

Personalities of Obese Subjects

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Obesity is a serious disorder and its treatment involves dietitians, psychologists, and psychiatrists. Long-term weight loss in obese subjects often has a poor outcome. A Dietetic education in association with eating behavior therapy is necessary to improve the prognosis. Among the possible etiologies of obesity, the psychological and emotional factors could have an important role. All subjects who took part in this study were recruited from endocrinology outpatient clinics of Baskent University Adana Hospital. All the subjects were tested for psychiatric pathology. The group involved 397 non-diabetic women (n=268) and men (n=129). Both obese and non-obese subjects were divided into four groups depending upon their personality (PERSONA test). This test defines four types of personality, based on the level of emotion (expansive or reserved) and the degree of power (dominant or consenting). Most of the analyzing subjects were obese (83.3%). None of the controlling group was obese and most of the subjects in facilitating group were non-obese (84.7%). Analyzers were older and had higher BMI than facilitators (51.17±3.57 vs. 33.40±0.69 yr, $q<0.001$; 34.91±3.51 vs 24.75±0.34 kg/m², $p<0.02$, respectively) and controllers (51.17±3.57 vs 26.50±2.53 yr, $p<0.0001$; 34.91±3.51 vs 23.40±1.57 kg/m², $p<0.01$, respectively). Promoters had higher BMI than facilitators (29.40±1.04 vs 24.75±0.34 kg/m², $p<0.0001$). Personalities of the individuals may affect their eating behaviors. Diet advices in respect to their personalities may be helpful to achieve long-term weight loss in obese subjects.

Keywords: obesity, personalities

Introduction

Obesity is a serious disorder and its treatment involves dietitians, psychologists, and psychiatrists. Long-term weight loss in obese subjects often has a poor outcome. Even specialized centers have demonstrated that success after 3 years is less than 30 % (1,2). A dietetic education in association with eating behavior therapy is necessary to improve the

prognosis (2,3). The role of psychological issues in obesity is equivocal, and so is the fact whether emotional and behavioral disturbances are causes or consequences of an individual's overweight condition.

Retrospective studies had shown social problems, the absence of support from the entourage, work problems, social conflicts and psychological problems as the reasons of failure of weight loss (4-6). Among the possible etiologies of obesity, the psychological and emotional factors might have an important role (7). Role of psychiatric problems in the origin of obesity is contradictory. Two studies conclude that psychiatric problems are no more prevalent in the obese population than they are in a

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non-obese population (8,9). In another study, most obese subjects begin treatment scoring in the normal or high-normal range of depression (10). Halmi et al. compared morbid obese patients with normal weight subjects using the DSM III criteria and did not find any difference between the groups (11). An exception to this finding is obese subjects who also have binge eating disorders (12-14).

In the present study, we aimed to study the personality types of obese subjects in order to propose therapeutic strategies adapted to their personality.

Materials and Methods

This prospective study was conducted at Baskent University Adana Hospital. Every patient was asked to participate in the study after the first consultation. All the patients were tested for psychiatric pathology as usually clinical screening by a multidisciplinary medical team involving an endocrinologist, a family practitioner, a psychiatrist, nurses and dieticians. Those presenting a psychiatric pathology were excluded from the study. The group involved 397 non-diabetic women (n=268) and men (n=129). Weight and height were measured with the patient in light clothes and without shoes.

All subjects were asked to fill out the PERSONA questionnaire. Charles Osgood built the test according to Carl Jung’s theory defining four fundamental interpersonal needs: Appreciation (being recognized as a unique individual, distinct from others), Admission (being affiliated to groups in a climate of consensus), Realization (accomplishing results, challenging oneself), and Security (managing accountable exchanges on the basis of tested analysis). These four interpersonal behaviors depend upon two fundamental dimensions: power relationship and level of emotion (15,16). People

establish power relationship in their exchanges by being either dominant or consenting. They develop a level of emotion by showing themselves rather expansive or rather reserved with their interlocutors.

The PERSONA test involves 60 items in pairs of opposite words which establish the power relationship in people’s exchanges (either dominant or consenting) and the level of emotion (rather expansive or rather reserved). The interpretation of the test allows for the differentiation of four personality types (Table 1).

The Promoting type (dominant and expansive) is open-minded, creative and quick with his decisions. These are multiple and are made without much research. The promoting type shows himself to be open to exchange, to dialog, to new ideas; he anticipates. His interpersonal need is appreciation. The Controlling type (dominant and reserved) primarily seeks realization and efficiency. He makes a single decision, often his own quickly and after reflection. He is characterized by his authenticity and honesty, which explains that he is sometimes ill-received. His interpersonal need is realization. The Facilitating type (consenting and expansive) likes society and his inclusion within it. He always shares your opinion and makes his decisions perceptively after numerous hesitations. His interpersonal need is admission. The Analyzing type (consenting and reserved) seeks security. Very trust on way, he lacks openness and creativity. He makes a single decision after a long reflection. His interpersonal need is security. the validation analysis indicated 81% of the common variance between items (16). The PERSONA test may be used in obesity and diabetes clinics to improve the compliance in both obese and diabetic patients (17).

Table 1. Characteristics of four social types.

Social style	Promoting	Facilitating	Controlling	Analyzing
Power	Dominant	Consenting	Dominant	Consenting
Emotion	Expansive	Expansive	Reserved	Reserved
Need	Appreciation	Admission	Realization	Security
Strength	Openness	Acceptance	Authenticity	Reliability
Weakness	Reliability	Authenticity	Acceptance	Openness
Decision	Quick	Slow	Quick	Slow
Number of decision	Numerous	Numerous	Unique	Unique

Statistical analysis was done using SPSS software, version 9.05 (SPSS, Inc., Chicago, Illinois, USA). The numeric variables are given as means \pm standard deviation (SD), the categorical variables as percentage and p values less than 0.05 were considered significant. Differences between four groups were analyzed by one-way analysis of variance (ANOVA) and χ^2 test or Fisher's Exact test, and comparisons of the groups with each other were analyzed by independent students t test or Mann-Whitney U test where appropriate; homogeneity of variance was assessed with Levene's test. Linear or logistic regression analysis was performed to determine independent risk factors for obesity.

Results

The obese patients in our study are unequally distributed according to their social styles (Table 2). Most of the analyzing subjects were obese (80%). None of the controlling group was obese and most of the subjects in facilitating group were non-obese (85.5%). Analyzers were older and had higher BMI than facilitators (49.20 ± 3.65 vs 33.31 ± 0.68 year, $p < 0.006$; 34.91 ± 3.51 vs 24.75 ± 0.34 kg/m², $p < 0.002$, respectively) and controllers (49.20 ± 3.65 vs 26.50 ± 2.53 yr, $p < 0.003$; 34.91 ± 3.51 vs 22.13 ± 1.13 kg/m², $p < 0.03$, respectively). Promoters were older and had higher BMI than facilitators (37.83 ± 2.26 vs 33.31 ± 0.68 year, $p < 0.05$; 29.39 ± 1.05 vs 24.62 ± 0.34 kg/m², $p < 0.0001$, respectively), more obese than controllers (29.39 ± 1.05 vs 22.13 ± 1.13 kg/m², $p < 0.04$), and younger than analyzers (49.20 ± 3.65 vs 37.83 ± 2.26 year, $p < 0.02$). Obese subjects were older than non-obese subjects (44.79 ± 1.58 vs 31.50 ± 0.64 year, $p < 0.0001$). In regression analysis, age ($p < 0.0001$) and personality ($p < 0.02$) found as risk factors for obesity.

Discussion

In present study, we have attempted to better understand the obese patient by looking for

psychopathological troubles and/or disorders of eating behavior according to their personality. Our research shows an inequality in the distribution of obese patients according to their social style. Most of the analyzing subjects were obese. They like to eat traditional foods with their families and traditional foods in our region contain high amounts of fat and carbohydrate. They also make systematic dietary errors, eat in regular, an even routine manner and this is how dietetic errors are passed from generation to generation. Alcoholism, among analyzing subjects, tends to be the solitary kind. Drinking also becomes routine, and alcohol may be used as antidepressant or to help for sleeping.

In our study, none of the controlling group was obese and most of the subjects in facilitating group were non-obese. Controllers think that eating is a waste of time. The present moment is what counts for them and they do not like meals to drag out. They eat because of necessity. They drink discreetly thinking that they have the situation under control. Detecting alcoholism in controllers is difficult, only very rarely does a controller have too much to drink. Facilitators like eating out with friends. They do not like to be alone while eating because, for them, food represents sharing. They enjoy trading recipes, and sharing meals and impressions with their inner circle. One of the problems that they have is, not knowing how to turn down an invitation. If their friends or members of family eat high calorie diets and drink alcohol, the facilitators also eat and drink with them. They like social life and share good times with their relatives and friends. Probably those obese facilitators in our study belong to a community in which eating is a kind of pleasure.

Analyzers were older than facilitators and controllers. In the literature we did not find any study showing the change of personalities of people by age. This difference may be due to a change in their personality, as one has more experience.

Table 2. Physical characteristics of subjects

	Promoting	Facilitating	Controlling	Analyzing	p value
Women/Men (%)	66.7/33.3	67.6/32.2	60/40	80/20	NS
Nonobese/Obese (%)	54.2/45.8	85.5/14.5	100/0	20/80	0.0001
Age (years)	37.83 ± 2.26	33.31 ± 0.68	26.50 ± 2.53	49.20 ± 3.65	0.004
BMI (kg/m ²)	29.39 ± 1.05	24.62 ± 0.34	22.13 ± 1.13	33.68 ± 4.02	0.0001

Unfortunately economical conditions in Turkey worsen. Life is getting more complex and difficult, this may force people to be more self-possessed and also eat traditional carbohydrate rich foods.

Promoters eat for pleasure. They like good food and they are always on the lookout for a new gourmet restaurant. They like different and exotic dishes, and many of them have a little black book with all their favorite places to eat. They are a gourmet and the way dishes are presented, as well as the decor of a restaurant are very important to them. They enjoy good company. They do not necessarily have a drink every day, but if the occasion arises and they are having is good, they are capable of carried away. They may spend more time for eating than controllers, because of their social status, and this may be the reason for their obesity.

Obese subjects were older than non-obese subjects. This may due to decreased metabolic rate and that older people follow traditions more than young ones. Probably they eat traditional foods often, have less physical exercise and have less metabolic rate. In regression analysis we found age and personality as independent risk factor for obesity. This finding also confirms the opinion mentioned above. As a conclusion, age and personalities of the individuals may affect their eating behaviors. Diet advices in respect to their personalities may be helpful to achieve long-term weight loss in obese subjects.

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