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## Bariatric surgery, intersections of gender, race and social class: a cohort study

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### Abstract

**Objective:** To discuss the profile of participants in bariatric surgery concerning the intersections of gender, race and class and the standardization of women's bodies. **Methods:** Cohort with 387 adults undergoing bariatric surgery between 2012 and 2014, in a general hospital in Minas Gerais General. The association between the studied variables was investigated in analyzes stratified by sex, a self-reported category. **Results:** The sample was predominantly composed of females, aged between 31 and 45 years old and brown skin color. There was a statistical difference between skin color, average family income between genders. **Conclusion:** The predominance of female bariatric surgeries is thought to be part of gender relations, which intertwine with race and class relations, forming hierarchies. It becomes necessary to link bariatric surgery, health education and other therapies that refer mainly to the freedom of the body to experience less hierarchical and healthier gender relations.

**Descriptors:** Social class; Gender and Health; Socioeconomic Factors; Ethnic Origin and Health; Women's Health.

## INTRODUCTION

Gender concerns knowledge that establishes meanings for bodily differences; it is a social construction that varies between cultures, social groups and time<sup>1</sup>. Western culture has historically distinguished anatomical reproductive bodily variations, as being male and female, in binary form. Sex was linked to a series of social meanings, giving space to the social creation of women and men. Gender relations are constituted in this way, in a reductionist way, based on a "biological determinism", still marked by the asymmetry of power and male domination. People's experiences are structured by and in gender relations, which are associated with race, class, generational relationships, among others. The category "intersectionality" proposes the analysis of the social context, in order to integrate the multiple dimensions of relationships<sup>2</sup>.

Social relations, in turn, are permeated by meanings about the body, and vice versa. Different meanings are attributed to the body of the black thin woman, when compared to the body of the black obese woman, as well as to the body of the white woman - which also lead to inequalities and prejudices. In contemporary Western societies, body image is central to the aesthetic, health, well-being and social status standard<sup>3</sup>. The concept of the body as an object of private property, in which everything is possible, omits the imposition of standards for body image and the problem of the subjects as executors of the consumption norms in their

own bodies<sup>4</sup>. In this way, an obligation on the female body is exacerbated, which must be healthy, young and beautiful, which has resulted in the increase of body projects, such as surgical interventions. There is also an obsessive search for a standard of beauty, which often ends up blurring the fine line between care that benefits the body and the emergence of diseases<sup>3,5</sup>.

The standard of beauty associated with a slim body is a recent event and, at various times in history, weight gain was considered a sign of good health, valued in women at the time<sup>6</sup>. Nowadays, the current cultural standards lead to individuals with healthy biotypes to perceive their weight in addition to the healthy one, directly affecting the perception of body image<sup>6-7</sup>. It is known that the body image formation process is complex, dynamic and influenced by characteristics, such as sex, age, media, professional discourse and attitudes inserted in the culture<sup>6,8</sup>.

In Brazil, the predominant aesthetic culture, the body, especially the young, "the standard", "sexy" and especially the slim one, is considered a means of social ascension, besides being an important capital in the work, of marriage and sexual market<sup>9</sup>.

The high prevalence of obesity, evidence the social, economic and cultural problems faced by countries considered to be middle and low income, as well as by specific groups, such as ethnic minorities<sup>10</sup>. It is a health problem of complex and multifactorial etiology, resulting from several factors that are related, such as the interaction of genes, context, lifestyles and

emotional factors, which can lead individuals to social and psychological problems<sup>11</sup>. In Brazil, more than half of the population is overweight, with the prevalence of overweight being 57.7% in men and 50.5% in women<sup>12</sup>. In 2017, the proportion of obese people in the Brazilian population grew 60% in the period from 2006 to 2016<sup>12</sup>.

Bariatric surgery, also known as gastroplasty or obesity surgery, has spread as a possible way to control the problem of obesity<sup>13</sup>. As noted, the prevalence of overweight is higher among men. However, when comparing the search for bariatric surgery, the difference is significant between men and women. One author shows that of all obese patients in the preoperative period for bariatric surgery, 80% were female<sup>14</sup>. It is noteworthy that gastroplasty, despite being considered the most effective path of the disease in the long run, cannot be considered a simple decision, as it is surrounded by fear, added to the countless family and individual "pressure", resulting in anguish and anxiety<sup>14</sup>. In this context, and given the scarcity of studies on this topic, the present study aimed to discuss the profile of participants in bariatric surgery from the intersections of gender, race and class and the standardization of women's bodies.

## **METHOD**

This is a prospective cohort study guided by the STROBE tool carried out with 387 adults and elderly patients who underwent bariatric surgery in the years

2012 to 2014, in a private General Hospital located in the city of Contagem, Minas Gerais, Brazil.

Data collection was carried out by previously trained nurses and was divided into two stages. All patients who underwent bariatric surgery at this hospital between the period 2012 to 2014 were considered eligible. The first stage took place through a semi-structured questionnaire prepared by the researchers, and used as data source the records in the electronic medical records of all patients who underwent bariatric surgery in the years 2012 to 2014. In this questionnaire there were sociodemographic and clinical variables.

In the second phase that subsequently began the performance of bariatric surgery in December 2015, data were collected through telephone interviews with patients (in the first, second, third and fourth year after the operation). In the initial part of the interview, data related to information before the surgical procedure was recorded, then information was collected after the surgical procedure was carried out, and the final part of the interview refers to information about what patients think of their life in relation to the past two weeks. The researchers stipulated a three-month period for making calls. This step was also performed by previously trained nurses and was standardized when there was a failure on the first call attempt, a return call at alternate times (morning, afternoon and night) and alternate days (working days and weekends).

In this study, sociodemographic, epidemiological and lifestyle variables were assessed. Regarding the categorization of variables, for self-reported skin color, the classification according to the Brazilian Index of Geography and Statistics (IBGE) was used, which corresponds to the colors: white, black (black), brown, yellow, indigenous (red), all self-reported. Age was subdivided into the following age groups: 18 - 30 years; 31 - 45 years; 46 - 60 years and 61 years or older. Education was defined according to the number of completed years of schooling (1 to 3 years, 4 to 7 years, 8 to 10 years, 11 to 14 years and above 15 years of schooling). The average family income was defined based on the minimum wage at the time, which was seven hundred and eighty-eight reais (R\$788.00).

The data obtained were processed and analyzed using the Statistical Software program (Stata), version 14.0 (StataCorp, Texas, USA). For the descriptive analysis of the data, tables of distribution of absolute and relative frequencies of the studied variables were presented. The association between variables was investigated in bivariate analyzes, stratified by sex. Fisher's exact test was used to compare proportions and verify associations and, for variables with more than two categories that had a statistical difference in this test, an analysis with Bonferroni correction was performed, in order to avoid type I errors derived from multiple comparisons. The level of significance corrected after this procedure was  $p < 0.0083$ . The significance level of 0.05 was adopted in all analytical

procedures, except for Bonferroni correction. The results were presented using tables and graphs.

Concerning the qualitative analysis of the data collected in the data collection questionnaires in the electronic medical records and in the telephone interviews, discussions were carried out in the intersectional feminist field, which allows an integrated approach to the relations of gender, class and race. Among these, the productions related to the theme body and obesity stood out.

The study was approved by the Research Ethics Committee of the Federal University of Minas Gerais (CAAE 52657115.2.0000.5149) and opinion number 1,503,789. All participants gave their consent verbally over the phone, according to the ethical guidelines described in Resolution No. 466, of December 12, 2012, of the National Health Council, which involve research with human beings. It is worth mentioning the signing of the Free and Informed Consent Term (ICF) was waived, as the second phase of the research took place by telephone, making it impossible to sign them.

## **RESULTS**

Among the total patients in this study, 87.60% were female; the majority were brown (49.84%); between 31 and 45 years old (53.49%); had 11 to 14 years of schooling (32.57%) and had an average family income of 1 to 3 minimum wages (54.79%). Regarding the practice of physical activity, almost 70.00% of the

sample did not have a regular practice (Table 1).

**Table 1-** Profile of people undergoing bariatric surgery - Contagem, Minas Gerais, Brazil, 2016

Variáveis	n	%
<b>Sex</b>		
Male	48	12.40
Female	339	87.60
<b>Skin color</b>		
White	102	33.22
Black	46	14.98
Brown	153	49.84
Yellow/ Indigenous	6	1.96
<b>Age group(years)</b>		
18 - 30	110	28.42
31 - 45	207	53.49
46 - 60	64	16.54
≥ 61	6	1.55
<b>Schooling(years of study)</b>		
1 to 3	6	1.97
4 to 7	66	21.71
8 to 10	62	20.39
11 to 14	99	32.57
≥15	71	23.36
<b>Average family salary</b>		
No salary up to 1 minimum salary	28	9.59
1 to 3 minimum salaries	160	54.79
>3 to 5 minimum salaries	69	23.63
> 5 minimum salaries	35	11.99

Source: Prepared by the authors.

Table 2 shows the variables according to sex. There was a significant difference between skin color and average family income, both according to sex. As for the skin color variable, 52.63% of the male population consisted of white men, and in

the female population, 51.30% were brown and 16.36% black. The average family income predominant in the female population, was 1 to 3 minimum wages (57.65%) and 3 to 5 minimum wages (43.24%) in the male population.

**Table 2 -** Variables according to sex - Contagem, Minas Gerais, Brazil, 2016

Variables	Sex		P value
	Male n (%)	Female n (%)	
Skin color**			<b>0.027*</b>
White <sup>A</sup>	20 (52.63)	82 (30.48)	
Black <sup>B</sup>	2 (5.26)	44 (16.36)	
Brown <sup>C</sup>	15 (39.47)	138 (51.30)	

Yellow/ Indigenous <sup>D</sup>	1(2.63)	5 (1.86)	
Age group			0.246
18 - 30 years	18 (37.50)	92 (27.14)	
31 - 45 years	20 (41.67)	187 (55,16)	
46 - 60 years	9 (18.75)	55 (16.22)	
≥61 years	1 (2.08)	5 (1.47)	
Schooling(years of study)			0.632
1 to 3 years	-	6 (2.25)	
4 to 7 years	5 (13.51)	61 (22.85)	
8 to 10 years	8 (21.62)	54 (20.22)	
11 to 14 years	13 (35.14)	86 (32.21)	
≥15 years	11 (29.73)	60 (22.47)	
Average family income***			<b>0.004*</b>
No salary up to 1 minimum salary <sup>A</sup>	1 (2.70)	27 (10.59)	
1 to 3 minimum salaries <sup>Bc</sup>	13 (35.14)	147 (57.65)	
>3 to 5 minimum salaries <sup>Cb</sup>	16 (43.24)	53 (20.78)	
> 5 minimum salaries <sup>D</sup>	7 (18.92)	28 (10.98)	

Source: Prepared by the authors.

**Notes:** \* p-value in bold  $\leq 0.05$ ;

\*\*  $p \leq 0.05$  (post hoc associated with Bonferroni correction,  $p < 0.0083$ ). A priori, each category receives a capital letter. The lower case letters symbolize a statistically significant difference between the categories, with no difference being observed after correction. It is assumed that the difference found by Fisher's exact test is a type 1 error.

\*\*\*  $p \leq 0.05$  (post hoc associated with Bonferroni correction,  $p < 0.0083$ ). A priori, each category receives a capital letter. The lowercase letters symbolize a statistically significant difference between categories B and C ( $p = 0.002$ ).

Regarding the professions exercised by the patients, the distribution of the most prevalent in the sample according to the female sex were: Teacher (3.75%),

Salesperson (3.75%), Telemarketing Attendant (4.82%) and Do Lar (16.09%) (data not shown).

## DISCUSSION

The result of this research showed that the majority of patients who sought bariatric surgery were female, brown, adult, with an income of 1 to 3 minimum wages and with more than 8 years of schooling. The predominance of female bariatric surgeries is thought to be part of gender relations, which intertwine with the relations of race, social class and

generation, configuring hierarchies. There is a significant difference in gender and race among people who seek bariatric surgery. Considering that the prevalence of the condition (overweight) is higher among men and that, when comparing the search for bariatric surgery, the difference is significant between men and women, it is important to reflect on a greater search for bariatric surgery in women with the previously mentioned profile.

It is known that beauty standards can lead to social distinction and differences<sup>5</sup>. Especially in Brazil, there is a change in the standard of socially accepted beauty, due to economic, social and political changes. In addition to this there is prejudice attributed to the condition of the obese person, in which thinness assumes the role of success, competence, self-control and female sexual attractiveness<sup>5</sup>.

This discrepancy in the search for surgical intervention is worrying, since body dissatisfaction may result from several prejudices regarding overweight and obesity, experienced in the social environment<sup>15-17</sup>. This context is worsened by the fact that obese people are less likely to attend shorter periods of school years<sup>18</sup>. In addition, there is a cascade of exclusion, in which overweight women find it more difficult to find jobs and, consequently, jobs with good salaries in relation to the others<sup>5</sup>.

Aesthetics is undoubtedly among the main objectives of the candidates for surgical performance<sup>18</sup>. Stigmas and, consequently, prejudice, aesthetics of the obese person, can be perceived through comments, looks, insults and, often, aggressions that, in a way, embarrass them<sup>19</sup>.

Nowadays, society values physical appearance a lot. Thus, it becomes natural that, in the face of social stigma, prejudice and embarrassment, the search for some solution that motivates the individual to choose bariatric surgery<sup>19-20</sup>. This surgery ends up assuming the role of enabling social reinclusion<sup>16,19</sup>.

In Brazil, in 2006, it was observed that overweight was increased in non-white women<sup>21-23</sup>. It is noteworthy that, when articulating sex and race, it is evident not only for the historical differences between men and women, but for specific groups, such as: white and black women and white and black men, assuming that race and gender still explain the countless social inequalities<sup>24</sup>. Considering sex and race, there is discrimination in the labor market<sup>25</sup>. A decrease is identified in relation to wages, where white men receive higher wages, followed by black men, white women and black women, who have the lowest wages<sup>25</sup>. In the case of Brazil, being a woman and, in particular, white and black women, conditions less prestigious occupations to the subject and puts them in poor working conditions<sup>2</sup>.

As for the economic class, it was found that most women are classified in a lower class, unlike the male population. This data corroborates findings in the literature, which show a negative correlation between socioeconomic status and overweight, especially in women<sup>26</sup>. It is observed that due to globalization, the distribution of overweight among populations begins to be perceived in demographic and socioeconomic strata said to be privileged<sup>27</sup>. Given this context, public policies are essential to tackle overweight and obesity, and to be equitable policies for subjects with low education and with less access to health services<sup>28</sup>.

Finally, from the sample studied, working "at home" was the predominant occupation for women. Women are the most

affected population group, since they have lower chances of competing in the labor market, due to the large part of their time being engaged in unpaid services and configuring themselves in the current social conformation as people considered as caregivers of the "family" <sup>29</sup>. Considering the predominant gender, one can reflect on the factors that can also lead, in this category, to a greater search for the performance of the surgical procedure: the search for the perfect body or for an ideal of beauty imposed by society, more characteristic of the female sex, or the higher prevalence of physical and psychological comorbidities<sup>30</sup>.

## REFERENCES

1. Carvalho MP. O conceito de gênero: uma leitura com base nos trabalhos do GT Sociologia da Educação da ANPEd (1999 - 2009). Rev Bras Educ [Internet]. 2011 [cited 2019 out. 18];16(46):99-117. DOI: <http://dx.doi.org/10.1590/S1413-24782011000100006>.
2. Hirata H. Gênero, classe e raça: interseccionalidade e consubstancialidade das relações sociais. Tempo Soc [Internet]. 2014 [cited 2019 out. 18]; 26(1): 61-73. DOI: <http://dx.doi.org/10.1590/S0103-20702014000100005>
3. Lima AF, Batista KA, Junior NL. A ideologia do corpo feminino perfeito: Questões com o real. Psicol estud [Internet]. 2013[cited 2019 out. 18]; 18(1): 49-59. DOI: <http://dx.doi.org/10.1590/S1413-73722013000100006>
4. Ramos C. Consumismo e gozo: uma compreensão de ideologia entre T.W. Adorno e J. Lacan. Psicol USP [Internet]. 2008 [cited 2019 out. 18]; 19(2):199-212. DOI:

## CONCLUSION

Therefore, the predominance of female bariatric surgeries is thought of as part of gender relations, given its socio-cultural characterization. Among the meanings, expectations and taboos socially related to the female gender, a specific body is expected, characterized by slim bodies and youthful white skin, for example. Finally, it is necessary to combine bariatric surgery with the care practices, health education and other therapies that mainly refer to a freedom of experience and experimentation of the body that generates less hierarchical and healthier gender relations.

5. Oliveira LL, Hutz SH. Transtornos alimentares: O papel dos aspectos culturais no mundo contemporâneo. Psicologia em estudo [Internet]. 2010 [cited 2019 out. 18]; 15(3):575-82. DOI: <http://dx.doi.org/10.1590/S1413-73722010000300015>
6. Nozaki VT, Rossi NM. Imagem Corporal: Cirurgia Bariátrica. Rev Saúde Pesq. [Internet] 2010 [cited 2018 jan. 22]; 3(2): 185-91. Available from: <http://periodicos.unicesumar.edu.br/index.php/saudpesq/article/view/737/1101>
7. Damasceno VO, Lima JRP, Vianna JM, Vianna VRA, Novaes JS. Tipo físico ideal e satisfação com a imagem corporal de praticantes de caminhada. Rev Bras Med Esporte [Internet]. 2005 [cited 2019 jan. 22]; 11(3): 181-6. DOI: <http://dx.doi.org/10.1590/S1517-86922005000300006>
8. Costa ACC, Ivo ML, Cantero WB, Tognini JRF. Obesidade em pacientes candidatos a cirurgia bariátrica. Acta Paul Enferm[Internet]. 2009 [cited 2019 jan. 22]; 22(1): 55-9. DOI: <http://dx.doi.org/10.1590/S0103-21002009000100009>

9. Goldenberg M. Corpo, envelhecimento e felicidade na cultura brasileira Body, aging and happiness in Brazilian culture. *Contemporânea* [Internet]. 2011 [cited 2019 jan. 22];9(2):77-85. DOI: <https://doi.org/10.12957/contemporanea.2011.2143>
10. Associação Brasileira para o Estudo da Obesidade e da Síndrome Metabólica (ABESO). *Diretrizes Brasileiras de obesidade 2009/2010* [Internet]. 3.ed. Itapevi: AC Farmacêutica; 2009 [cited 2017 nov. 23]. Available from: [http://www.abeso.org.br/pdf/diretrizes\\_brasileiras\\_obesidade\\_2009\\_2010\\_1.pdf](http://www.abeso.org.br/pdf/diretrizes_brasileiras_obesidade_2009_2010_1.pdf)
11. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância de Doenças e Agravos não Transmissíveis e Promoção da Saúde. Brasília; 2017.
12. Lenz M, Richter T, Mühlhäuser I. The morbidity and mortality associated with overweight and obesity in adulthood: a systematic review. *Dtsch Arztebl Int* [Internet]. 2009 [cited 2019 out. 18]; 40(106): 641-8. DOI: <http://dx.doi.org/10.3238/arztebl2009.0641>
13. Scabim VM, Eluf-Neto J, Tess BH. Adesão ao seguimento nutricional ambulatorial pós-cirurgia bariátrica e fatores associados. *Rev Nutr* [Internet]. 2012 [cited 2019 out. 18]; 25(4): 497-506. DOI: <http://dx.doi.org/10.1590/S1415-52732012000400007>
14. Silva SS, Maia AC. Obesity and treatment meanings in bariatric surgery candidates: a qualitative study. *Obes Surg* [Internet]. 2012 [cited 2019 out. 18]; 22(11): 1714-22. DOI: <http://dx.doi.org/10.1007/s11695-012-0716-y>
15. Allison DB, Downey M, Atkinson RL, Billington CJ, Bray GA, Eckel RH, et al. Obesity as a disease: a white paper on evidence and arguments commissioned by the Council of The Obesity Society. *Obesity* [Internet]. 2008 [cited 2019 out. 18]; 16(6): 1161-77. DOI: <http://dx.doi.org/10.1038/oby.2008.231>
16. Moliner J, Rabuske MM. Fatores biopsicossociais envolvidos na decisão de realização da cirurgia bariátrica. *Psicologia Teor Prat* [Internet]. 2008 [cited 2018 abr. 22]; 10(2): 44-60. Available from: <http://pepsic.bvsalud.org/pdf/ptp/v10n2/v10n2a04.pdf>
17. World Health Organization. Obesity: preventing and managing the global epidemic [Internet]. Geneva: WHO; 2004 [cited 2017 Nov 27]. Available from: [http://www.who.int/nutrition/publications/obesity/WHO\\_TRS\\_894/en/](http://www.who.int/nutrition/publications/obesity/WHO_TRS_894/en/)
18. Castro MR, Carvalho RS, Ferreira VN, Ferreira MEC. Função e Imagem Corporal: Uma análise a partir do discurso de mulheres submetidas à cirurgia bariátrica. *Rev Bras Ciênc Esporte* [Internet]. 2010 [cited 2019 out. 18]; 33(2-4): 167-83. DOI: <http://dx.doi.org/10.1590/S0101-32892010000200012>
19. Oliveira DM, Merighi MAB, Jesus MCP. A decisão da mulher obesa pela cirurgia bariátrica à luz da fenomenologia social. *Rev Esc Enferm USP* [Internet]. 2014 [cited 2019 out. 18]; 48(6): 970-6. DOI: <http://dx.doi.org/10.1590/S0080-623420140000700002>.
20. Marchesini, JB. A história da cirurgia bariátrica e das equipes multidisciplinares: os psicólogos. In: Franques ARM, Loli, MAS (organizador). *Contribuições da psicologia na cirurgia da obesidade*. São Paulo: Vetor; 2006. p.13-21
21. Gigante DP, Moura EC, Sardinha LMV. Prevalência de excesso de peso e obesidade e fatores associados, Brasil, 2006. *Rev Saúde Pública* [Internet]. 2009 [cited 2019 out. 18]; 43(2): 83-9. DOI: <http://dx.doi.org/10.1590/S0034-89102009000900011>
22. Mokdad AH, Ford ES, Bowman BA, Dietz WH, Vinicor F, Bales VS, et al. Prevalence of obesity, diabetes, and obesity-related health risk factors. *JAMA* [Internet] 2003 [cited 2017 Nov 27]; 289(1): 76-9. Available from: <https://pdfs.semanticscholar.org/e6fd/31f3d479513951aabe127c259792a295a5bb.pdf>
23. Silva VS, Petroski EL, Souza I, Silva DAS. Prevalência e fatores associados ao excesso de peso em adultos no Brasil: Um estudo de base populacional em todo território nacional. *Rev Bras Ciênc Esporte* [Internet]. 2012 [cited 2019 out. 18]; 34(3): 713-26. DOI: <http://dx.doi.org/10.1590/S0101-32892012000300013>

24. Guimarães NA, Britto MMA. "Genre, race et trajectoires professionnelles: une comparaison São Paulo et Paris". In: Costa AO, Sorj B, Bruschini C, Hirata H (organizador). Mercado de trabalho e gênero: comparações internacionais. Rio de Janeiro: Editora FGV; 2008, p.69-87
25. Cacciamali MC; Hirata GI. A influência da raça e do gênero nas oportunidades de obtenção de renda - uma análise da discriminação em mercados de trabalho distintos: Bahia e São Paulo. Est Econ [Internet]. 2005 [cited 2019 out. 18]; 35(4): 767-95. DOI: <http://dx.doi.org/10.1590/S0101-41612005000400007>.
26. Pinheiro MM, Oliveira JS, Leal VS, Lira PIC, Souza NP, Campos FACS. Prevalência do excesso de peso e fatores associados em mulheres em idade reprodutiva no Nordeste do Brasil. Rev Nutr [Internet]. 2016 [cited 2019 out. 18]; 29(5): 679-89. DOI:<http://dx.doi.org/10.1590/1678-98652016000500006>.
27. Araújo VCD, Konrad LM, Rabacow FM, Graup S, Amboni R, Farias Junior JCD. Prevalência de excesso de peso em adolescentes brasileiros: um estudo de revisão sistemática. Rev Bras Ativ Fis Saúde [Internet]. 2012 [cited 2018 jan. 22]; 12(3): 79-87. Available from:[http://rbafs.emnuvens.com.br/RB\\_AFS/article/view/825/832](http://rbafs.emnuvens.com.br/RB_AFS/article/view/825/832)
28. Silva VS, Petroski EL, Souza I, Silva DAS. Prevalência e fatores associados ao excesso de peso em adultos no Brasil: Um estudo de base populacional em todo território nacional. Rev Bras Ciênc Esporte [Internet]. 2012 [cited 2019 out. 18]; 34(3): 713-26. DOI: <http://dx.doi.org/10.1590/S0101-32892012000300013>
29. Giffin K, Dantas-Berger SM. Violência de gênero e sociedade de risco: uma abordagem relacional. In.: Taquette SR, organizadora. Violência contra a mulher adolescente/jovem. [Internet]. Rio de Janeiro: EDUERJ; 2007 [cited 2018 mai. 10]. Available from: <http://portaltj.tjrj.jus.br/documents/10136/3936438/violencia-genero.pdf>
30. Porcu M, Franzin R, Abreu PB, Previdelli ITS, Astolfi M. Prevalência de transtornos depressivos e de ansiedade em pacientes obesos submetidos à cirurgia bariátrica. Acta Scientiarum [Internet]. 2011[cited 2019 out. 18]; 33(2): 165-71. DOI: <http://dx.doi.org/10.4025/actascihealthsci.v33i2.7653>

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