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ORIGINAL ARTICLE

TREATMENT ADHERENCE OF PEOPLE WITH OVERWEIGHT

ADESÃO AO TRATAMENTO DE PESSOAS COM EXCESSO DE PESO

ADHERENCIA AL TRATAMIENTO DE PERSONAS CON EXCESO DE PESO

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ABSTRACT

Objective: to identify the factors that influence treatment adherence of overweight people. ***Method***: this is a descriptive-exploratory study with a quantitative approach, carried out in a reference outpatient clinic in obesity, with 88 people of both genders and having overweight. The data were collected through a structured questionnaire, presented in tables and figures, and analyzed in a descriptive way. ***Results***: difficulty in following therapy (65%), did not perform physical activity (54.5%). In 73.9% who reported following the diet, 46.2% did it on a regular basis. The main reasons for not doing physical activity are physical limitations (37.3%), lack of time (31.3%) and lack of motivation/discipline (25.0%). The reasons for not following the diet were: difficulty with mealtimes (58.5%), financial availability (46.2%) and quantity of food (38.5%). ***Conclusion***: the interviewees had specific difficulties in adhering to the treatment. There is a need for an individualized and adequate approach to the population profile. ***Descriptors***: Obesity; Patient Cooperation; Treatment; Nursing.

RESUMO

***Objetivo*:** identificar os fatores que influenciam a adesão ao tratamento de pessoas com excesso de peso. ***Método*:** estudo descritivo-exploratório, com abordagem quantitativa, realizado em um ambulatório de referência em obesidade, com 88 pessoas de ambos os sexos com excesso de peso. Os dados foram coletados por meio de questionário estruturado, apresentados em tabelas e figura, e analisados de maneira descritiva. ***Resultados*:** dificuldade em seguir a terapêutica (65%), não realiza atividade física (54,5%). Dos 73,9% que informaram seguir a dieta, 46,2% faziam de forma regular. Principais motivos para não realizar atividade física: limitações físicas (37,3%), falta de tempo (31,3%) e falta de motivação/disciplina (25,0%); motivos para não seguir a dieta: dificuldade com os horários das refeições (58,5%), disponibilidade financeira (46,2%) e quantidade dos alimentos (38,5%). ***Conclusão*:** os entrevistados apresentam dificuldades específicas em aderir ao tratamento. Há necessidade de uma abordagem individualizada e adequada ao perfil da população. ***Descritores*:** Obesidade; Cooperação do Paciente; Tratamento; Enfermagem.

RESUMEN

***Objetivo*:** identificar los factores que influyen en la adherencia al tratamiento de personas con exceso de peso. ***Método*:** estudio descriptivo-exploratorio, con enfoque cuantitativo, realizado en un ambulatorio de referencia en obesidad, con 88 personas de ambos sexos con exceso de peso. Los datos fueron recogidos por medio de un cuestionario estructurado, presentados en tablas y figura, y analizados de manera descriptiva. ***Resultados*:** dificultad en seguir la terapia (65%), no realizar actividad física (54,5%). De los 73,9% que informaron seguir la dieta, 46,2% lo hacían de forma regular. Principales motivos para no realizar actividad física: limitaciones físicas (37,3%), falta de tiempo (31,3%) y falta de motivación/disciplina (25,0%); motivos no seguir la dieta: dificultad con los horarios de las comidas (58,5%), disponibilidad financiera (46,2%) y cantidad de los alimentos (38,5%). ***Conclusión*:** los entrevistados presentan dificultades específicas en adherirse al tratamiento. Hay necesidad de um enfoque individualizada y adecuada al perfil de la población. ***Descriptores*:** Obesidad; Cooperación del Paciente; Tratamiento; Enfermería.

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INTRODUCTION

The World Health Organization says that overweight is a global epidemic, reaching all social strata, age groups, developed and developing countries. The prevalence of overweight and obesity has increased significantly in the last 30 years, and it is estimated that 1 billion adults are overweight in the world and about 475 million are obese.[1] According to the research Surveillance of Risk Factors and Protection For Chronic Diseases by Telephone Inquiry - VIGITEL performed in the 26 Brazilian capitals and Federal District, the prevalence of overweight in men is 56.5% and in women, 49.1% and obesity in both genders is 17.9%.[2]

In the context of chronic non-communicable diseases, obesity is highlighted by being a disease and a risk factor linked to other chronic non-communicable diseases, such as hypertension and diabetes, cancer and osteoarthritis, leading to worsening of quality of life and increasing the risk of premature death.[1]

Overweight is multifactorial, resulting from the genetic and environmental interaction. It is also influenced by psychosocial, economic, endocrine and metabolic factors. Therefore, prevention and treatment of this health condition should be multi-professional to ensure lifestyle change, besides weight reduction.[3] About the treatment of obesity, it should be recognized as a disease and treated as such. Regardless of the indicated treatment, dietary, physical activity, medication or surgery, it also requires behavioral changes of the individual.[4]

The efficacy of treatment depends on adherence to treatment, which can be defined by a patient´s behavior in response to the recommendations of health professionals regarding medication use, dietary adoption or lifestyle changes.[5] In this way, the adherence is related to active role of the patient who participates and takes responsibility for the treatment.[6]

As the adherence to treatment is influenced by several determinants, including the environment, personality characteristics of the person and health professionals´ attitudes, it is necessary to know the aspects involved in non-adherence to the planning of more appropriate follow-up strategies, approaching the patients in their specificities.[7] The approach of overweight people should contemplate their real demands and needs, be closer to their reality and difficulties faced in the day to day, and contribute to reducing obstacles to better adherence.[8] Only with this view can the nursing team develop specific actions that, besides the biological dimension, contemplate the psychic, social and cultural aspects of these people.

Considering that the production of knowledge about factors that influence adherence to the treatment of overweight people is scarce in the national literature and the nursing area, the advancement of knowledge may contribute to a comprehensive understanding of this issue. In this context, this study has as an investigative question **<< *Which factors influence the process of adherence to the treatment of overweight people?*>>** and aims to:

- Identify the factors that influence the process of adherence to the treatment of overweight people.

METHOD

This is a descriptive-exploratory study with a quantitative approach carried out in a reference outpatient clinic in obesity of a Private Institution of Higher Education in the city of Salvador, Bahia, Brazil.

The study population was 88 overweight patients enrolled in a referral service in obesity at a private higher education institution in the city of Salvador (BA), Brazil. The selection of the sample was by convenience technique since the researchers chose the patients who were present at the health service, the consultation scheduled in the period established for the collection to participate in the research, February to April 2015.

Patients of both genders over 18 years old who were being followed by the team for a minimum period of six months were included. Despite the exclusion criterion for people who were unable to answer the questionnaire questions due to serious cognitive or psychiatric problems, none of them had this criterion.

Data collection was performed through interviews and the instrument used was a structured questionnaire elaborated by the researchers, with questions related to socio-demographic data (age, gender, declared skin color, education, marital status, work situation and family income); classification of the degree of overweight; family history of obesity; variables related to weight gain (onset of weight gain, previous attempts to lose weight, current treatment and time in treatment); and variables related to adherence to treatment (difficulties to follow treatment, frequency of consultations, physical activity and eating habits).

The project was approved by the Committee for Ethics in Research with Human Beings of the School of Medicine and Public Health Bahiana (EBMSP), CAAE: 39024714.6.0000.5544 and protocol nº 943.457. All participants signed the Informed Consent Term (TCLE) after reading and clarifying the research objectives and procedures.

The descriptive statistical analysis of the data included mean and standard deviation of the quantitative variables and absolute and relative frequency of the categorical variables. The results are represented in tables and figures with respective discussion and comparison with literature data. Statistical Program SPSS version 18.0 was used for data storage and processing.

RESULTS

The mean age of the 88 study participants was 51.4 years old (SD 11.4), a minimum of 24 and maximum of 71 years old. The most frequent age group was between 50 and 59 years old (36.4%). Most of the sample consisted of females (92.0%), black self-reported skin color (52.3%), high school (53.4%) and living without a partner (58.0%). Regarding the labor situation, most were retired (27.3%) and 76.1% had an income of 1 to 3 minimum wages (Table 1).

The data revealed that 17 (19.3%) were overweight, 26 (29.5%) were grade I, 22 (25%) were grade II, and 23 (26.1%) were grade III. Regarding the antecedents and descendants with obesity in the family, 71.6% of the respondents reported the presence of at least one first-degree relative (parents, siblings or children), first siblings (31.7%) and followed by parents (27.0%).

Table 1. Distribution of socio-demographic variables of overweight individuals. Salvador (BA), Brazil, 2016.

Socio-demographic characteristics	n	%
Age		
<40	17	19.3
40 – 49	19	21.6
50-59	32	36.4
≥ 60	20	22.7
Gender		
Female	81	92.0
Male	7	8.0
Declared skin color		
White	4	4.5
Brown	38	43.2
Black	46	52.3
Education		
Illiterate/Know how to read and write	4	4.5
Elementary school	34	38.7
High school	47	53.4
Higher education	3	3.4
Marital status		
With a partner	37	42.0
Without a partner	51	58.0
Job status		
Retired	24	27.3
Working with a job bond	17	19.3
Self-employed	18	20.5
Housewife	20	22.7
Student	1	1.1
Unemployed	8	9.1
Monthly family income		
<1 minimum wage	18	20.5
1-3 minimum wages	67	76.1
4-5 minimum wages	3	3.4

The beginning of weight gain was related by participants mainly with gestation (42.0%) and with increasing age (18.2%). Most of them (8.0%) associated weight gain with other factors such as hysterectomy, menarche, use of corticoids, smoking cessation and emotional problems (Table 2).

Regarding the treatment, 48.9% reported previous attempts to lose weight and 62.2% reported having performed their care without any professional follow-up. Most of the patients (39.2%) had more than four years of treatment and only 13.6% presented time less than one year (Table 2). Seventy-five percent of the respondents reported having some family support for the therapy, such as financial support, emotional support, and encouragement for continued treatment.

Table 2. Distribution of variables related to weight gain, previous and current treatments performed by overweight people. Salvador (BA), Brazil, 2016.

Variables	n	(%)
Beginning of weight gain		
Since childhood	15	17.0
With increasing age	16	18.2
After marriage	13	14.8
After gestation	37	42.0
Other	7	8.0
Previous attempts to lose weight		
Ys	43	48.9
No	45	51.1
Type of prior treatment (n=43)		
With health professionals follow-up	17	37.8
On their own	28	62.2
Time in treatment for weight control		
< 1 Year	12	13.6
1 – 2 years	25	28.4
3 – 4 years	16	18.2
> 4 years	35	39.2

According to the data in Table 3, it is verified that 64.8% of the participants reported having difficulties to follow the treatment for weight control. Most of the interviewees (67.0%) reported attending consultations assiduously, and only 11.4% missed consultations two to three times a year.

The practice of regular physical activity was reported by 45.5% and the percentage of those who had this practice for more than six months was 52.4%. The main modalities of physical activity were: aerobics 34 (85%), aerobics plus bodybuilding 2 (5%), Pilates 2 (5%) and water aerobics/swimming 1 (2.5%). The reasons reported by the 45 interviewees who did not practice regular physical activity were: physical problems (plantar fasciitis, low back pain, and joint pain) 37.5%, lack of time (31.3%) and emotional problems (lack of motivation, laziness, and despondency) (31.3%). (Table 3)

The data showed that regular physical activity was more frequent among people with higher education (60.0%) than lower education (literacy and elementary education) (40.0%). This practice was greater in 50 years old people or older (57.5%).

Regarding the follow-up of dietary treatment for weight control, 73.9% reported dieting, and among these, less than half (46.2%) did it on a regular basis, they stopped frequently dieting (58.5%) and rarely had a diet (24.6%) (Table 3) Among those who said to follow the diet to lose weight, the highest frequency was people with higher education (63.1%) than with lower grade education (36.9%). Respondents aged 50 years old and over also reported greater adherence to diet (60.0%) than under 50 years old (40.0%).

Among the difficulties in dieting, the problem related to feeding time was more frequent (58.5%), financial availability appeared as the second difficulty (46.2%), followed by food quantity (38, 5%), and quality (23.1%). The reduction in consumption of high-fat foods was reported by the majority of the population (89.8%), followed by a reduction in the use of foods prepared by frying (68.2%) and by the consumption of sweets (64.8%). Reduced consumption of salt and red meats and viscera were also reported by 62.5% and 34.1% respectively (Table 3).

Table 3. Distribution of the sample according to the difficulties of following the treatment, frequency of consultations, the practice of physical activity and dietary therapy. Salvador (BA), Brazil, 2016.

Variables		
Difficulties to follow current treatment		
Yes	57	64.8
No	31	35.2
Missing consultations last year		
Attendance to scheduled consultations	59	67.0
Missed less than twice	19	21.6
Missed two to three consultations	10	11.4
Practice of regular physical activity (≥ 3 times/week)		
Yes	40	45.5
No	48	54.5
Reasons for not doing physical activity (n=48)		
Related to lack of time	15	31.3
Related to physical problems	18	37.5
Related to motivation and discipline	12	25.0
Related to the structure of the neighborhood	2	4.2
Related to financial difficulty	1	2.1
Carrying out diet for weight reduction	65	73.9
Regular diet follow-up (n=65)	30	46.2
Number of times that stopped following the diet in the last month (n=65)		
Frequently	38	58.5
Sometimes	11	16.9
Rarely	16	24.6
Reasons for difficulties in dieting (n=88)		
Related to food quality	25	23.1
Related to the quantity of food	15	38.5
Related to schedules	38	58.5
Related to financial availability	30	46.2
Other reasons	3	2.3
Caring for weight reduction		
Reduction of fat consumption	79	89.8
Reduction in the use of fried foods	60	68.2
Reduction of sweets consumption	57	64.8
Reduction of consumption of red meats and viscera	30	34.1
Reduction of salt consumption	55	62.5
Other	17	19.3

Regarding the frequency of food consumption, 30.7% had a habit of eating fatty foods less than twice a week and 35.2% reported not using fried food preparation. Most participants reported daily intakes of whole foods and fruits and vegetables 30.7% and 62.3%, respectively. Regarding other foods rich in calories, 19.3% reported the reduction of consumption of foods such as pasta, bread, and flour. (Figure 1)

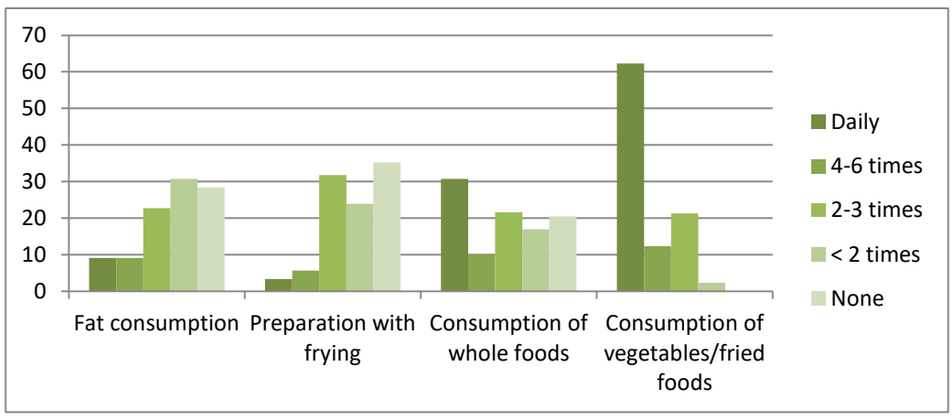

Figure 1. Distribution of the frequency of food consumption of fats, fried foods, whole foods, vegetables and fruits by overweight people. Salvador (BA), Brazil, 2016.

DISCUSSION

Considering that factors such as age, color, gender, education, income and habits influence the emergence, maintenance of excess weight and adherence to treatment, the bio-social and demographic characterization of individuals is relevant.

The mean age of 51.4 years old found in this study represents an already expected measure, since the frequency of overweight in the Brazilian population is more common in the age group from 45 to 54 (61.6%) and in the

group of 55 to 64 (61.8%),[2] as well as being composed mostly of women, since studies reporting a greater use of health services by women.[9] The predominance of people with self-declared black and brown skin color represents the profile of the population of Salvador, which has a greater proportion of individuals with these skin colors (82.1%).[10]

The high percentage of people with only elementary and high school education is relevant, since besides being associated with weight gain, low education can influence the problem, as a difficulty in understanding the nature of the problem and the necessary guidelines for the appropriate segment of the therapy.

Another important finding in this study is the predominance of people with monthly income less than four minimum wages. Obesity has been growing mainly in the economically disadvantaged people. One of the reasons pointed out for the inverse relationship between overweight, and the socioeconomic level is the low purchasing power to acquire healthier foods due to its high cost, generating the consumption of cheap, highly caloric and low nutritional value food.[8] In addition to access to a better food standard, people with low income have less access to knowledge and health services,[11] which demands special care regarding the adequacy of therapeutic guidelines.

Research on the beginning of weight gain revealed that most of the individuals interviewed started weight gain after gestation (42%). The findings of this study corroborate the results of another study,[12] in which 56% of participants also reported the onset of weight gain after gestation. Excessive weight gain in the gestational period may lead to retention of this weight for a time after delivery, and to predetermine a subsequent obesity condition.[13]

The percentage of 48.9% of people who have had previous treatments shows that maintaining weight can be more difficult than slimming. According to Oliveira and Silva[8] how to maintain weight depends on much personal motivation, it is necessary that the forms of intervention are compatible with the needs and demands of the people and close to their reality and difficulty faced in the day to day. Medical prescription and home diets without nutritional monitoring for weight loss reported by a large portion deserve to be highlighted, since diets without the guidance of a health professional, especially the nutritionist may represent a health risk.[14] Therefore, these behaviors must be identified and discouraged in each consultation and even in educational activities in health.

The difficulty in following the treatment, referred by more than half of the sample is in agreement with another sample that brings the need for the health professionals to know these aspects in a comprehensive way to be able to help the patients to face and to overcome the individual difficulties of each person.

The high percentage of those interviewed who reported that they had not missed any consultations in the last year show that attendance at these was not a problem. As most of the participants have been accompanied by the health team for more than four years, this aspect may favor the maintenance of the link with the professionals and consequently, help in the continuity of the treatment. Considering that adherence to treatment is a process that encompasses several factors, including the link between the health professional and the patient, lack of linkage can lead to demotivation, low adherence, and abandonment of treatment.[15]

It is a worrying result that less than half of the interviewees practice physical activity since the benefits of this practice are already known for weight control and protection and other chronic diseases.[16-7] The high frequency of sedentary adults in the population (20.2%) and its increase with age and in people with low education level corroborates with the data of this study that is constituted in its majority of people over 50 years old and with few years of study.[18]

The main reasons for not performing physical activity were the complaints of musculoskeletal pain, financial difficulty and lack of own and safe public places. A study carried out with obese adults in Brasília found that 51% of the individuals justified the negative behavior to the practice of physical activity due to lack of time; 27.4% due to lack of disposition; 5.8% for health problems and 15.8% for other reasons (dislike, unfavorable climate, lack of habit, lack of financial resources and lack of adequate place).[19]

As physical discomfort due to osteoarticular pain, which is quite common in obese people, prevents or impairs participation in physical activity programs,[20] it is essential to treat problems related to the musculoskeletal structure.[12] It is known that physical activity improves how the individual deals with his or her body, and can contribute to behaviors related to the quality of life, eating habits and social interaction.[21] The public structural conditions regarding street infrastructures (road conditions, presence of garbage and

debris and absence of leisure areas), as well as safety-related issues, are determinant for physical activity practice.[22] Thus, health professionals need to know the conditions related to housing and "lack of time" to provide adequate guidance and about where, when and how to perform physical activity.

Although a large number of participants reported dieting, most did so irregularly. Considering that one of the pillars of the treatment of obesity is the adoption of healthy eating habits so that a diet plan for weight loss is successful, it is necessary to have a good adherence to it.[16]

More than half reported that they often did not follow the diet and the reasons stated were diverse, especially the difficulties related to the fractional feeding schedule. Fractionation of meals is recommended to facilitate weight control since the metabolic rate can be favored by this action and the consumption of four to six meals per day to avoid the consumption of large volumes of food in a single meal and prolonged intervals between meals.[16] The habit of carrying out a larger number of meals a day contributes to reducing the habit of "proving" other foods not suitable during the day.[23]

Financial availability considered another factor that hinders directly was another important aspect found in this study. In one study[8] it was identified that financial difficulties and lack of time to acquire and prepare healthier foods led to the consumption of easily prepared and high-calorie foods, as well as reducing the number of meals a day and still eating at inappropriate times. In developing countries, the socioeconomic level is directly linked to unhealthy eating habits, overlapping with less physical activity, favoring weight gain.[24]

The difficulties related to the adequate quality and quantity of food reported by the interviewees are also highlighted. The knowledge of these difficulties allows the professionals to carry out an individualized orientation and with a greater possibility of adhesion.

Considering that fat consumption is a common habit among the Brazilian population, since about one-third admit to consuming meats with excess fat,[2] the reduction of the consumption of fats, fries, and sweets reported by most of the interviewees is considered an important fact because this care shows that they understand that these foods do not contribute positively to weight control.

While the high frequency of respondents who say they reduce salt can be considered a positive aspect since most participants have other comorbidities such as hypertension, the fact that only 34.1% reduce consumption of red meats and viscera is worrying, as many of them also have dyslipidemia.

The findings of the study reveal that respondents have a pattern of incorrect eating behavior regarding the frequency of consumption of high-fat foods. Only about a third of them never consume it, and 40.9% do it more than twice a week. However, about frying, the percentage of 35.2% of people who do not use frying can mean that they are opting for other healthier forms of preparation, such as grilling, which is recommended as an adequate preparation.[16] Recent data on the food consumption of Brazilians revealed an increase in fat consumption in general, especially saturated fat.[2]

Regarding foods considered healthy, the percentage of daily intakes (30.7%) and fruits and vegetables (63.6%) can be considered relevant. In the population of Salvador, the consumption of fruits and vegetables is 29.7%.[2] Foods high in fat and sodium should be avoided, and the consumption of whole foods, fruits and vegetables should be valued.[25]

Adherence to the treatment of excess weight demands that the individual adopts a new lifestyle. Patterns of eating habits are shaped mainly by social relations and express individual choices based on family influence and social context. Coping of these situations requires long-established changes in behavioral and social patterns, often difficult to change. In this sense, a set of historically constructed values, beliefs, and habits that are linked to a particular pattern of consumption cannot be ignored by all those involved in health care.

Although overweight people may face the early stage of treatment without too much difficulty, they can often be unprepared to accept the reality that maintaining weight loss requires adherence to a new lifelong behavior. Knowledge of the factors that prevent the patient from following the recommendations can guide the actions developed by the health team to assist the patient in adhering to the treatment.[6]

CONCLUSION

The study enabled to know the profile of people accompanied by a project to monitor overweight people, aspects related to therapeutics and mainly to identify some factors that interfere with adherence to treatment.

About dietary difficulties, financial issues for food procurement, and time to prepare food and to perform all six meals, including snacks in the intervals were the main barriers to be addressed and overcome. The difficulties in practicing regular physical activity were due to physical problems, mainly intermuscular problems, lack of time, motivation and self-discipline, and also related to the neighborhood´s infrastructure.

Understanding that obesity is a complex fact, determined by social, family, biological and emotional issues and that adherence to treatment also involves a network of diverse factors, health professionals should look at the individual as a whole within the social context in which it is inserted. Strategies should be adopted to recognize the limitations of each person and to help them cope with them, paying special attention to the situation of each person, especially with the known factors involved in adherence, such as social determinants. It should not only prioritize nutritional surveillance and physical exercise practice but all issues involved in the context of the problem.

Among the limits of the study, it is emphasized the size and form of sample selection. As selection was of convenience, selection bias may occur, which does not allow generalizations regarding adherence to the treatment of overweight individuals. Thus, it is suggested that later studies that may be carried out include a larger sample with the probabilistic selection and a deeper understanding of the issues related to the topic.

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