150 - PROGRAM OF GUIDANCE FOR PREVENTION AND CONTROL OF THE YOUTH OBESITY: A STUDY CASE

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INTRODUCTION

The modernity, the lack of physical activity daily, inadequate nutrition, behavior and emotional genetic factors, are some of the factors contributing to the emergence of obesity.

The understanding of obesity starts with their classification; often the term "overweight" is used wrongly, that because only check through the balance body weight and determine whether it is or not above the weight is not ideal. There are several techniques to classify a person with overweight or obesity, one of the simplest ways is based on weight and stature of assessed by determining if the BMI - (Body Mass Index), used frequently in adults classifying them with: weight normal (BMI 19-24,5 kg / m 2), overweight (BMI 25-29 kg / m 2) and obesity (BMI> 30). For children and young people cutting these points are not valid and can be used for classification of the table BMI for young people, the study by the International Obesity Task Force, the World Health Organization (WHO), which takes into account the age, gender and nationality, Cole TJ; Belizzi MC; Flegal KM, Dietz WH, (2000).

Obesity can be caused by several factors, which must be taken into account when relating to the control and treatment of juvenile obesity, because, if one of these factors is not working properly (treaty), may hamper the success in treatment. To Viuniski (2000), the most obvious factors, can be classified as: endogenous factors (causes endocrinológics, metabolic or genetic) or exogenous (external factors: dietary habits, customs, psychological factors, socioeconomic condition). Salbe and Ravussin (2002) supplement that obesity is also linked to environmental factors (socioeconomic condition "schooling", level of activity, nutrition and tobacco), metabolic (genetic factors, metabolic and endocrine factors), and biological (gestation, age, gender and race).

Known the determinants of obesity, we need to intervene to promote changes, especially those modifiable factors, such as level of physical activity, diet, psychological factors and socioeconomic condition. In Brazil, programs for the control and treatment of obesity, particularly in young people, with an interdisciplinary approach, are little known. Programs in preparation to inform, educate, motivate and change the habits of people with problems of obesity should be a function of the organs of health federal, state and municipal authorities, which could use research conducted at universities, as a starting point for creating and implementation of projects for the control and treatment of obesity.

There is a need for public and private policies for the prevention, control and treatment of obesity in all age groups in Brazil. To have programs that result, it is necessary to use an interdisciplinary approach, with strategies focused on the change of lifestyle, through information, education, motivation, and strategies for change of behavior (physical activities, food and reeducation restructuring behavioral). Programs of this nature, targeting young people, must include activities to self-monitoring, control of stimuli, management of stress, social support and physical activity. These are some of the items critical to the success in the control and treatment of obesity in young people.

Purpose of the Study

The goal of the study was to develop and evaluate a protocol of an interdisciplinary program, in order to promote the changes in indicators of overweight / obesity in young people through behavioral changes. It is used for a program focused on information, motivation and development opportunities for changes in lifestyle and measures body, providing a more healthy life to these young people.

The Model Study

This study characterizes itself as descriptive, the type case study for the purpose of planning, implementing and evaluating the contribution of an orientation program for the prevention and control of juvenile obesity, focusing on the modification of behavior related to health, so a team was assembled interdisciplinary.

Interdisciplinary Team

All activities were conducted in an interdisciplinary, with specific evaluations of each professional, and, 2 professionals in Physical Education, 01 Psychologist, 01 Nutróloga, 01 Cardiologista and 01 Endocrinologista.

Subjects and Form of Recruitment

The group of subjects, in two phases of this study, included 21 young people aged 14 to 19 years, classified as obese (classification according to table-Annex 11), which participated in the program for guidance and control of juvenile obesity, in the Guidance Center for Physical Activity and Health (COAFIS) - UFSC, between July 2003 and July 2004. Four of these subjects attended the program in two phases, and also considered as special cases.

The original criteria for exclusion included: the age (<14 and> 19 years), young people who do not present a problem of health or who were participating in other programs of weight loss.

Collection and Analysis of Data

All data were collected in the Center for Guidance for Physical Activity and Health (COAFIS), UFSC, being used in this work only the variables of weight, Body Mass Index (BMI), waist circumference of, sum of skin folds, the percentage of fat and energy expenditure. All data were evaluated at the beginning of the program and every two months.

The data were organized into spreadsheets and analyzed using descriptive statistical procedures (mean, the standard deviation) and comparing intra (repeated measures), with level of statistical significance of $p < 0.05$. For analysis of the data using the statistical package SPSS 11.0. The qualitative data are analyzed by means of report of the activities.

Analysis and Discussion of Data

To understand the relevance of the study, it is necessary to a description of how the activities were carried out. After all participants conduct activities to assess their state of health in general, and part of the study group were held the following activities and with a different methodology.

It is to treat young people and that theoretically had behavior of life pre-determined, it was considered that it could not conduct a program focusing on exercise only, but in an interdisciplinary program focusing on guidelines and activities that motivassem estimulassem its change for a more healthy lifestyle so that they understand the process and how they could be self-monitoring.

However these assessments become somewhat subjective when it comes to compare data that the proposed methodology may have provided some modification, so the variables were used: Body Weight, Body Mass Index, Waist Circumference of, Somatório Curl Skin, Percent Fat and Spend Calórico.

Measurement of Body Weight

The table below (total body weight-during the program) shows the values of average, standard deviation, minimum and maximum value found in the evaluations, important in the discussion on the development of the program. The boys (n = 13) decreased significantly the maximum estimated earlier, in the same way as women. What is observed in boys, is a decrease in the average maximum weight which was 121.3 kg and rose to 113.8 kilograms, a drop of almost 8 kg, and the minimum value decreased by only 2 kg, but in sum the decrease total reaches 10 kg. The values of total body weight of the women (n = 8) it was observed that, for the ceilings was not a decrease as representative, ie, 4 kg in weight reducing maximum of 113.0 kilograms to 109.0 kilograms, and an increase of 1 kg in weight minimum. The explanation for the gain of body weight is due to one of the girls has increased three kilograms in the period of holidays.

According Lobstein et al. (2004) and Neovius, Linné, Barkeling and Rössner (2004), the IMC, through the measurement of weight and stature, a measure is particularly easy, which can be performed repeatedly, providing important information, the big problem is that this measure how it is done, the wrong measurement could affect the validity of the study.

Variable	Average	DP	Max	Min
Boys				
IMC 1	31,04	2,25	34,2	27,2
IMC 2	30,72	2,14	33,5	28,0
IMC 3	30,34	1,78	32,5	27,6
IMC 4	30,37	1,63	32,9	27,8
Girls				
IMC 1	34,26	5,48	42,8	28,2
IMC 2	34,47	5,23	42,4	29,0
IMC 3	33,56	5,04	41,3	27,6
IMC 4	33,08	5,37	42,2	28,1

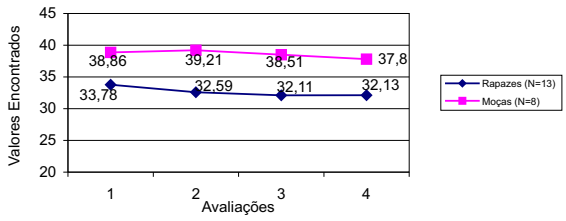
Variable		Average	DP	Max	Min
Boys					
Weight	1	97,30	12,15	121,3	85,0
Weight	2	96,73	11,63	118,8	85,2
Weight	3	95,81	10,77	115,0	82,2
Weight 4		95,80	10,11	113,8	83,0
Girls					
Weight 1		93,08	15,31	113,0	73,0
Weight 2		94,07	15,42	114,1	74,9
Weight 3		91,45	13,83	109,9	73,0
Weight 4		90,30	13,31	109,0	71,0

Noting the table above, (body mass index-during the program), you can see that everyone on average were classified with high BMI, which is considered obese (partial requirement to be part of the study). The minimum values found in young people of this research are high, ie, all are classified as obese.

At the same table pointed out even a variation in minimum and maximum values found in boys and girls, and the minimum value of the BMI of boys rose from 27.2 kg/m2 to 27.8 kg/m2 throughout the program, while the maximum value of the BMI decreased from 34.2 kg/m2 to 32.9 kg/m2, considered more important at this time of the study. Now the girls figures have different answers, the minimum value of the BMI decreased from 28.2 kg/m2 to 28.1 kg/m2, while the maximum value of the IMC also decreased from 42.8 kg/m2 to 42.2 kg / m2, even during the program have increased, shows have a more positive response.

Measure the Percent Fat

For the assessment of the percentage of fat was used to measure the skin folds triciptal and suprailíaca, checking the body composition (% fat) of the young, not taking into account the quantity of water. In the obese often difficult to measure the fat often can bring results wrong (or sub overestimated), and one of the forms used and accepted in searches is the bio-electrical impedance to assess body composition in obese.

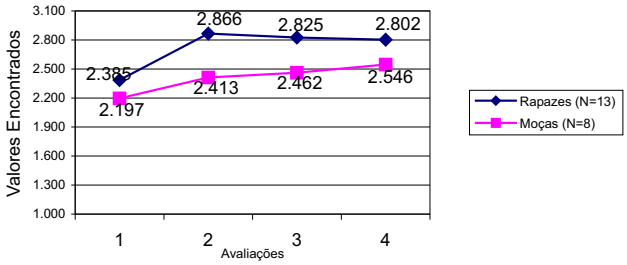


Even though the percentage of fat, measured by skin folds is not the most suitable for research with obese, this program was used as a parameter for comparison in body composition of young people from the moment that joined in the program by the closure, had there prior knowledge that would be found high values of percentage of fat, because the population of the study would be composed of young obese.

It can be seen in the chart above (percentage of fat) that all participants decreased their percentage of fat during the period that there was direct intervention of professionals. The boys started the program with a percentage of initial fat of 33.78%, decreasing to 32.59% (evaluation 2) and 32.11% (Rating 3) and after the period of direct intervention, increased to 32.13% the percentage of fat. Now the girls started with a percentage of fat from 38.86% (Rating 1), increased to 39.21% (evaluation 2), decreasing to 38.51% (Rating 3), continuing the decline after the period of fairs, coming to the percentage of fat from 37.8 at the conclusion of the program.

Measures of Spend Calórico kcal / kg for the entire program

Has been favored by the use of daily physical activity, according to its easy reproducibility and its acceptance in the scientific community as a unit of measure of energy spent.



The chart above (spending calorie) shows that there was an increase in spending of calorie subject, which in the beginning the boys had spent calorie of 2,385 kcal / kg at the end was 2,825 kcal / kg, decreasing to 2,802 kcal / kg after period holiday. The girls also had an increase in caloric expenditure of 2,197 kcal / kg at the beginning of the program to 2,462 kcal / kg at the end of the program and to 2,546 kcal / kg after the holiday period. These figures show that both boys as the girls grew approximately 400 Kcal / kg calorific values of spending, even with a decrease after the holiday period, it can be considered a significant increase for the development of the program, it is estimated that if they spent calorific values of stay, can provide an even greater decrease in body weight of these values young people. LeMura and Maziekas (2001), say that the exercise has emerged in the treatment of obesity in children, along with the power and intervention.

Conclusion

It can be concluded that programs with this methodology can contribute significantly to change of habits in young people through information, motivational activities, local and opportunity for the practice of knowledge aprendidos and encouragement for the maintenance of the new habits of life, requiring only one more time for implementation of all phases.

Another achievement of the program was to work interdisciplinarmente, where each was responsible for professional development activities of their specific knowledge, but with the collaboration of other professionals, which reinforced the initial proposal of the program.

Yet the need to replicate this study with a time of increased intervention could set phases or periods, such as every six months participants of the program graduate from weekly meetings to monthly meetings, with a two-year, which may help significantly for the control and treatment of youngs obesity.

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PROGRAM OF GUIDANCE FOR PREVENTION AND CONTROL OF THE YOUTH OBESITY: A STUDY CASE

ABSTRACT

This study is featured as a case study whose primary objective is to develop a protocol of an interdisciplinary program capable of promoting changes in behavior and indicators in young people with overweight or obesity. The initial proposal was focused on body weight, information, motivation and creating opportunities for change in lifestyle. The initial group was made up of 21 young people aged between 14 and 19 years of age for both sexes. These volunteers were selected by their BMI (Body Mass Index) that according to the table proposed by the International Obesity Task Force of the World Health Organization (WHO), which takes into account the age and sex of children young. The population selected participated in a program of action that includes weekly meetings in a period of four months, with the participation of a multi professional team: physical education professionals, nutritionist, psychologist, cardiologist and an endocrinologist. The data were collected in COAFIS (Guidance Center for Physical Activity and Health) of UFSC, where the project was developed, but the laboratory tests have been made in the University Hospital of UFSC. The assessment includes the following information: a) personal and family data, b) Physical Examination, c) assessment related to the health and fitness physical activity usual, d) evaluation Endocrinology and), psychological evaluation, f), evaluation of the food consumption. The first step was developed in the second half of 2003. The activities of this phase follow all the specifications that the project requires, from the selection of volunteers, the assessments and also the control and the orientation program, which was developed over a period of four months of intervention, with four hours per week. This project therefore emphasized the priority development of a protocol for intervention interdisciplinary, noting the difficulties of implementation, results and the changes of behavior and indicators of obesity.

KEYWORDS: Young, interdisciplinary program, change of behavior

PROGRAMME D'ORIENTATION POUR LA PREVENTION ET LE CONTROLE DE L'OBESITE DES JEUNES: UNE ETUDE DE CAS

RÉSUMÉ

Cette étude a fait l'objet d'une étude de cas dont l'objectif premier est de mettre au point un protocole d'un programme interdisciplinaire capable de promouvoir les changements de comportement et d'indicateurs dans les jeunes ayant une surcharge pondérale ou d'obésité. La proposition initiale a été axée sur le poids, l'information, la motivation et la création d'opportunités pour le changement dans le mode de vie. Le premier groupe était composé de 21 jeunes âgés entre 14 et 19 ans pour les deux sexes. Ces volontaires ont été sélectionnés par leur BMI (Body Mass Index), qui selon le tableau proposé par l'International Obesity Task Force de l'Organisation mondiale de la santé (OMS), qui tient compte de l'âge et du sexe des jeunes enfants. La population sélectionnés ont participé à un programme d'action qui comprend des réunions hebdomadaires dans un délai de quatre mois, avec la participation d'une équipe multidisciplinaire professionnelle: professionnels de l'éducation physique, nutritionniste, psychologue, endocrinologue et un cardiologue. Les données ont été recueillies dans COAFIS (Centre d'orientation pour l'activité physique et la santé) de l'archipel, où le projet a été mis au point, mais les tests de laboratoire ont été effectués à l'hôpital universitaire de portugais. L'évaluation comporte les informations suivantes: a) les données personnelles et familiales, b) de l'examen physique, c) l'évaluation liées à la santé et la forme habituelle de l'activité physique, d) évaluation et érection), évaluation psychologique, f) et l'évaluation de la consommation alimentaire . La première étape a été développée dans la seconde moitié de 2003. Les activités de cette phase, suivre toutes les spécifications que le projet exige, de la sélection des volontaires, les évaluations et le contrôle et l'orientation du programme, qui a été élaborée sur une période de quatre mois d'intervention, avec quatre heures par semaine. Ce projet a donc insisté sur l'importance du développement d'un protocole d'intervention interdisciplinaire, en notant les difficultés de mise en oeuvre, les résultats et les changements de comportement et d'indicateurs de l'obésité.

MOTS CLES: Young, programme interdisciplinaire, changer de comportement

PROGRAMA DE ORIENTACIÓN PARA LA PREVENCIÓN Y EL CONTROL DE LA OBESIDAD DE LOS JÓVENES: UN ESTUDIO DE CASO

RESUMEN

Este estudio se presenta como un caso de estudio cuyo objetivo principal es el desarrollo de un protocolo de un programa interdisciplinario capaz de promover cambios en el comportamiento y los indicadores en los jóvenes con sobrepeso u obesidad. La propuesta inicial se centraba en el peso corporal, la información, la motivación y la creación de oportunidades para el cambio en el estilo de vida. El primer grupo estaba compuesto por 21 jóvenes de edades comprendidas entre los 14 y 19 años de edad para ambos sexos. Estos voluntarios han sido seleccionados por su IMC (Índice de Masa Corporal) que, según el cuadro propuesto por el International Obesity Task Force de la Organización Mundial de la Salud (OMS), que tiene en cuenta la edad y el sexo de los niños jóvenes. La población seleccionada participó en un programa de acción que incluye reuniones semanales en un período de cuatro meses, con la participación de un equipo de varios profesionales: profesionales de la educación física, nutricionista, un psicólogo, un cardiólogo y un endocrinólogo. Los datos fueron recolectados en COAFIS (Centro de Orientación para la Actividad Física y Salud) de la UFSC, en donde se desarrolló el proyecto, pero las pruebas de laboratorio se han realizado en el Hospital Universitario de la UFSC. La evaluación incluye la siguiente información: a) datos personales y familiares, b), examen físico, c) la evaluación relacionadas con la salud y la forma física de la actividad física habitual, d) la evaluación y respuestas), la evaluación psicológica, f) la evaluación del consumo de alimentos . La primera etapa se desarrolló durante el segundo semestre de 2003. Las actividades de esta fase, seguir todas las especificaciones que requiere el proyecto, desde la selección de los voluntarios, las cuotas y también el control y la orientación del programa, que fue desarrollado a lo largo de un período de cuatro meses de la intervención, con cuatro horas semanales. Este proyecto, por lo tanto, hizo hincapié en la prioridad del desarrollo de un protocolo para la intervención interdisciplinaria, señalando las dificultades de la aplicación, los resultados y los cambios de comportamiento y los indicadores de la obesidad.

PALABRAS CLAVE: Jóvenes, programa interdisciplinario, cambio de comportamiento

PROGRAMA DE ORIENTAÇÃO PARA PREVENÇÃO E CONTROLE A DA OBESIDADE JUVENIL: UM ESTUDO DE CASO

RESUMO

O presente estudo é caracterizado como um estudo de caso cujo principal objetivo é desenvolver um protocolo de um programa interdisciplinar capaz de promover mudanças no comportamento e indicadores em jovens com sobrepeso ou obesidade. A proposta inicial foi centrada no peso corporal, informação, motivação e criação de oportunidades de mudanças no estilo de vida. O grupo inicial foi constituído por vinte e um jovens com idades compreendidas entre os catorze e dezenove anos de idade de ambos os sexos. Estes voluntários foram selecionados por seu IMC (o Índice de Massa Corporal) que de acordo com a tabela proposta pelo Obesity Task Force Internacional da Organização Mundial da Saúde (OMS), a qual leva em consideração a idade o sexo das crianças e jovens. A população selecionada participou de um programa de intervenção que inclui reuniões semanais em um período de quatro meses, com a participação de uma equipe multiprofissional: profissionais da educação física, nutricionista, psicóloga, cardiologista e um endocrinologista. Os dados foram coletados no COAFIS (Centro de Orientação para Atividade Física e Saúde) da UFSC, onde o projeto foi desenvolvido, mas os exames laboratoriais, foram feitos no Hospital Universitário da UFSC. A avaliação inclui as seguintes informações: a) dados pessoais e familiares, b) Exame Físico, c) avaliação relacionada a aptidão física a saúde e a atividade física habituais, d) avaliação endocrinológica, e), avaliação psicológica, f), avaliação do consumo alimentar. A primeira etapa foi desenvolvida no segundo semestre do ano de dois mil e três. As atividades desta fase seguem todas as especificações que o projeto exige, desde a seleção dos voluntários, as avaliações e também o controle e a orientação programa, que foi desenvolvido num período de quatro meses de intervenção, com quatro horas semanais. Este projeto, portanto enfatizou prioritariamente o desenvolvimento de um protocolo de intervenção interdisciplinar, observando as dificuldades de aplicação, os resultados e as mudanças de comportamento e nos indicadores de obesidade.

PALAVRAS CHAVE: jovem, programa interdisciplinar, mudança de comportamento.