155 - DIABETES MELLITUS: APPLICABILITY AND EFFECTIVENESS OF THE EDUCATIONAL WORK ADDRESSED TO THE PHYSICAL ACTIVITY IN BEARERS OF THE PROGRAM OF HEALTH IN THE FAMILY (PHF) OF THE MUNICIPAL DISTRICT OF CUITEGI, PB

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1 INTRODUCTION

Nowadays, the Diabete Mellitos is one of the main chronic diseases - degenerative that affect the man. It is characterized by presenting disturbances metabolic ocasionandos for the increase of glucose sanguine for insulin deficiency or for outlying resistance the action of the insulin and it is considered such as a serious problem of public health. In Brazil, data of the multicentric study on the prevalence of the diabetes (1987/89) demonstrated about 7,6% of the population in an age group from 30 to 69 years, where it is made calculations that in the year of 2025 it pass to exist about 11 million diabetics in the country, representing an increase of more than 100% in relation to the data obtained in the year of 2000 (BRAZIL, 2002).

In spite of being considered for a long time a disease of developed countries, the diabetes has been presenting epidemic characteristics in the developing countries, being among the four more important problems of health, due to number of affected people. With this affirmation it is possible to verify that the diabetes is constituted in a complex problem that needs urgent actions of public health. That because it attacks all of the socioeconomic classes, especially the population of low income that stands out for not possessing enough conditions to submit to an appropriate treatment, that characterizes in that group, larger number of complications, incapacitations or precocious morbosity.

The intervention for the treatment of the diabetes is linked to the alimentary habits, practice of the physical exercise and medical ingestion, which it causes changes in a certain way, a lot of times, radicals for the patient, for demanding alterations in his way of living. It is necessary that the diabetic knows all the conditions that can help him in his health, mainly in what he refers to the physical activities that can contribute in a significant way to a better adaptation. It is known that the practice of physical activity to regulate help in the control of the body mass, reduces the blood pressure, and it improves the psychological health (ROSA NETO; COQUEREL; GUIMARÃES, 2004), as well as it brings social benefits in all of the phases of the life.

Therefore, it is necessary that inside of the educational activities controlled by the professional health, the importance of the practice of the routine exercise always been emphasized with the intention of contributing for the improvement of the patient's illness state. The accomplishment of this study is justified for the need that the diabetic patients have regarding the low level of information about diabetes and the physical activity as middle of intervention for taken care itself. It was considered important the following question: Will it be that the level of the patients' bearers of Diabetes Mellitus information about the use of the practice of the exercise as intervention can modify after the application of an educational work? The treatment process and control of degenerative chronic diseases no transmissible (DCDNT) dispute of the diabetic's information necessary explanation. In this perspective, The aim of this study is to verify the applicability and effectiveness of the educational work addressed to the physical activity in bearers of diabetes of PHF.

2 METHODOLOGY

2.1 CHARACTERIZATION OF THE STUDY: This research elapses from an exploratory and field study, descriptive, probabilística, with primary data.

2.2 POPULATION AND SAMPLE: The population was consisted of patients of the PHF. The sample was polietapic, because it involved people enrolled in the Program of Health of the Family (PHF) of the group Roberto Paulino of the municipal district of Cuitegí - PB, residents in this neighborhood. And lecture visitors promoted by the center and, after 30 days, it was felt 10 bearers of Diabetes Mellitus volunteers, raffled starting from the ones that were presents.

2.3 PROCEDURES FOR COLLECT OF DATA AND INSTRUMENTS

The nurses, under the researcher's command and atendente of the center, organized the project of the lectures and they published through microphone of the church of the city summoning the community, especially the diabetics, for the event the interested patients. The educational work was accomplished in the form of lectures, during the period of 30 days, about the theme the definition of diabetes mellitus and the importance of the physical activity for the diabetic. Likewise as the accomplishment of dynamics of the group for the diabetics' motivation. Initially it took place the test of capillary glicemia in all the participants that were in fast. In the second moment it was offered a breakfast following by group dynamics and of the lecture about diabetes and the importance of the physical activity for the patient. It was given the right for the participant to question and to remove their doubts.

Soon afterwards, in the third moment, an instrument was applied, counting with the support of aiding of nursing and ACS of USF, at the end of the period, it was selected by draw 10 volunteers for application of an interview itinerary semi-structured, of the type form, containing objective questions on the participants' profile, state of diabetes, perception about the physical activity and the diabetic and their complications. The orientations adopted the ethical aspects of the resolution 196/96 of the ministry of the health that treats the researches with human beings. The plan of statistical analysis felt in percentile of frequency.

2.4 ANALYTICAL PLAN: The plan of statistical analysis felt in percentile of frequency. Distributed in tables and illustrations.

3. ANALYSIS RESULTED DOS AND DISCUSSION

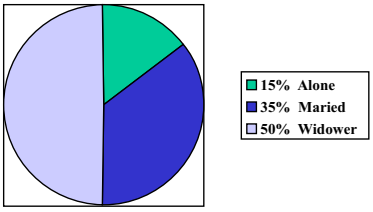
Initially, it was observed the analysis of the variable age group and gender in accordance table 01. It was verified that most of the participants of the educational work is female gender and about 70% were in an age group between 50 and 70 years, fact waited, once they present clinical characteristics of Diabetes Mellitus type II, confirmed through the data obtained in table 4, where most of these discovered that they are diabetes, the less than one year, as refers the Ministry of Health (BRAZIL 2002) to this pathology, essentially the type 2 has begin insidious, with symptoms not specific, which a lot of times it delays the diagnosis.

TABLE 1: DISTRIBUTION OF THE ANSWERS OF THE GROUP OF DIABETICS, PARTICIPANTS OF THE EDUCATIONAL PROPOSAL / USF OF THE CONJUNTO ROBERTO PAULINO, SECOND AGE GROUP AND GENDER.

	FREQUENCY		
AGE GROUP	**FEM**	**MASC**	**% RELATIVE**
30 A 50	01	-	10,0
50 A 70	04	03	70,0
+ DE 70	01	01	20,0
TOTAL	**06**	**04**	**100**

In agreement with graph 01, it can be observed that 50% of the bearers of diabetes are married, important fact in what concerns the participation of the family in the solemnity taken care diary of this patient one, as well to motivate to develop physical daily practices of activity such as: prolongations and tasks that contribute to favor the motricity. According to Nasser (2002 Pink apud Neto, Coquerel, Guimarães, et al 2004) it is important to emphasize the paper of the physical rehabilitation, above all to combat the immobility.

GRAPH 1: DISTRIBUTION OF THE ANSWERS OF GROUP OF DIABETICS, PARTICIPANTS OF THE EDUCATIONAL WORK / USF OF THE CONJUNTO ROBERTO PAULINO, ACCORDING TO THE MARITAL STATUS (N=10)



According to data obtained in table 2, it is observed that about 40% of the participants of the educational work are illiterate, hindering a lot of times the adhesion to the treatment, the other ones 60% are literate facilitating a little more the work, however it is important that the professionals of health offer objective and clear orientations in agreement with the instruction degree of each one. This statement corroborates with the one that Moreira (2002) comments on the problem of the illiteracy or of low education, explaining that it commits the life quality and the health. The professionals communicators and educators in health should consider this problem and to adopt mechanisms to favor the communication process.

TABLE 2: DISTRIBUTION OF THE ANSWERS SECOND DEGREE OF INSTRUCTION AND PROFESSION OCCUPIED.

PROFESSION AND OCCUPATION	LITERATE	ILLITERATE	%
Merchant	1	-	10
Retired	4	-	40
Of home	-	2	20
Did not inform	-	-	-
Farming	1	2	30
TOTAL	**06**	**04**	**100**

According to data demonstrated in table 3, it can identify that 50% receive less than a minimum wage, unchaining difficulties in following the treatment correctly, since they need good financial condition to follow the appropriate diet and to follow a program of regular physical activity. In this sense, Smeltzer (1998) affirms that the bearer type 1 should accomplish six meals to the day and the diabetes type 2 from four to six meals. It is valuable not to exclude any meal or snack, preventing of this sorts out sharp complications of the diabetes mellitus such as hipoglicemia.

TABLE 3 - DISTRIBUTION OF THE ANSWERS SECOND PAYS FAMILY.

MONTHLY FAMILY INCOME	Nº	%
< of minimum wage	05	50
from one to two minimum wages	02	20
from two to three minimum wages	01	10
+ of three minimum wages	02	20
TOTAL	**10**	**100**

In Table 4, it can be verified that 60% of the bearers of diabetes discovered the disease there is less than three years, showing, a late discovery of the diagnosis confirming to Diabetes type II more frequent to happen, being responsible for precocious incapacities. This fact is due the pathology to the lifestyle, as sedentarism that takes the obesity and other factors unchaining the pathology. Being reinforced the need of the practice of a physical activity and good feeding habits for the prevention of the diabetes and other degenerative diseases. In this perspective, Freire (2001), indicates that in his studies that the prevalence is increasing, in the last decades, due to a series of factors among them: change of the lifestyle, increase of the medium life of the population, increase of the diabetic's life.

TABLE 4: DISTRIBUTION OF THE ANSWERS OF THE GROUP ACCORDING TO THE TIME OF DISCOVERY OF PATALOGY.

TIME OF DISCOVERY	Nº	%
< of one year	02	20
from one to three years	04	40
from three to five years	04	40
TOTAL	**10**	**100**

As Graph 2, it is observed that 55% of the participants present chronic complications. This inspires cares, because it feels due to late discovery, as commented on previously, and also for inadequate habits of life. Therefore it is important to reinforce the importance of the daily physical activity once again as way of preventing the disease and their disorders. In spite of a high one percentile to present chronic complications, only two participants had been interned. Observing table 5, it can be affirmed that about 80% of the participants considered the educational proposal excellent, showing the need of more professionals to publish the importance of physical activity for the health.

This is going towards Moreira's studies (2002) that says that considered the education in diabetes a therapeutic modality and it can be defined as the process teach learning of the knowledge body, ability and attitudes related to the control of the diabetes, with the objective of promoting the necessary changes to the reach of a good status of health and to optimize the psycosocial adaptation to life quality.

GRAPH 2: DISTRIBUTION OF THE ANSWERS, ACCORDING TO THE PRESENCE OF COMPLICATIONS CHRONIC DIABETES.



TABLE 5: DISTRIBUTION OF THE ANSWERS, ACCORDING TO THE OPINION REGARDING THE LECTURE.

OPINION REGARDING THE LECTURE	Nº	%
Execellent	08	80
Good	02	20
Regular	-	-
Bad	-	-
TOTAL	**10**	**100**

As tells Millech (1989) apud Fernandes (1995) " it is extremely constraining to verify in patients that already present the disease for some time, a deep ignorance degree in relation to the same, that carts as consequence the bad controls and the coming of complications that it could be avoided or delayed". The answers in Table 6 show that the patients consider of addition importance the physical activity, as well as the use of the same ones for the daily life. It can confirm the effectiveness of the education through educational works explained by the team multiprofessional reinforcing above all the prevention and the best physical conditioning.

Cancelliéri (1989) affirms that the practice of physical exercises provides countless benefits to the any human being, particularly in the bearer of Diabetes, the exercises possess outstanding qualities in the prevention and in the treatment

TABLE 6: DISTRIBUTION OF THE PROPOSALS ACCORDING TO THE LEARNING.

LEARNING	Nº	%
Yes	09	90
Not	01	10
TOTAL	**10**	**100**

As the practice of the exercises, 50% of the participants practiced some type of physical activity, in spite of they do not know the importance. That reinforces the previous subject when it enrolled a percentile one very low of internments for the diabetes. About 20% of the patients practice activities of daily life as: to wash clothes, to go to the country, to arrange house, to do the fair. Which they were also considered as actives. But, it is worth to point out the importance that still 30% were sedentary, that is considered a high number in treating of need activity for the diabetes, of a better life quality. To maintain a healthy feeding, normal weigh and practice physical activity regurlarly are important healthy habits of life that it help to prevent the appearance of the diabetes type-II as refers the Ministry of the Health. (BRAZIL, 2006)

TABLE 7: DISTRIBUTION OF THE ANSWERS ACCORDING TO THE PRACTICE OF PHYSICAL ACTIVITY.

PRACTICE OF THE PHYSICAL ACTIVITY	Nº	%
Prolongation	02	20
Walk	03	30
Other	02	20
not practice	03	30
TOTAL	10	100

4 CONCLUSION

The study based in the sample and results allowed to end that: the educational work about the applicability and effectiveness addressed to the physical activity in bearers of diabetes is explanatory and it supplies adhesion to the exercises while treatment form for the bearer. It suggests that is reformulated in own PHF the control conducts and treatment including lectures and more direct information for the patients enrolled in these centers, mainly in the communities.

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DIABETES MELLITUS: APPLICABILITY AND EFFECTIVENESS OF THE EDUCATIONAL WORK ADDRESSED TO THE PHYSICAL ACTIVITY IN BEARERS OF THE PROGRAM OF HEALTH IN THE FAMILY (PHF) OF THE MUNICIPAL DISTRICT OF CUITEGI, PB

Introduction: The treatment process and control of degenerative chronic diseases no transmissible (DCDNT) dispute of the diabetic's information necessary explanation. The aim of this study is to verify the applicability and effectiveness of the educational work addressed to the physical activity in bearers of diabetes of PHF. The **methodology** consist of an exploratory and field study, developed with a group of diabetic patients of PHF of the group Roberto Paulino, Cuitegi-PB, residents in this neighborhood that received information through lectures supplied by nurses on the theme Diabetes and Exercise, during the period of 30 days, with procedures in stages: control of capillary glicemy; talks educational about the importance of the physical activity for the diabetic and soon afterwards, it was selected by draw 10 volunteers for application of an interview itinerary semi-structured, of the type form, containing objective questions on the participants' profile, state of diabetes, perception about the physical activity and the diabetic and their complications. The orientations adopted the ethical aspects of the resolution 196/96 of Ministry of Health that treats of the researches with human beings. The statistical analysis plan felt in percentile of frequency. The **results** found that: 70% were with ages between 50 and 70 years, 50% widowers, 40% retired, 50% receive less from minimum wage, 80% discovered the pathology between 1 to 5 years, 55% present chronicle complications, 80% said that the lecture was excellent and 90% considered them transparent as for the understanding of the effect of the exercise in the

treatment, 90% absorbed learning affirming that they would accomplish exercises, the ones that practice exercises became in 50%, and 20% indicate that accomplish domestic tasks, as cleared, to wash clothes, to do fair, etc. **Conclusion:** The educational work about the applicability and effectiveness addressed to the physical activity in bearers of diabetes is explanatory and it supplies adhesion to the exercises while treatment form for the bearer.

DIABÈTE MELLITUS: APPLICABILITÉ ET EFFICACITÉ DU TRAVAIL PÉDAGOGIQUE ONT ADRESSÉ À L'ACTIVITÉ PHYSIQUE DANS PORTEURS DU PROGRAMME DE SANTÉ DANS LA FAMILLE (PHF) DU DISTRICT MUNICIPAL DE CUITEGI, PB

Introduction: Le processus du traitement et contrôle de maladies chroniques dégénératives aucun transmissible (DCDNT) discussion de l'information du diabétique explication nécessaire. Le but de cette étude est vérifier l'applicabilité et efficacité du travail pédagogique adressé à l'activité physique dans porteurs de diabète de PHF. La **méthodologie** consiste d'un d'exploration et étude de champ, a développé avec un groupe de malades diabétiques de PHF du groupe Roberto Paulino, Cuitegi-PB, résidents dans ce voisinage qui a reçu de l'information à travers conférences fourni par les infirmières sur le Diabète du thème et Exerce, pendant la période de 30 jours, avec les procédures par phases: contrôle de glicemy capillaire; pourparlers pédagogique au sujet de l'importance de l'activité physique pour le diabétique et bientôt après, il a été sélectionné par tour 10 volontaires pour application d'un itinéraire de l'entrevue semi a structuré, de la forme du type, contenir des questions objectives sur le profil des participants, état de diabète, perception au sujet de l'activité physique et le diabétique et leurs complications. Les orientations ont adopté les aspects éthiques de la résolution 196/96 de Ministère de Santé qui traite des recherches avec les êtres humains. Le plan de l'analyse statistique a senti dans centile de fréquence. Les **résultats** ont trouvé cela: 70% étaient avec les âges entre 50 et 70 années, 50% veufs, 40% retraité, 50% reçoivent moins de salaire minimum, 80% ont découvert la pathologie entre 1 à 5 années, 55% complications de la chronique présentes, que 80% ont dit que la conférence était excellente et 90% les ont considérés transparent comme pour la compréhension de l'effet de l'exercice dans le traitement, 90% érudition absorbée qui affirme qu'ils accompliraient des exercices, ceux que ces exercices de l'entraînement sont devenus dans 50%, et 20% indiquent que cela accomplissent des tâches domestiques, comme éclairci, laver des vêtements, faire la foire, etc. **Conclusion:** Le travail pédagogique au sujet de l'applicabilité et l'efficacité a adressé à l'activité physique dans porteurs de diabète est explicatif et il fournit l'adhésion aux exercices pendant que forme du traitement pour le porteur.

MOTS DE LA CLEF: mellitus du diabète, éducation, activité physique,

DIABÈTE MELLITUS: APPLICABILITÉ EL ET EFFICACITÉ DU LA FATIGA PÉDAGOGIQUE ONT EL ADRESSÉ À L'ACTIVITÉ EL FÍSICO EL DANS PORTEURS DU EL PROGRAMA DE SANTÉ DANS LA FAMILLE (PHF) DU DE CUITEGI MUNICIPAL DISTRITO, PB,

La introducción: El Le processus du traitement et contrôle del enfermedades chroniques dégénératives aucun trasmisible (DCDNT) la discusión del l'information du diabétique explication nécessaire. Le pero del cette étude est vérifier l'applicabilité et efficacité du los adressé del pédagogique fatigan el à l'activité físico dans porteurs del diabète de PHF. El La **méthodologie** consiste d'un d'exploration et étude de mordisque, un développé avec un groupe del diabétiques del malades del PHF du groupe Roberto Paulino, Cuitegi-PB, el résidents dans ce voisinage qui un reçu del l'information el à travers conférences fourni equivalencia les infirmières sur le el Diabète du thème et Exerce, el période del la colgante de 30 jours, las avec les procédures equivalencia fases: el contrôle del capillaire del glicemy; el pourparlers pédagogique au sujet del l'importance del l'activité físico lluvia le diabétique et bientôt après, il una été sélectionné equivalencia gira que 10 volontaires vierten al itinéraire de d'un de aplicación del semi del l'entrevue un structuré, del du de forme de la teclee, el des del contenir cuestiona a los objetivos sur le profil des participantes, el état del diabète, el sujet de au de percepción de las l'activité físico et le diabétique et leurs complicaciones. El Les orientaciones ont adopté les aspectos éthiques del la résolution 196/96 de Ministère del Santé qui traite des recherches avec les êtres humains. Le planean del statistique del l'analyse un centile de dans de senti del fréquence. El Les **résultats** ont trouvé cela: 70% étaient avec les âges entran en 50 et 70 années, 50% veufs, 40% retraité, 50% moins del reçoivent del mínimo del salaire, 80% ont découvert la pathologie entran en 1 à 5 années, 55% complicaciones del présentes de chronique de la, el que 80% ont dit que la conférence était excellente et 90% considérés de ont de les que los comme transparentes vierten al compréhension del la del l'effet del l'exercice dans le traitement, 90% érudition absorbée qui affirme qu'ils accompliraient des exercices, el ceux que ces exercices del l'entraînement sont devenus dans 50%, et 20% indiquent que cela accomplissent des tâches domestiques, el éclairci del comme, el vêtements de des de laver, el foire de la de faire, el etc. la **Conclusión**: Le fatigan el sujet de au de pédagogique del l'efficacité de et de l'applicabilité un adressé el à l'activité físico dans porteurs de diabète est explicatif et il fournit l'adhésion aux exercices que los que forme du traitement colgantes vierten al porteur del le.

MOTS LA DE LA CLAVE: el diabète de du de mellitus, el éducation, el físico del activité,

DIABETES MELLITUS: APLICABILIDADE E EFICÁCIA DO TRABALHO EDUCATIVO DIRECIONADO À ATIVIDADE FÍSICA EM PORTADORES DO PROGRAMA DE SAÚDE NA FAMÍLIA (PSF) DO MUNICíPIO DE CUITEGI, PB,

Introdução: O processo de tratamento e controle de doenças crônicas degenerativas não transmissíveis (DCDNT) demandam de informações necessárias esclarecimento do diabético. O presente estudo tem o objetivo de verificar a aplicabilidade e eficácia do trabalho educativo direcionado à atividade física em portadores de diabetes do PSF. A **metodologia** decorre de um estudo exploratório, de campo, desenvolvido com um grupo de pacientes diabéticos do PSF do conjunto Roberto Paulino, Cuitegi-PB, residentes neste bairro que receberam informações por meio de palestras ministradas por enfermeiras sobre a temática Diabetes e Exercício, durante o período de 30 dias, com procedimentos em etapas: monitorização de glicemia capilar; palestra educativa sobre a importância da atividade física para o diabético e em seguida selecionou-se por sorteio 10 voluntários para aplicação de um roteiro de entrevista semi-estruturado, do tipo formulário, contendo questões objetivas sobre perfil dos participantes, estado de diabetes, percepção sobre a atividade física e o diabético e suas complicações. As orientações adotaram os aspectos éticos da resolução 196/96 do Ministério da Saúde, que trata das pesquisas com seres humanos. O plano de análise estatística deu-se em percentuais de freqüência. Os **resultados** encontraram que: 70% estavam com idades entre 50 e 70 anos, 50% viúvos, 40% aposentados, 50% recebem menos de salário mínimo, 80% descobriram a patologia entre 1 a 5 anos, 55% apresenta complicações crônica, 80% achou a palestra excelente e 90% consideraram-nas transparentes quanto ao entendimento do efeito do exercício no tratamento, 90% absorveram aprendizado afirmando que iriam realizar exercícios, os que praticam exercícios se dividiram em 50%, sendo que 20% indicam que realizam tarefas domésticas , como roçado, lavar roupa, fazer feira, etc. **Conclusão:** O trabalho educativo sobre a aplicabilidade e eficácia direcionada à atividade física em portadores de diabetes é esclarecedor e fornece adesão aos exercícios enquanto forma de tratamento para o portador.

PALAVRAS CHAVES: diabetes mellitus, educação, atividade física.