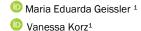
# FOOD AND NUTRITION IN COLLECTIVE HEALTH

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Blumenau, Blumenau, SC, Brasil

# Attitudes of nurses from the Family Health Team (eSF) towards obesity

Atitudes de enfermeiros de equipe da Saúde da Família em relação à obesidade

#### Abstract

Introduction: Obesity is a multifactorial, chronic disease and a major public health problem. There are many stigmas and stereotypes used in this pathology and obese patients are often considered lazy, incompetent and responsible for their weight gain. Health professionals are reported by patients as one of the main sources of application of this stigma. Objective: To evaluate nurses' attitudes towards obese individuals. Method: All nurses from the 66 Family Health teams in Blumenau - SC were invited to participate in the research. Data collection included the application of the Antifat Attitude Test with 34 questions, in addition to a structured interview questionnaire prepared by the authors and self-completed with sociodemographic and health data, with 14 questions, including weight and height reported by the participants for calculation of the Body Mass Index. Results: 42 nurses participated, with a predominance of females, prevalent nutritional status of overweight and most reported a history of overweight or obesity. In the Antifat Attitude Test, the highest average was from the subscale 'Weight Control/Blame' associated with the statement 'most fat people buy too much junk food' with the fact that the participants consider themselves to be overweight (p <0.05). Conclusion: The results suggest that professionals have some anti-obesity attitudes towards obesity.

Keywords: Obesity. Social Stigma. Biases. Nurses.

## Resumo

Introdução: A obesidade é uma doença multifatorial, crônica e um grande problema de saúde pública. Há muitos estigmas e estereótipos empregados à essa patologia e os pacientes obesos são, muitas vezes, considerados preguiçosos, incompetentes e responsáveis pelo seu ganho de peso. Os profissionais de saúde são relatados pelos pacientes como uma das principais fontes de aplicação desse estigma. *Objetivo*: Avaliar as atitudes dos enfermeiros em relação aos indivíduos obesos. *Método:* Foram convidados todos os enfermeiros das 66 equipes de Saúde da Família de Blumenau -SC para a participação na pesquisa. A coleta de dados incluiu a aplicação da Escala de Atitudes Antiobesidade com 34 questões, além de um questionário de entrevista estruturada elaborado pelos autores e auto preenchido com dados sociodemográficos e de saúde, com 14 questões, dentre elas peso e altura relatados pelos participantes para cálculo do Índice de Massa Corporal. *Resultados*: Participaram 42 enfermeiros, com predomínio do sexo feminino, estado nutricional prevalente de sobrepeso e a maioria relatou histórico de sobrepeso ou obesidade. Na Escala de Atitudes Antiobesidade, a maior média foi da subescala 'controle de peso e culpa', havendo associação estatisticamente significativa à afirmação 'a maioria dos gordos compram muita besteira ('junkfood')' com o fato de os participantes se considerarem

com excesso de peso atualmente (p<0,05). *Conclusão*: Os resultados sugerem que os profissionais apresentam algumas atitudes antiobesidade frente a obesidade.

**Palavras-chave:** Obesidade. Estigma social. Preconceito. Enfermeiras e enfermeiros.

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## **INTRODUCTION**

Obesity is a multifactorial disease, defined by the World Health Organization (WHO) as abnormal or excessive accumulation of fat.<sup>1</sup> Considered a public health problem, obesity is related to the increase in chronic non-communicable diseases, in addition to psychological morbidity due prejudice, stigma, discrimination, stress and body dissatisfaction.<sup>2-4</sup>

However, currently, there are controversies around the possibility of obesity really being considered a disease, due to the existence of metabolically healthy obese people, in other words, obese individuals who do not have any secondary disease conventionally related to obesity. There are also studies showing that among healthy obese and unhealthy obese, the risks of illness and death are lower in healthy obese, while among healthy obese and individuals with what is considered "normal" weight, the former had a higher risk of cardiovascular events, despite both have the label of "healthy". 5-8

Regardless of whether obesity is considered a disease or not, individuals with obesity are stigmatized and stereotyped as lazy people, without willpower, incompetent, unattractive and guilty of being overweight, which impacts on daily lives of these subjects. 9-12 This scenario can increase the risk of depression, anxiety, body dissatisfaction and low self-esteem, which can cause the obese to devalue and apply negative stereotypes to themselves. 13

This prejudice or devaluation is often caused by the health professionals themselves, who are pointed out by patients as one of the main sources of prejudice.<sup>14</sup> Health professionals make inappropriate comments, which can make patients feel misunderstood. As a result, there is a gap between professionals and obese patients and, therefore, they present a worse response to treatment.<sup>15</sup>

Such stigma is related to the social construction of what is beautiful, of what is considered "normal" and acceptable socially, consequently creating standards of beauty and cult of the body. Individuals who do not fit this pre-established body pattern are isolated and suffer prejudice, what infers that their bodies position them in the social space.<sup>16</sup>

Considering the relevance and topicality of the theme, this research is necessary to identify stereotypes applied to obesity by health professionals, who are responsible for the care and monitoring of obese individuals. Prejudice, when present, can directly affect the individual and take them away from treatment.<sup>2</sup> For this reason, health professionals are the target audience of this research, which aimed to assess nurses' attitudes towards obesity and relate them to the sociodemographic profile and health of these professionals.

#### **METHODS**

This study is classified as a cross-sectional and observational research, which was carried out with nurses from the Equipe de Saúde da Família (eSF) (Family Health Teams) in the city of Blumenau - SC, subsequently the approval of the Ethics Committee in Research with Human Beings with opinion number 3.214.531 and Certificate of Presentation for Ethical Appreciation: 08987218.0.0000.5370.

All the 66 nurses allocated to the eSF in the city of Blumenau - SC were invited to participate of the research and accepted the invitation. The inclusion criteria adopted was the nurse accepting the invitation to participate in the research. After the stage of participant selection, sociodemographic and health data were collected, such as age, gender, education, the eSF that the participant works, how long the participant works at the unit, how long the participant works as a nurse, if the participant has already had overweight or been obese, if the participant answered yes to the previous question, what method was used for weight loss, how

many times the participant had to resort to weight loss treatments, if the participant currently considers himself overweight or obese and if the participant has cases of obesity in the family.

In addition, the participants had to inform their weight, in kilograms (kg), and their height, in meters (m), to calculate the Body Mass Index (BMI). For the classification of the BMI of adult participants, the criteria used, according to the WHO, was: BMI < 18.5 kg/m² classified as underweight,  $\geq$  18.5 and < 25 kg/m² classified as adequate weight,  $\geq$  25 and <30 kg/m² classified as overweight and  $\geq$  30 kg/m² classified as obesity. For elderly individuals, the following cutoff points were used: BMI  $\leq$  22 kg/m² classified as low weight,  $\geq$  22 and < 27kg/m² classified as adequate or eutrophic, and  $\geq$  27 kg/m², classified as overweight.

The Antifat Attitudes Test (AFAT) was also applied, which was developed by Lewis et al., <sup>19</sup> and, in Brazil, validated by Obara & Alvarenga. <sup>20</sup> The scale includes 34 items divided into three subscales: 1) Social/Character Disparagement, with 15 items that assess the attribution of personal characteristics socially undesirable and social contempt for the obese; 2) 'Physical/Romantic Unattractiveness', with 10 items that reflect perceptions that obese people are clumsy, unattractive and unacceptable as romantic partners; and 3) 'Weight Control/Blame', with 9 items that assess the belief regarding the responsibility of obese people for their excess weight. For each item, there were five response options on a Likert scale, being 'do not agree with anything', 'do not agree with most', 'neither disagree nor agree', 'agree with most' and 'strongly agree'; scoring between 1 and 5. Among all items, six have an inverse scale. <sup>19-20</sup>

The questionnaires were applied between March and June 2019, at the monthly meeting of nurses of the eSF, which is part of the calendar of the Municipal Health Secretariat and with their knowledge and prior consent for data collection. The nurses who were not present on the day of the meeting were contacted by phone and/or email to invite them to be part of the survey.

The collected data were tabulated in duplicate in the Microsoft Excel® program, version 10, and analyzed using descriptive and inferential statistics in the Epi Info® program, version 7. Quantitative variables were described as mean and standard deviation and categorical variables as absolute frequency and relative. For data comparison, after normality test, the Fischer exact test was used and a statistically significant difference was considered when p<0.05.

#### **RESULTS**

Forty-two nurses participated in the research, most of them female, with an average age of  $46.36 \pm 8.27$  years, ranging from 27 to 65 years (Table 1). Regarding marital status, the predominant data were married, with children. As for education, the level of postgraduate/complete specialization stood out. According to the division of the territory by regions, the region of the city that had the largest number of participants was the Fortaleza district, followed by the Garcia and Centro regions. The average time of work of nurses in the eSF was  $7.3 \pm 6.78$  years, out of a total of  $19.81 \pm 9.08$  years of profession.

Table 1. Sociodemographic data of nurses from the Family Health teams of Blumenau - SC, March / June 2019.

Characteristics	N (%) (n=42)
Gender	
Female	38 (90.5%)
Male	4 (9.5%)

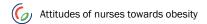


Table 1. Sociodemographic data of nurses from the Family Health teams of Blumenau - SC, March / June 2019.(Continues)

Characteristics	N (%) (n=42)
Marrital Status	
Single	12 (28.6%)
Married/Common Law marriage	21 (50.0%)
Divorced/separated	8 (19.0%)
Widower	1 (2.4%)
Children	
Yes	33 (78.6%)
No	9 (21.4%)
Level of education	
Complete higher education	2 (4.8%)
Postugraduate/specialization course (studying)	10 (23.8%)
Postugraduate/specialization course (complete)	27 (64.3%)
Master's degree	3 (7.1%)
Região da cidade da eSF	
Itoupavas	4 (9.5%)
Centro	6 (14.3%)
Escola agrícola	5 (11.9%)
Velha	5 (11.9%)
Badenfurt	4 (9.5%)
Fortaleza	11 (26.2%)
Garcia	7 (16.7%)

Source: research data

Most participants reported a history of overweight or obesity, indicating that the most used methods for weight loss are the practice of physical activity, dieting on their own and carrying out nutritional monitoring (Table 2). In addition, some participants reported other methods, such as follow-up with medical specialty (s) (n = 3), weight loss program in clinics (n = 1), change in habits (n = 1), nutritional guidance (n = 1) and 'Trying to control carbohydrates and fats' (n = 1).

**Tabela 2**. Variables related to overweight / obesity of nurses from Family Health teams from Blumenau - SC. March / June 2019

Characteristics	N (%) (n=42)
Has already been overweight or obese	
Yes	31 (73.8%)
No	11 (26.2%)
Method used for weigh loss	
Medication	10 (23.8%)
Surgry	4 (9.5%)
Unattended diet	15 (35.7%)
Nutricionist	15 (35.7%)
Physical activity	20 (47.6%)
Others	7 (16.7%)
Obesity cases in the family	
Yes	23 (54.8%)
No	19 (45.2%)
Currently considers himself/herself overweight/obese	
Yes	26 (61.9%)
No	16 (38.1%)

**Tabela 2**. Variables related to overweight / obesity of nurses from Family Health teams from Blumenau - SC. March / June 2019. (Continues)

Characteristics	N (%) (n=42)
BMI classification	
Eutrophy	13 (31.0%)
Overweight	19 (45.2%)
Obesity	10 (23.8%)

Source: research data.

In the topic related to the number of times the participant had undergone treatment for weight loss, the responses ranged from 1 to 10, with the most cited being '1 time' (n = 8) and '3 times' (n = 6). Other responses were 'several/many times' (n = 3), 'some' (n = 3) and 'currently' (n = 1). Some participants reported a history of overweight/obesity, but did not answer this question (n = 5). Most nurses cited cases of overweight obesity in the family, as well as considering themselves overweight/obesity at the time of the survey, as also indicated by the current average BMI of  $26.89 \pm 4.5 \text{ kg/m}^2$ .

In relation to the AFAT, the subscale that presented the highest average was 'Weight Control/Blame' (2.29  $\pm$  0.58), followed by 'Physical/Romantic Unattractiveness' (1.95  $\pm$  0.58) and, finally, 'Social/Character Disparagement' (1.32  $\pm$  0.32). The highest average statements of the entire instrument were 'most fat people buy too much junk food', 'there is no excuse to be fat' and 'if fat people really wanted to lose weight, they would make it', which belong to the subscale 'Weight Control/Blame' (Table 3).

Table 3. Means and standard deviation for items on the Antifat Attitude Test.Blumenau-SC. March / June 2019.

Variables	Mean ± SD
Social/Character Disparagement	
If fat people don't get hired, it's their own fault	$1.43 \pm 0.67$
Fat people don't care about anything except eating	1.52 ± 0.67
I'd lose respect for a friend who started getting fat	$1.05 \pm 0.31$
Most fat people are boring	$1.19 \pm 0.71$
Society is too tolerant of fat people	$1.83 \pm 0.93$
When fat people exercise, they look ridiculous	1.29 ± 0.67
Fat people are just as competent in their work as anyone*	1.76 ± 1.41
Being fat is sinful	$1.02 \pm 0.15$
I prefer not to associate with fat people	$1.14 \pm 0.57$
Most fat people are moody and hard to get along with	$1.26 \pm 0.50$
If bad things happen to fat people, they deserve it	$1.02 \pm 0.15$
Most fat people don't keep their surroundings neat and clear	$1.19 \pm 0.55$
Society should respect the rights of fat people*	$1.60 \pm 1.21$
Fat people are unclean	$1.19 \pm 0.55$
It's hard to take fat people seriously	$1.31 \pm 0.72$
Subscale Physical/Romantic Unattractiveness	
If I were single. I would date a fat person*	2.76 ±1.34
Fat people are physically unattractive	2.21 ±1.24
Fat people shouldn't wear revealing clothing in public	2.62 ±1.31
I can't believe someone of average weight would marry a fat person	$1.21 \pm 0.52$
It's disgusting to see fat people eating	$1.14 \pm 0.52$
It's hard not to stare at fat people because they are so unattractive	$1.43 \pm 0.74$
I would not want to continue in a romantic relationship if my partner became fat	$1.24 \pm 0.66$
I don't understand how someone could be sexually attracted to a fat person	$1.36 \pm 0.79$
People who are fat have as much physical coordination as anyone*	2.57 ± 1.50
Fat people should be encouraged to accept themselves the way they are*	$2.95 \pm 1.34$

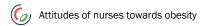


Table 3. Means and standard deviation for items on the Antifat Attitude Test.Blumenau-SC. March / June 2019.(Continues)

Variables	Mean ± SD
Subscale Weight Control/Blame	
There's no excuse for being fat	$3.00 \pm 1.36$
Most fat people buy too much junk food	3.40 ± 1.33
Most fat people are lazy	1.79 ± 1.16
If fat people really wanted to lose weight. they could	2.74 ± 1.13
Fat people have no willpower	1.50 ± 0.89
The idea that genetics causes people to be fat is just an excuse	1.71 ± 0.89
If fat people knew how bad they looked. they would lose weight	1.62 ± 0.96
Most fat people will latch onto almost any excuse for being fat	2.33 ± 0.98
Fat people do not necessarily eat more than other people*	2.48 ± 1.33

Legend:.\* = statements that had reversed punctuation

Source: research data

In the subscale of 'Physical/Romantic Unattractiveness', the items 'fat people should be encouraged to accept themselves as they are', 'if I were single, I would date a fat person' and 'fat people have so much motor coordination as any other' had their scores reversed, so the averages were close to 'neither agree nor disagree'.

In the statistical analysis, after verifying the non-normality of the variables, there was a statistically significant association between the statement 'most fat people buy too much junkfood', belonging to the subscale 'Weight Control/Blame', and to the question 'do you consider yourself overweight or obese today?' (p = 0.0096). No statistically significant results were found between the total AFAT score and the BMI, and between the AFAT subscales, age and BMI.

#### **DISCUSSION**

This study had the majority of female participants, adults and with current nutritional status of overweight. Nurses considered themselves to be overweight at the time of the interview and reported cases of obesity in the family. The attitudes towards obesity most frequently mentioned by nurses were from the subscale 'Weight Control/Blame' and the highest average question was 'most fat people buy a lot of junk food'.

Similarly, Obara<sup>21</sup> found a higher average in the item 'most fat people buy too much junk food' (3.66  $\pm$  1.01), in a population of Brazilian university students. Other items also showed similar averages in these studies, highlighting 'there is no excuse for being fat' (2.43  $\pm$  1.17) and 'if fat people really wanted to lose weight, they could do it' (3.20  $\pm$  1.24).<sup>21</sup> With lower averages in both researches,<sup>21</sup> there is the item 'if bad things happen to fat people, they deserve it', in addition to 'being fat is a sinful'.

Through the AFAT, Obara<sup>21</sup> obtained a higher average in the subscale 'Weight Control/Blame', showing that the blame for excess weight lies with the obese himself, as in the present study. However, Obara<sup>21</sup> demonstrated a difference in means between genders. The male averages are higher in all subscales of the AFAT, whereas in the current study there were a small number of male participants.

A study carried out in a health center analyzed the perception that health professionals have in relation to the obese patient. Health professionals reported that these patients are sad and stated that 'to lose weight it is necessary to want', reinforcing what was found in this research, a view that the individual is in these conditions, because he cannot control himself, because he is relaxed and lazy.<sup>11</sup>

Similarly, the attitudes of doctors towards obese patients were more negative the greater the weight presented by the patient and, consequently, the greater the distance in the doctor-patient relationship. Half of the doctors saw the obese as uncomfortable, unattractive and ugly; one third characterized them as lazy or careless; 9% indicated the obese as unpleasant and 3% as dishonest. In addition, among the factors that generate doctors' reluctance to treat obesity, there is evidence about the view of obesity as a behavioral problem and as the most important factor for the development of the disease, physical inactivity.<sup>10</sup>

Likewise, nutritionists saw obesity as a behavioral and psychological problem. They pointed to physical inactivity as the main 'cause' of the disease, while factors such as metabolic-hormonal changes, financial and social situations and repeated dieting were listed as less important.<sup>9</sup>

Although, in the present study, data were collected from a different professional category compared to the studies mentioned above. The nurses who participated on the research reported physical activity as the most used method for weight loss (n=20), however 85% (n=17) of these continued to be overweight. They also had low agreement with the items 'when fat people exercise they look ridiculous' and 'most fat people are lazy', which indicates the importance of nurses' knowledge about physical activity and its relationship with obesity, in addition to demonstrating relevance of these professionals in the course of treating the disease, for successful results.

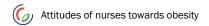
In relation to the discussions above, therefore, the relevance of the role of the physical education professional, who is inserted in public health in primary care, can be highlightened as an important agent of health promotion and quality of life<sup>22</sup> of obese patients. The study developed by Alves Júnior et al.<sup>23</sup> analyzed the perception of these professionals against obesity and they considered themselves responsible for preventing and fighting the disease and promoting quality of life.

In this research, the results indicate that, among nurses who tried to lose weight, 35.7% (n=15) reported nutritional monitoring and that the same frequency followed a diet without monitoring. Araújo, Pena & Freitas<sup>24</sup> found weight loss methods similar to the present study, but mentioned by obese nutritionists, such as the use of medications, fad diets and monitoring by professionals (doctors, nutritionists, among others).

The relationship between diet and obesity is discussed in the literature, with some studies associating the consumption of unhealthy foods, such as 'junkfood' and 'fastfood', with overweight and/or obesity, <sup>25,26</sup> demonstrating poor diet as one of the causes and healthy eating as part of the treatment of obesity. However, obesity must be considered as a multifactorial disease, including genetics, sleep deprivation, psychological stress, endocrine disruption, drugs, among others, as causes. Therefore, obesity is not only conditioned by poor diet and little physical exercise, since body weight and 'fat' mass are regulated by several physiological mechanisms. <sup>27,28</sup> In the current study, the question that obtained the highest average score in the AFAT was 'most fat people buy too much junk food', which may show a simplistic view of obesity.

Similar results to the present research were evidenced in a study with health professionals in a health center. The professionals reported that the lack of 'willpower' hinders the treatment of weight loss and that the obese patient is in this condition due to his inability to control himself. In addition, the obese was seen as relaxed and lazy and who, for moral reasons, should accept the conducts imposed by health professionals.<sup>11</sup> This blaming of the obese was observed in the current study, which obtained the subscale referring to the individual's own fault for being overweight as the highest average.

In a public hospital, nurses described the meaning of caring for obese patients, showing the presence of judgment "[...] when he/she is overweight, way overweight, way above ideal weight. It is beyond his capacity. Being obese is visible. We judge what we see (N5)". In addition, nurses reported that these patients 'work hard' and treating obesity requires teamwork.<sup>29</sup>



In addition, a systematic review showed that doctors considered the treatment of obese people as a 'not easy' task and showed low expectations in relation to the results of the treatment and the adopted procedures. The same work emphasized that the lack of knowledge of these professionals in relation to obesity can favor negative attitudes towards obese patients, impairing the success of the treatment and increasing beliefs about the obese as unmotivated, lazy and without self-control.<sup>30</sup>

Negative attitudes towards obesity were also seen in medical professionals, nurses and nutritionists in Portugal. Doctors were powerless in their patients' adherence to treatment, with low expectations of success, and designated little effort to encourage a change in lifestyle patients' lives, as they thought it was a 'waste of time'. Even with negative attitudes, nurses and nutritionists were concerned with the obesity epidemic and assumed a posture of educators and motivators for obese patients, taking an active position in changing habits and adhering to treatment.<sup>31</sup> Likewise, another integrative review also found stigma related to obesity by health professionals, such as doctors, nurses, nutritionists, pharmacists and physical educators, as well as medical and physical education students.<sup>32</sup>

The lack of understanding of obesity, in some reductionist narratives, in health and in society, promotes the idea that obesity develops due to poor diet and lack of physical exercise and that it is the fault of the individual to be in this condition. This panorama affects the self-image that the individual builds, in addition to impairing his/her self-esteem, self-confidence, generating feelings of guilt, vulnerability, stress, depression and even suicidal thoughts. <sup>27,28</sup>

Social pressure and the application of stereotypes to obese people do not help them in self-care in health. On the contrary, the research shows that the use of these stereotypes can worsen the emotional condition and the treatment of the disease.<sup>33,34</sup> In addition, stigma, when present, can marginalize the obese and generate social and health inequalities.<sup>34</sup>

When assessing the perception of the obese patient about themselves, they reported feeling sick, overweight and with low self-esteem; suffer from depression and anxiety and; that the act of eating was considered a relief from the unpleasant situations they faced because of social exclusion.<sup>7</sup>

North American data revealed that 72% of the images and 77% of the videos broadcasted in the media stigmatize individuals with obesity,<sup>4</sup> with women experiencing greater stigmatization than men and more psychological problems associated with food,<sup>35</sup> because the ads and magazines show always happy, thin women and imposes a standard of beauty.<sup>36</sup>

Most of the participants in this study were women and one of the nurses responded as a method of weight loss, 'trying to control carbohydrates and fats', which can characterize the influence of the media. This conveys information on how to reach the standards considered ideal, involving even abusive practices justified by aesthetic issues.<sup>37</sup>

With the presence of weight stigma and its negative impacts on the health of obese people, this should be considered as one of the main social determinants of health. Therefore, health professionals have a responsibility to act to reduce stigma in health care and social systems. As strategies, the promotion of education on the multiple causes of obesity can be highlighted (social, cultural, psychological and biological), in order to avoid reductionist approaches about this health condition to improve the quality of life and well-being of individuals with obesity.<sup>35</sup>

This study promoted advances for the scientific environment for being innovative when applying the AFAT scale to health professionals (nurses) in Brazil. Still, it is important for public health, since it is shown that the presence of anti-obesity attitudes expressed by professionals can impair adherence and follow-up

of the treatment of obese patients. As limitations of the research, there is the veracity of the nurses' responses, considering the perspective of the experiences of those who are or were obese and those with no presence or history of overweight/obesity; the small sample size and the prevalence of female participants, making it impossible to know the perception of male professionals; however, they are relevant findings. It is recommended to carry out future studies with a larger sample size, including a similar number of participants of both, male and female subjects, in addition to confronting the anti-obesity attitudes of health professionals with the perception of obese patients about the care received from these professionals.

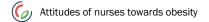
#### **CONCLUSIONS**

The data demonstrated the anti-obesity attitudes of nurses towards obesity, making the individual responsible for their overweight according to their choices, in addition to the stigma that obese individuals buy foods of poor nutritional quality. This kind of stigma allows moral judgments that can reflect on different aspects of the obese life.

For this reason, it is important that health teams understand the mechanisms of stigma and be careful to avoid reproducing it in everyday life. In order for professionals to understand the complexity of obesity, it is proposed to raise their awareness to develop a more humanized and holistic view of the condition of obesity, especially because the eSF is the gateway to the Sistema Único de Saúde (SUS) (National Health Service).

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