

7th to 9th Grade Obese Adolescents' Perceptions About Obesity in Tamaulipas, Mexico

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The objective was to explore obese adolescents' perceptions about obesity among students in the seventh to ninth grade of a public school in Tamaulipas, Mexico. This is a qualitative study. Participants were 24 adolescents with a body mass index equal to or greater than the 95th percentile. Semistructured interviews were conducted until data saturation was reached and the meaning was understood. The adolescents defined obesity according to standards of measurement. They identified the hereditary factor as the main obesity cause, tended to underestimate obesity and had low self-esteem. They reported problems to do physical exercise and get clothes in order to improve their image, and feel rejected by their peers in school. It was identified that these adolescents have psychological defense mechanisms against obesity and that some of them are making efforts to lose weight. Obesity entails social and psychological health implications for persons suffering from this problem. Interventions should be put in practice.

Descriptors: Adolescent; Obesity; Body Weight; Self Concept.

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Percepções da obesidade de adolescentes obesos, estudantes do 7º ao 9º grau residentes em Tamaulipas, México

O objetivo foi explorar as percepções da obesidade de adolescentes obesos, estudantes do 7º ao 9º grau de uma instituição pública de Tamaulipas, México. É estudo qualitativo, do qual participaram 24 adolescentes que tinham índice de massa corporal superior ao percentil 95. Realizou-se entrevista semiestruturada até a saturação dos dados e compreensão do significado. Os adolescentes definiram obesidade de acordo com um padrão de medição, identificaram como causa principal o fator hereditário, com tendência para subestimar a obesidade e a ter baixa autoestima, apresentam problemas quando realizam atividade física e para conseguirem roupas para melhorar a própria imagen, são rejeitados pelos seus pares ou iguais, na escola. Identificou-se, também, que possuem mecanismos psicológicos de defesa ante a obesidade e alguns deles estão realizando ações para diminuir o peso. A obesidade tem implicações na saúde, no aspecto psicológico e social de quem a padece, recomenda-se, aqui, implementar intervenções.

Descritores: Adolescente; Obesidade; Peso Corporal; Auto-imagem.

Percepciones de la obesidad de adolescentes obesos estudiantes del 7º al 9º grado residentes en Tamaulipas, México

El objetivo de esta investigación fue explorar las percepciones de la obesidad de adolescentes obesos estudiantes del 7º al 9º grado de una institución pública en Tamaulipas, México. Se trata de un estudio cualitativo en el cual participaron 24 adolescentes que tenían un índice de masa corporal superior al percentil 95. Se realizaron entrevistas semiestructuradas hasta obtener la saturación de los datos y la comprensión del significado. Los adolescentes definieron la obesidad de acuerdo a los estándares de medición, identificaron como causa principal el factor hereditario, tendieron a subestimar la obesidad y presentaron baja autoestima, relataron problemas cuando realizan actividad física y para conseguir ropa que pudiese mejorar su imagen, y se sienten rechazados por sus pares o iguales en la escuela. Se identificó que cuentan con mecanismos psicológicos de defensa ante la obesidad y algunos de ellos están realizando acciones para disminuir el peso. La obesidad tiene implicaciones en la salud, también en los aspectos psicológico y social de quienes la padecen. Se recomienda implementar intervenciones.

Descriptores: Adolescente; Obesidad; Peso Corporal; Autoimagen.

Introduction

Obesity is a chronic illness characterized by excessive fat storage in the organism; its prevalence levels have risen to the extent that, since 1998, the World Health Organization has considered it a global epidemic, which affects both developed and developing countries. This disease is present in the adult and the child population⁽¹⁻²⁾.

Nowadays, 15% of children and adolescents are overweight. In Mexico, according to data from the 2006 National Health and Nutrition Survey, one in every three male or female adolescents suffer from overweight or obesity; this represents about 5,757,400 adolescents in the country. Moreover, obesity is associated with

risk factors like heart attack and other chronic diseases, such as hyperlipidemia, hyperinsulinemia and hypertension⁽³⁻⁴⁾.

Adolescence is a critical period in life, characterized by important physical and psychological changes. During this accelerated growth period, body changes can influence the perception of weight, which is a determinant of eating habits and actions to maintain weight among adolescents.

Weight perception refers to the perception of one's body figure as an important dimension of the body image, which plays an important role in related conducts. Some studies⁽³⁻⁶⁾ have reported on the negative psychological

effects of a poor body image and a distorted weight perception, such as low self-esteem, anxiety and depression. Subjects who perceive themselves as obese feel isolated or discriminated against in social situations⁽⁵⁾.

Some studies relate a negative body image perception or dissatisfaction with weight with poor psychological functioning, including problems in the family, at school or with teachers. A study carried out in Finland identified that obese adolescents are ridiculed, rejected and frequently considered clumsy by their peers. These manifestations of social rejection tend to have a stronger emotional impact on girls than on boys. Moreover, only 54% of the adolescents were satisfied with their weight and, among those dissatisfied, 84.9% considered themselves as obese⁽⁶⁾.

Another research found that obese adolescents tend to have a poor body self-image and express feelings of inferiority, rejection and low self-esteem⁽⁷⁾. A study was carried out about the general public's perception of childhood obesity, with 1,047 participants living in the United States, who perceived childhood obesity as a severe problem, indicated bad-quality food (77%), fast food (65%) and watching television more than two hours per day (57%)⁽⁸⁾ as the main factors contributing to obesity.

But how do people suffering from obesity perceive this situation? And, in case of adolescents, how do they live with this situation? To answer these questions, this research aimed to explore perceptions about obesity among obese adolescents in the 7th to 9th grade of a public school in Tamaulipas, Mexico, applying qualitative research methods, which permit exploring multifaceted complex questions.

Methods

The qualitative method was considered appropriate for the present research as it permitted knowledge about obesity perceptions in a group of obese adolescents. Study participants were 24 adolescents in the 7th to 9th grade of a public school and living in Matamoros, a city in Tamaulipas, Mexico.

Participants were identified through an earlier study in which weight and height were measured; the criterion for obesity was a body mass index equal to or greater than the 95th percentile⁽⁹⁾.

The data collection technique was a semistructured interview that took approximately 30 minutes, applied until data saturation and until the meaning was understood. Before holding the interviews, participants

were informed about the research objectives and both adolescents and their parents signed the informed consent form.

The interviews were audiorecorded. The goal was to discover how the adolescents perceived their body weight and obesity, allowing subjects to freely express their opinions; the interviews were held at the educational establishment, in an environment of confidence and cordiality, so that students could freely express their opinions.

Data were collected between March and June 2008. The thematic analysis technique was used for data analysis. The notion of theme is related with an assertion about a given subject; the method intends to discover the cores of meaning in communication, whose presence or frequency means something for the intended goal. In qualitative terms, the presence of certain themes indicates the reference values and behavior models that are present⁽¹⁰⁾.

Six themes were identified: 1) Definition of obesity and etiology, 2) Perception and feelings produced by obesity, 3) Limitations imposed by obesity, 4) Rejection by peers, 5) Psychological defense mechanisms against obesity and 6) Management.

This research was carried out in accordance with the Ethical precepts proposed in the Regulations of the *Ley General de Salud en Materia de Investigación para la Salud de México* (General Mexican Health Law for Health Research) and received authorization from the Research Ethics Committee at the Multidisciplinary Academic Unit Matamoros of *Universidad Autónoma de Tamaulipas*.

Results

Participants were 24 male and female obese adolescents (BMI ≥ 95 percentile) between 11 and 15 years old, 14 girls and 10 boys.

Definition of obesity and etiology

The adolescents mention that they have obesity based on their body weight.

My weight is not average. E6

I am not according to my weight. E13

I am more obese these days, I weighed myself and I weight more than 80 kilos and that shocked me. E15

A trend was observed to underestimate the situation, however.

I weighed myself on Saturday and I was only two kilos too heavy. E8

I am slightly overweight. E12

The dominant belief is that body size and growth standard are fixed or predestined and can be attributed to hereditary factors. They even mentioned that health professionals commented on this.

It's normal that I'm fat, my family is fat. E16

I have been to doctors, but they tell me that, because my family is like that, the same happens to me, I'm happy. E21

Other participants indicated food habits as a possible cause of obesity; but the predominant belief continues being the hereditary factor.

You don't know if it is because you don't eat right, or because your family is fat. E16

And only one of the participants attributed the origin of obesity to emotional problems:

I got problems with my nerves and I started to eat. E22

Perception and feelings produced by obesity

A trend was observed to underestimate the obesity problem.

I weighted myself on Saturday and I was only two kilos too heavy. E8

I am slightly overweight. E12

It was identified, however, that adolescents perceive a distorted body image and feelings of inferiority.

A person can be fat and look in the mirror and say, I am really ugly. Who is going to want me? People with obesity get into a very ugly depression, I've seen it, I've got friends who got it. E10

I would like to be slimmer, not so chubby. E13

Some adolescents even indicated they got used to living with obesity.

I feel fine, good, I've already got accustomed to see myself fat. E16

Other participants appointed they were aware that obesity is harming them, but mentioned that they were unable to manage and lose weight.

I feel bad, I feel I am very fat, I feel bad, I feel that, if I say I'm going to lose weight, I won't manage, it would be good for me to change... a change in me would be good, do..., a change in me would be positive, I'm harming myself. E20

It is noteworthy, however, that when mentioning how they feel about themselves, there is a trend towards bias (neither good nor bad).

I don't feel bad, I don't feel good. E5

They also contradict themselves, that is, they affirm that they are feeling good or bad in their discourse and then, in their next statement, contradict themselves. They use negative adjectives about themselves, as a way of defining their person by reducing themselves, in most cases, to their characteristic of obese. *I feel good...sometimes*

I think it's bad the way I am...it's not normal...they say that I'm fat and ugly...there are many things you can't do. E16

Limitations imposed by obesity

The participants commented that obesity causes problems for them to practice physical activity.

Because, I don't feel like, very deteriorated, I can do everything, I run, I play, I jump; but sometimes when I run a lot I get agitated easily, my physical condition is not good because of my obesity. E10

There are many things I can't do because you run and you see that you get agitated very quickly. E17

When I run I get agitated, if I lost more weight I could do more, I would want to walk and run much more. E18

As physical appearance and body image are important aspects for adolescents, the participants appointed difficulties to find their clothes in their size or that make them see themselves positively. They even indicated that this situation makes them feel depressed.

If there are clothes the way I like, I fight for them. E21

Clothes do not fit well with my weight, some item does look well, but others don't, most of the times clothes do not fit well with my weight. E23

Sometimes I get depressed because I can't find what I want, like clothes, they don't fit me with this type of body, it bothers me because, as I'm fat, I can't find clothes very easily like any other person. E24

Rejection by peers

One of the situations participants mentioned most frequently was feeling rejected by their peers. They mentioned they felt physically good, but not emotionally, as they are ridiculed by their colleagues or feel marginalized. Some even indicated the desire to lose weight as a mechanism to be accepted and gain respect from their peers.

My colleagues treat obese people badly, insult them. Hey! Get lost! You don't have anything to do with us, if I lost weight I'd feel better. E8

Many say that I am fat and ugly. E16

I feel good, but sometimes they tell you that I'm fat and quiet, that way I feel bad, I don't feel bad in my organism, not physically. E19

Many colleagues make fun of me and I don't feel good, the relation with my peers is really bad sometimes, because they make fun of me and make me feel less than them, make me feel bad, because they are making fun of me, I want to make an effort to lose weight so that I feel better and my colleagues respect me more. E24

Psychological defense mechanisms against obesity

The analysis of the sense and in-depth meaning of the interviewed adolescents' discourse evidenced the force and number of psychological defense mechanisms present to bear the emotional burden implied in the experience of being obese, mechanisms which in turn paradoxically constitute an obstacle to accept that one has a problem and consequently, to take action to solve it, which was evidenced when the interviewees referred to the future, using conditional verb tenses.

If I lost weight I would feel better. E8

If I changed my food I would lose weight and if I lost weight I could do more things, I would want to walk and run, a change would do me good, bringing about a change in me would be positive. E20

This alludes to what is expected as correct but they are not or do not have this.

I should be slimmer to feel a lot better. E11

I should not feel good because I'm overweight. E12

Only two of the interviewees gave answers with a connotation of proactive acceptance.

I should lose weight, yes, I need to. E14

I need to lose weight... I want to make an effort to lose weight. E24

Management

Only two of the 24 interviewees mentioned expressions of acceptance and of solid actions in course to solve the problem.

I feel bad, I am more obese these days, I weighed myself and I weigh more than 80 kilos and I got shocked, I am trying to eat healthy things. E15

Another adolescent mentioned actions to improve her physical appearance, but did not address health aspects.

I already go jogging, I would like to look good always, and my trousers looking good, wearing my clothes well, but with my weight, some item does look well, but others don't, most of the times clothes do not fit well with my weight. E23

Discussion

Findings in this research permitted exploring how obese adolescents living in Matamoros, Tamaulipas perceive their weight and obesity. Participants defined obesity based on weight levels, commenting that they weigh more than they should, a perception that differs from adolescents whose mothers do not accept the classifications provided by health staff, using growth parameters as arguments and mentioning physical

activity limitations as signs that their children are getting overweight⁽¹¹⁾.

Participants identified family heredity as the main cause of obesity, which had even been indicated by the health team. This finding is in accordance with other studies about mothers' perception of their children's obesity, expressing the dominant belief that their children's body size and the growth standard are fixed or predestined by hereditary factors and, hence, that they cannot be changed⁽¹¹⁻¹²⁾.

In this research, a trend was identified to minimize obesity, through expressions like the use of diminutives, considering obesity as of little importance, in line with the results of a study that involved 2,032 adolescents in the 9th to 12th grade, which identified that more than 20% of participants with overweight or risk of overweight perceived themselves as low-weight⁽¹³⁾.

The above coincides with the findings of a study carried out to explore willingness to change food patterns and physical activity among children of parents with type 2 diabetes mellitus. Seventeen percent of participants presented overweight and 68% obesity. Moreover, it was identified that a considerable percentage of participants was not trying to decrease fat consumption in their diet, and that a considerable part made no intent on or would not try to practice some kind of exercise in the next six months⁽¹⁴⁾, which can be associated with the fact that children of parents with type 2 diabetes do not perceive their risk of developing this disease or do not perceive that they are obese.

Body weight perception is a determinant of nutritional habits and weight management among adolescents. Adolescents with overweight who do not perceive this situation present greater difficulties to take part in weight control practices, such as diet and exercise. It has been identified, however, that perception is the best predictor of current weight and adolescents' integration into diet or weight control practices⁽¹⁵⁾.

In relation to the feelings generated by obesity, the adolescents used negative adjectives about themselves to define their person and their condition of obesity. This negative self-concept is related with poor self-esteem⁽⁶⁾. A study carried out in China, involving 6,863 adolescents, identified a relation between the perception of obesity on the one hand and stress and depression in men and women and hostility in men. Besides, perception of overweight was related with low academic performance in women⁽¹⁶⁾.

With respect to the limitations imposed by obesity, adolescents mentioned that they got agitated when they

ran and that the fact that they could not find clothes in their size or did not manage to look good in those clothes made them feel depressed, in line with the mothers' perception, according to literature, about their children's obesity. Mothers indicate limitations in the physical activity their children perform; they do not consider that their children are overweight but that they are active and refer to physical activity limitations as a sign that their children are getting overweight. Mothers also start to get worried with their children's weight when clothes for their age are small or simply too small⁽¹¹⁾.

Based on the present study findings, it can also be affirmed that obese adolescents experience rejection by their peers in the school environment, are ridiculed, mistreated and looked down upon by their colleagues, who make them feel inferior. That is consistent with what mothers of obese children mention in terms of concern with negative comments by friends or relatives. Adolescents, however, are submitted to their peers' social pressure in school⁽¹²⁾.

Nevertheless, defense mechanisms against obesity were identified, including the fact that they are considering the possibility of losing weight to feel better; some of them even mentioned what they are doing to lose weight. This situation demands further analysis to

identify the characteristics or factors that would allow those adolescents to use those mechanisms or perform actions to lose weight.

As a distorted body weight perception is associated with psychological factors like low self-esteem, these findings can contribute to increase knowledge on how adolescents perceive obesity, which can support the development of effective intervention programs.

Study limitations. These findings can only be generalized to adolescents with similar characteristics to the present study participants.

Conclusions

The adolescents defined obesity as the fact of weighing more than they should, appointed the hereditary factor as the main cause of obesity, tend to underestimate the obesity problem and to have low self-esteem. As the main limitations obesity imposes, they indicated problems to practice physical activities and to find clothes that make them improve their image. Participants mentioned they were ridiculed and rejected by their peers at school. It was identified that they have psychological defense mechanisms at their disposal against obesity and that some of them are taking concrete action to lose weight.

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