

Variables		n	(%)
Sex	Feminine	28	56
	Masculine	22	44
Groups of agars (years)	35-44	10	20
	45-54	20	40
	55-64	15	30
	65+	5	10
Swindle DM the of evolution of (years)	Minor of 1	6	12
	5-Jan	15	30
	10-Jun	22	44
	More than 10	7	14

Table 1: General characteristics of the affected sample. Source: Clinical records.

54% of the patients met an IMC of 25,29,9 before the intervention, 50% of the patients had a significant diminution of the IMC of 20,24,9 after having carried out the intervention by demonstrating in the table 2.

IMC	Before the intervention	%	After the intervention	%
20-24,9	-	-	25	50
25-29,9	27	54	13	26
30	23	46	12	24
Total	50	100	100	100

Table 2: Distribution of patients according to index of corporal mass before and after the intervention. Source: Clinical records.

In the table 3 the levels are can appreciate of measured glucose in the patients before the intervention 44% of these had a metabolic inadequate control, after the intervention 86% of these met the parameters of appropriate glycemia, when evaluating the knowledges, they had on your illness 46% not knew on aspects of the diabetes, after the educational intervention 90% overflowed your knowledges satisfactorily.

Metabolic control	Educational intervention			
	Before			%
		#	%	
Appropriate	12	24	43	86
Acceptable	16	32	5	10
Inadequate	22	44	2	4
Total	50	100	50	100
Knowledges on Diabetological Education				
know	12	24	45	90
It knows little	15	30	5	10
know	23	46	-	-
Total	50	100	50	100

Table 3: Metabolic control before and after the intervention.

In the table 4 reflect the main related illnesses with the obesity by resulting the HTA with a 60 %, followed have the dyslipidemia in a 50 % and the ischemic cardiopathy with a 30 %.

Illnesses	#	%	Obese	%	On weight	%
HTA	50	100	23	46	27	54
Dyslipemia, hypertriglyceridemia	33	84	20	40	22	44
Ischemic heart disease	22	60	17	34	13	26
Arteraciones Osteoarticulares, ankle, column	13	40	13	26	7	14

Venous insufficiency lower extremities	15	30	8	16	7	14
Digestive illnesses,						
hepatic steatosis's, gallstones	20	40	8	16	12	24
Cutaneous affections	10	20	6	12	4	8

Table 4: Diabetic patients type 2 obese and on weight according to illnesses associates. Source: N clinical records: 50.

Discussion

It makes evident that the 45-54-years age, predominant result in this study coincides with the revision bibliography (being similar results to the tour, the same thing occurred with the female group that is corresponded with the worldwide statistics (Quirantes Hernández A.) where remains well clear that exist more diabetic women than men [6].

According to the report of the group of study for the prevention of the Diabetes Mellitus (DM) of the World Health Organization (OMS), the education to the diabetic it defines as the fundamental activity, this program of Diabetological Education and nutritional has been conceived to inform and form to the patient on the fundamental points of your illness [7,8]. In investigation this letter it is demonstrated that the patients not had no knowledge of your illness before the intervention, as well as not took a good control of the diet, for which not carried out physical activity, by comparing it after the intervention made evident that the education in diabetes and the realization of physical drill as well as the correct realization of the diet falls directly in the metabolic control of these to appear in person and consequently in your future evolution, which coincides with (García R, Suárez R, 2003) that presented similar investigations to the our [9]. The previous does reflect that with a 20-hours course is possible to add you years to the life of a diabetic, with an intervention of very below cost, save one hundred of the correct weight thousands to the country and to the familiar economy of these to appear in person, that with very little effort they are contributed great cheer and well-being to many families.

Although in general the obesity as phenomenon is comfortably placed known and studied in the different levels of attention of the system of Cuban health [10]. The Index of Corporal Mass (IMC) has been recognized as the more valuable tool to evaluate the corporal overweight and the obesity, and is amply recommended for organizations as the OMS and the center for the control and prevention of illnesses [11]. In this investigation it is demonstrated

that before the intervention the IMC results from 25,29,9, for which after this most patients reached to an IMC of 20,24,9 for which it have coincided with other authors that presented similar results to the our where outline that the diet and the practiced physicist are beneficial and effective for the diabetic obese patient, on weights, which a plain of feeding, physical activity reduces the corporal weight and keeps the levels of glucose in bleeds and in urinates normal schools [12].

It has verified and ratified that between the diabetic patients Type 2 obese and on weight finds the HTA, the Dyslipidemia, ischemia cardiopathy, having these a very high prevalence between the population of diabetics [13] for which in our investigation demonstrated that the bigger quantity of these illnesses corresponds to patients on weight for which the precocious detection of these illnesses guarantees a better quality of life of these patients, for which our results show once again the importance of the correct education of the diabetic patients as for the control of the illness, coinciding with (Suárez R, García R, d bone added to a dish to enhance the flavor) that presented similar results to the our [14].

Conclusions

It is of vital importance in the diabetic patient, the educational component, since without it does not exist effective treatment to treat the diabetes in whoever of your forms for which can offer better quality of life and therefore increase the expectation in years. Demonstrated that it had a predominance of the group of 45,54-years ages in the female sex, as well as in the time of evolution of the 6,10-years diabetes. The index of corporal mass before the intervention was clear augmented, by demonstrating a significant diminution after having carried out the intervention.

It could appreciate that the levels of measured glucose in the patients before the intervention had a metabolic inadequate control, after the intervention a great per cent of these patients met the parameters of appropriate glycemia, when evaluating the knowledges, they had on your illness, not knew on aspects of the diabetes, after the educational intervention 90% overflowed your knowledges satisfactorily. The main illnesses related with the obesity resulted the arterial followed of the ischemic cardiopathy dyslipidemia respectively.

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