



Body image in prison: perceptions of imprisoned women

Imagem corporal no cárcere: percepções de mulheres privadas de liberdade

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Abstract

Objective: To evaluate the perception of body image among imprisoned women in relation to the current body size, body before imprisonment, and the ideal body. **Methodology:** A cross-sectional study carried out with 149 female prisoners from Natal, State of Rio Grande do Norte, Brazil. The perception of body image was assessed using a figure rating scale validated for Brazilian people, containing 15 silhouette figures and their respective values of body mass index. Each participant indicated the figure reflecting her current body size (at the time of the interview), her body before incarceration, and the body she would like to have. The analysis of the concept of ideal body and the perception of changes in their bodies after imprisonment was performed using the chi-square test, considering p-value <0.05 for statistical significance. **Results and discussion:** Half of prisoners perceived themselves to be obese (50.3%) or overweight (26.8%). Regarding the desired body, 83.8% would like to be overweight, and 40% of obese women wanted to maintain their body size or even increase it. Thus, it was found that body image and ideal body in prison environment are very complex issues, going beyond the slim beautiful body traditionally desired by most women. **Conclusion:** The high proportion of female convicts who are overweight and who yearn for even more robust bodies points to the need to intensify health actions; further research within the scope of Social and Human Sciences; as well as qualified healthcare professionals to work in these institutions.

Keywords: Prisons. Women's Health. Body image. Nutritional Status.

Resumo

Objetivo: avaliar a percepção da imagem corporal em mulheres privadas de liberdade em regime fechado em relação ao corpo atual, corpo antes do encarceramento e corpo ideal. **Metodologia:** Estudo transversal, desenvolvido com 149 reclusas em regime fechado em Natal, Rio Grande do Norte, Brasil. A imagem corporal foi avaliada a partir de uma escala de figuras de silhuetas validada para brasileiros, contendo 15 figuras e seus respectivos valores de índice de massa corporal. Cada participante apontou qual figura refletia seu corpo atual (no momento da entrevista), seu corpo antes da reclusão e o corpo que gostaria de ter. As análises referentes ao conceito de corpo ideal e à percepção de mudança no corpo após a reclusão foram realizadas por meio do teste qui-quadrado, considerando-se o p-valor <0,05 para significância estatística. **Resultados e discussão:** Metade das reclusas percebeu-se como obesa (50,3%) ou sobrepeso (26,8%). Em relação ao corpo desejado, 83,8% almejam estar acima do peso, e 40% das mulheres obesas desejam manter o tamanho do corpo ou ainda aumentá-lo. Desse modo, evidenciou-se que a imagem corporal e do referencial de corpo ideal no ambiente do cárcere é muito complexa, indo para além de um corpo belo e esguio tradicionalmente desejado pela maior parte das mulheres. **Conclusão:** A elevada proporção de mulheres privadas de liberdade com excesso de peso e que anseia por corpos ainda mais robustos aponta para a necessidade de intensificação nas ações de saúde, aprofundamento das investigações no âmbito das Ciências Sociais e Humanas, bem como da qualificação dos profissionais de saúde para atuação nesses espaços.

Palavras-chaves: Prisões. Saúde da mulher. Imagem corporal. Estado Nutricional.

Introduction

In contemporary society, the ideal of the female body has been increasingly associated with thinness, muscularity, beauty and happiness.¹² Therefore, considering the intangible challenge posed by such beauty patterns to the majority of the people, an increasing number of studies show a high rate of body image distortion and dissatisfaction, especially among females.³⁻⁶

In women, the greatest concern with body image is related to environmental and cultural factors, such as media influence, income and education.⁷⁻⁹ This process heightens the urge to control adiposity and sculpt the muscles, the workout frequency, the number of plastic surgeries, among other behaviors.¹⁰

However, unlike women living in this society, women deprived of their liberty are exposed to other factors that may influence their perception and their body satisfaction. Taking into account the particularities and difficulties imposed by the prison environment, this population lives in another social context, in which standards and references regarding a “normal”, “suitable” and even “desirable” body are established.¹¹

This scenario has been increasingly worrying, since Brazil has the third largest prison population in the world, with an occupancy level of 197.4% in the country’s prison units.¹² Although at the national level the proportion of women deprived of their liberty (6.4% in 2014) is lower than the proportion of men in the same situation, the growth of the female population in the Brazilian prison system is considered alarming, with an increase rate of 567% between 2000 and 2014. In the State of Rio Grande do Norte, the growth percentage was 138% between 2007 and 2014, and 6.4% of the prison population in the State are women.¹³

Problems related to body image may result in low self-esteem, depression, anxiety, adoption of inappropriate eating behaviors, somatoform disorders, use of laxatives, metabolic imbalance, among other conducts.^{7,10} In the prison environment, body image distortion and dissatisfaction may have additional effects for the convicts facing this reality, such as the development and/or aggravation of chronic non-communicable diseases (CNCD), especially obesity. It may also favor inadequate weight control practices, self-abandonment, among other conditions that usually become even more severe due to the confinement.¹⁴

In-depth studies on body image in prison units can provide support to prison managers and healthcare professionals, aiming at improving of the quality of life of these women, and minimizing the effects of the prison environment on their health and their re-socialization process after release. Thus, the present study aimed at evaluating the perception of body image of women deprived of their freedom in a closed prison regime, in a Brazilian Northeast capital regarding their body at the present time, their body before incarceration and the ideal body.

Materials and Methods

This cross-sectional descriptive study was carried out with the female population in a closed regime, serving sentences at the women’s ward of a Prison Complex located in Natal, State of Rio Grande do Norte, Brazil. Among the 33 prison units located in the State of Rio Grande do Norte, only four have a women’s pavilion, three of which are for female convicts in a closed regime (Natal, Caicó and Mossoró) and one (Parnamirim) for women awaiting trial and, thus, the time they remain in confinement is variable.

All women serving a sentence in the prison complex were considered eligible, regardless of age group and time in prison. Pregnant women, breastfeeding mothers, females with physical disabilities or diseases that could interfere with the evaluation of the body image, and detainees that, for some reason, were placed in a secluded area were deemed ineligible. Those who during field data collection changed their prison regime to semi-open or engaged in prison rehabilitation (released) were excluded from this study.

Data collection took place between January 2015 and April 2016, on days and times established by the prison complex management team. Interviews were conducted using a questionnaire with closed and open questions addressing socioeconomic and demographic aspects (age, marital status, education level, regularity of visits, household income per capita and period of confinement).

The perception of the body image (BI) of the detainees was investigated through a standardized, validated and established Figure Rating Scale (FRS), applied to evaluate the BI of Brazilian people.¹⁵ The scale is composed of 15 female silhouette figures ranging from the most slender (extreme thinness) to the largest (morbid obesity), with their respective values of body mass index (BMI). During the interview, when viewing the images, the participants chose the figure that reflected their current body size (at the time of the interview), the one related to their body size before imprisonment and the image indicating the body they would like to have.

For data analysis, BMI values of the figures indicating the body size before confinement, the current body size and the ideal one were classified according to the cut-off points adopted by the Ministry of Health (underweight, eutrophia, overweight, obesity).

Data typing was performed in duplicate and validated using Epidata 3.1 software. Statistical analysis was performed using the SPSS software version 20.0, presenting the frequencies of the categorical variables and the means and standard deviation of the continuous variables. The analysis of the concept of ideal body and perception of body changes after imprisonment was performed using the chi-square test, considering the value of $p < 0.05$ for statistical significance, followed by *post-hoc* analysis.

The study entailed minimal risks for the detainees and was authorized by the Department of Justice and Citizenship of the State of Rio Grande do Norte, and by the prison management team. It was approved by the Research Ethics Committee of the Faculty of Health Sciences of Trairi, Federal University of Rio Grande do Norte - UFRN (CAAE:38714714.0.0000.5568, protocol 928.144). All procedures were performed only after the Informed Consent Form (ICF) was signed by the participants.

Results

Of the 186 eligible women present in the prison complex throughout data collection process, 24 refused to participate in the research, seven were transferred to a different prison, four were released before data collection and two were pregnant, totaling 149 participants (loss of 19.9%).

Almost half of the women was under the age of 30 years (47.9%) and had a household income per capita of less than 0.25 minimum wages (58.7%). Most of them were in prison for less than a year (40.9%) and did not receive regular visits (49.6%) (Table 1).

Through the FRS, it was observed that at the time of the interview, approximately half of the participants perceived themselves to be obese (50.3%) or overweight (26.8%), with a mean BMI of 30.28 Kg/m². Most women reported that before imprisonment they had a body size in the overweight (38.3%) or obesity (30.9%) categories, that is, 69.2% considered themselves to be overweight, with a mean BMI of 27.19 Kg/m² (Table 2).

When asked about the desired body, 83.8% of the women indicated the fat silhouette figures as the ideal body, with a mean BMI of 27.83 Kg/m² (Table 2).

When investigating perceptions of body changes since the beginning of the period of imprisonment in relation to body size to the time of the interview (Table 3), it was found that weight gain was significantly higher among obese females (84%), when compared to non-obese women. The proportion of women showing a decrease in body size was similar among underweight, eutrophia and overweight participants, and significantly lower in obese women ($p < 0.01$).

Although most women showed a desire for a larger-sized body than the current one, such behavior was significantly stronger in the eutrophic participants, who would like to have an overweight silhouette (88.2%). A great proportion of obese women also wanted to maintain their obese body or to have a body even larger than the one they had at the moment of the interview (40%), as shown in Table 3.

Table 1. Socioeconomic and demographic characteristics of the female prison population. Natal-RN, 2015/2016.

Variable	n	%
Age group	146	98.0
< 30 years old	70	47.9
30-50	70	47.9
> 50 years old	6	4.1
Marital status	146	98.0
Single / Separated / Widow	104	71.2
Married / Lives with a partner	42	28.8
Education	109	73.1
Can read and write / elementary school	75	68.8
Secondary school / higher education	32	29.4
Graduate school	2	1.8
Household income <i>per capita</i>	63	42.3
<0.25 minimum wages	37	58.7
0.25-0.50 minimum wages	17	27.0
>0.50 minimum wages	9	14.3
Time in prison	132	88.5
<12 months	54	40.9
12-24 months	50	37.9
>24 months	28	21.2
Receives regular visits	133	89.3
Does not receive	66	49.6
Receives sporadic visits	23	17.3
Receives regular visits	44	33.1

Table 2. Body self-concept before incarceration, current body size and ideal body of female prison population. Natal-RN, 2015/2016.

Variable	n	%
Current body size	149	100
Underweight	17	11.4
Eutrophia	17	11.4
Overweight	40	26.8
Obesity	75	50.3
Body before incarceration	149	100
Underweight	21	14.1
Eutrophia	25	16.8
Overweight	57	38.3
Obesity	46	30.9
Ideal body (or desired body)	148	99.3
Underweight	7	4.7
Eutrophia	17	11.5
Overweight	79	53.4
Obesity	45	30.4
Variable	Mean	SD
Perception of the body before incarceration (BMI in kg/m ²)	27.19	8.13
Perception of the current body size (BMI in kg/m ²)	30.28	8.31
Perception of the ideal body (BMI in kg/m ²)	27.83	5.09

Table 3. Perceptions and desires regarding the body in the female prison population, according to the current body size. Natal- RN, 2015/2016.

Variable	Current body size n (%)				p-value*
	Underweight n (%)	Eutrophia (%) n (%)	Overweight n (%)	Obesity n (%)	
Changes in body size since the beginning of the incarceration period	17	17	40	75	<0.01
Increased body size	4 (23.5%) ^b	7 (41.2%) ^b	19 (47.5%) ^b	63 (84.0%) ^a	
Decreased body size	10 (58.8%) ^a	9 (52.9%) ^a	17 (42.5%) ^a	10(13.3%) ^b	
Stable body size	3 (17.6%) ^a	1 (5.9%)	4 (10.0%)	2 (2.7%) ^b	
Desired body size	16	17	40	75	<0.04
Underweight	2 (12.5%)	0 (0.0%)	2 (5.0%)	3 (4.0%)	
Eutrophia	4 (25.0%) ^a	1 (5.9%)	4 (10.0%)	8 (10.7%) ^b	
Overweight	7 (43.8%) ^b	15 (88.2%) ^a	23 (57.3%) ^b	34 (45.3%) ^b	
Obesity	3 (18.8%)	1 (5.9%) ^b	11 (27.5%)	30 (40.0%) ^a	

Discussion

The present study unprecedentedly highlighted the perceptions and desires regarding the body size of women deprived of their liberty: most of them perceived themselves to be overweight and considered the ideal body the overweight silhouette. The desire for an overweight body was significantly higher among eutrophic women.

These results, which go in a diametrically opposite direction to what is observed in women living in our society, raise several questions and point out the importance to pay special attention to the inclusion of such complex outcomes in actions geared towards promoting health education programmes targeted at people held in prison, aiming at reducing health inequities observed in the prison system.

According to other studies carried out in Brazil,^{13,16,17} the participants of this study are young, with bre education attainment and low household income. The association of such factors with precarious access to health professionals, as well as measures to prevent and control health problems, makes this population even more vulnerable to physical and mental illnesses.^{17,18}

When the question regarding perception of their current body size was applied, most of the convicts perceived themselves to be obese or overweight (77.1%). This profile is in line with the high prevalence of overweight in the female prison population worldwide.¹⁹⁻²²

According to the results obtained in the present study, other investigations have reported weight gain during incarceration.²³ Khodabakhshifard et al.²⁴ also found that post-incarceration weight gain is more prevalent among women than among men, a trend also observed by Gates and Bradfort.²⁵ This phenomenon may be associated with a sedentary lifestyle, without work activities or recreational and physical activities, as well as inadequate food intake and the use of atypical antipsychotic medications.²⁵

The perception of an increase in the body size during incarceration may also be associated with anxiety, abstinence, depression, social stigmatization and other health problems with a particular emphasis on mental suffering.^{26,27} Other authors attribute weight gain to deprivation of illicit drug use and a decreased access to tobacco, resulting in exponential weight gain in the first months of incarceration.^{22,28} It may also be related to the low frequency of visits, which intensifies feelings of abandonment and loneliness²⁸⁻³⁰ and can produce changes in self-concept, due to the lack of familiar companionship, and degradation and humiliation suffered by the convicts.

In this context, the gradual increase in weight associated with poor monitoring by healthcare providers encourages the emergence and aggravation of chronic non-communicable diseases (CNCD). The findings by Binswanger et al.³¹ point out to the fact that prisoners have a higher burden than most chronic medical conditions in comparison with the general population, as the highest prevalence of CNCD in this group has already been reported in the specialized literature.^{17,21}

Overweight and ponderal gain pointed out by detainees in the present study, as well as the consequent increased risk for CNCDs, reinforce the importance of healthcare programmes targeted at this population, as when they are not carried out in good time, their lack may harm the legitimate human rights, increase pharmaceutical assistance expenditures, burden the emergency units of the health public system and bankrupts the public coffers.³² This scenario may also compromise the process of resocialization when detainees are released, and there may be a negative impact on their quality of life, work activity and labor market reintegration.

Amid an environment lacking any kind of mirror, as during the time in prison they cannot see their own reflection, they see their own image through their cellmates.¹⁴ Consequently, a relevant paradox was observed: although a great part of women perceives themselves to be overweight or obese, many would like to have larger bodies rather than leaner silhouettes. This desire may be associated with a greater sense of magnificence as they face a vulnerable and hostile environment, and moreover, it may be related to body masculinization, because when acting in a more masculine manner they can enjoy the privileges socially associated with men.³³ Besides, homosexuality is

widely related and attested by studies on the prison culture, which presumes the valorization of a large and imposing body pattern.^{16,33}

Contrary to the need, the number of women who have access to healthcare is lower than the number of diagnosed female patients, and this can be attributed to the inadequate or scarce health actions geared towards this population, and to the care provided at the right time.¹⁷ Thus, educational programmes promoting health assistance, disease prevention and the improvement of the quality of life of these women are essential. Until measures are taken, overweight and obesity will continue to loom in the prison system, and both conditions are even more harmful for female convicts than for the general population, due to the difficulty of monitoring and the lack of medical care, since it is an idle and stressful environment, without access to regular physical activities, and where psychological disorders are frequently reported in studies on the health of female detainees.^{8,34}

Concluding remarks

It was possible to particularly highlight that the body image and ideal body issues in the prison environment is very complex, going beyond the beautiful and slender body generally desired by most women. The high proportion of females deprived of their liberty who is overweight and who yearns for even more robust bodies points to the need to intensify the frequency of disease prevention and control measures.

The meanings of such expectations need to be further investigated by scientific researchers in order to elucidate the determinant factors involved and to provide support to the prison managers and healthcare professionals, aiming at developing educational actions targeted at health self-care and disease prevention, improving the quality of life of these people, minimizing the effects of incarceration on their health conditions and enhancing resocialization after release.

It is also evident that, to better understand this unique social phenomenon, one should carry out qualitative researches on this subject within the field of Social and Human Sciences. Interdisciplinarity scientific research, with reflections beyond the biological being, paves the way toward an expanded knowledge about unusual results in the health area, such as those presented here.

Lastly, the distorted perception on the appropriate body, regardless of the reason, must always be considered by healthcare professionals, as it may hamper the promotion of wellness among convicts, requiring expertise and sensitivity to seek, together with the detainees, a corporal balance that takes into account both health and wellbeing in the prison environment. Therefore, the professional qualification of health workers operating in such institutions is also crucial to address this complex issue and to prevent several health problems.

Collaborators

de Andrade ALCC carried out a literature review, participated in field data collection, performed data analysis and interpretation of the results, prepared, reviewed and approved the final version of the manuscript; Barbosa APDI participated in field data collection, prepared, reviewed and approved the final version of the manuscript; Bagni UV collaborated in all stages of the study, including design and planning; performance and coordination of field data collection; data analysis; interpretation of the results, preparation, review and approval of the final version of the manuscript.

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