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Urinary Incontinence and Body Image in High-Risk and Usual Risk Pregnant Women

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ABSTRACT

Pregnancy can be defined as a period of approximately 40 weeks, in which physiological and mechanic adaptations occur, along with strong psychological modifications. Being a moment of vulnerability, it can be negatively influenced by factors such as urinary incontinence, high-risk pregnancy or even a negative body image. Thus, the aim of this study was to compare body image and the occurrence of urinary incontinence in high-risk and usual risk pregnant women. An observational study with a quantitative and cross-sectional approach was conducted to evaluate the occurrence of urinary incontinence and body image of pregnant women. The sample was divided into two groups: high-risk (n=34) and usual risk (n=31) pregnant women. For the data collection, an identification file was applied, collecting data such as obstetric history, followed by the International Consultation on Incontinence Questionnaire- Short Form (ICIQ-SF), and the Body Image Measurement Scale (BIMS). It was observed that both groups were dissatisfied with body image, and urinary incontinence occurrence was moderately above to what is found in literature. No relationship between urinary incontinence and body satisfaction was observed in either group. There was no relationship between urinary incontinence and body image. The pregnant women from both groups presented dissatisfaction regarding body image, and the occurrence of urinary incontinence was slightly higher than that observed in literature.

Keywords: Urinary Incontinence; body image; pregnancy.

INCONTINÊNCIA URINÁRIA E AUTOIMAGEM CORPORAL EM GESTANTES DE ALTO RISCO E RISCO HABITUAL

RESUMO

Introdução: A gestação pode ser definida como um período de aproximadamente 40 semanas, no qual ocorrem adaptações fisiológicas e mecânicas, juntamente com intensas transformações psíquicas. Sendo um momento de vulnerabilidade, pode ser influenciada negativamente por fatores como incontinência urinária, gestação de alto risco ou mesmo uma autoimagem corporal negativa. **Objetivo:** Comparar a autoimagem corporal e ocorrência de Incontinência Urinária (IU) em gestantes de alto risco e risco habitual. **Métodos**: Realizou-se um estudo observacional com abordagem quantitativa e caráter transversal, que avaliou a ocorrência de perda urinária e a imagem corporal de gestantes. A amostra foi dividida em dois grupos: gestantes de risco habitual e gestantes de alto risco. Para a coleta dos dados foram aplicados uma Ficha de Identificação, recolhendo dados como os antecedentes obstétricos, seguida do International Consultation on Incontinence Questionnaire – Short Form (ICIQ-SF) e da Escala de Medida em Imagem Corporal (Emic). **Resultados**: Observou-se que em ambos os grupos as gestantes demonstraram-se insatisfeitas com a imagem corporal, e a ocorrência de IU moderadamente acima do descrito na literatura (58,8%). Não foi observada relação entre IU e autoimagem corporal em nenhum dos grupos. **Conclusão**: Não houve relação entre IU e autoimagem corporal. As gestantes de ambos os grupos apresentaram insatisfação em relação à imagem corporal, e a ocorrência de IU estava levemente superior àquela observada na literatura.

Keywords: Incontinência Urinária; autoimagem; gestação.

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INTRODUCTION

Pregnancy can be characterized as the period of approximately 40 weeks, between conception and delivery, which includes physiological and mechanic adaptations, along with strong psychological modifications. During this moment of vulnerability, it is expected that the pregnant woman gets access to a prenatal care that encompasses, in addition to the biological scope, psychosocial aspects, since these have a direct influence on maternal and child health, as well as on the bond between mother and baby[1,2,3.]

Within the strong beauty standards associated to slimness in current culture, together with the wide exposure of stereotypical body images, many women have their body image negatively affected. Body image has a broad definition, being described as the representation of the body in our minds, and it is related to self-concept, always influenced by cultural aspects, in addition to other factors such as gender or age[4,5,6]. Being in a period of changes in body dimensions, psychic modifications and emotional instability, many pregnant women may find themselves in conflict with aesthetic values learned until then. Thus, these factors can unleash or exacerbate an inadequate body image, negatively affecting the pregnant woman's experience[7,3].

Some other factors can influence the experience of pregnancy, such as the occurrence of urinary incontinence (UI) or a high-risk pregnancy. UI, defined by the International Continence Society as any complaint of involuntary loss of urine, can occur during pregnancy due to an alteration on muscular strength in the pelvic floor along with physiological changes of pregnancy, such as the uterus growth. Urine leakage can cause social discomfort, shame and embarrassment, even more so because many women do not search for medical assistance, thinking the problem is a symptom of pregnancy itself[8,9,10]. Hence, UI can have an impact on body image.

With respect to high-risk pregnancy, it is defined as the one in which the clinical course occurs in an unfavorable way, putting both fetal development and maternal health at risk[11,12.] High-risk pregnant women tend to remain more time at rest, therefore inactivity could impact body image, as well as UI. However, there is still a lack of studies that investigate the relationship between high-risk pregnancy and factors such as UI and body image.

Considering the above, this study aimed to compare body image and UI occurrence in high-risk and usual risk pregnant women. We hope to provide information that could contribute to a better assistance to pregnant women, with adequate prevention or treatment of UI, as well as the support necessary to cope with the difficulties of adapting to this "new" body.

METHODS

This was an observational, descriptive, cross-sectional study with a quantitative approach, which included 65 pregnant women undergoing prenatal care at a healthcare network (a teaching-hospital and a primary health care unit). The participants were divided into two groups: usual risk (UR) and high-risk (HR) pregnant women. Data collection was carried out between January and April 2019.

The sample consisted of primiparous and multiparous, usual or high-risk pregnant women, aged 18 or more, at the first, second or third trimester of pregnancy. The ones with diagnosis of neurologic or cognitive impairments that could make them unable to answer the research tools were excluded. This study was previously approved by the institutional research ethics committee, number 2.544.970.

The participants were addressed and informed about the research and its procedures, and signed an informed consent. The high-risk pregnant women were addressed at the High-risk Pregnancy Ambulatory at the teaching-hospital, and the usual risk at a primary health care unit, while awaiting for their prenatal care appointments. All participants were properly instructed regarding the questionnaires that would be applied, and the risks and benefits of the study were clarified.

Three instruments were used for data collection, the first one being an identification file that included information such as age, marital status, education level and gestational age, based on the Brazilian Ministry of Health's Prenatal and Puerperium Technical Manual[13] and Lemos[14]. Subsequently, the International Consultation on Incontinence Questionnaire Short Form (ICIQ-SF) was applied to evaluate the impact of UI on Quality of Life (QoL) and qualify the participants' urinary loss in a brief and simple manner. The ICIQ-SF consists of six questions, two of them regarding birth date and sex, and the other four referring to frequency, severity and impact of urinary loss on QoL. Overall score varies between zero and 21, zero meaning absence of UI; 1 to 3 indicating mild impact of UI in QoL; 4 to 6, moderate impact; 7 to 9, severe impact; and 10 or above, very severe impact[10]. Also, this questionnaire enabled the determination of the type of UI.

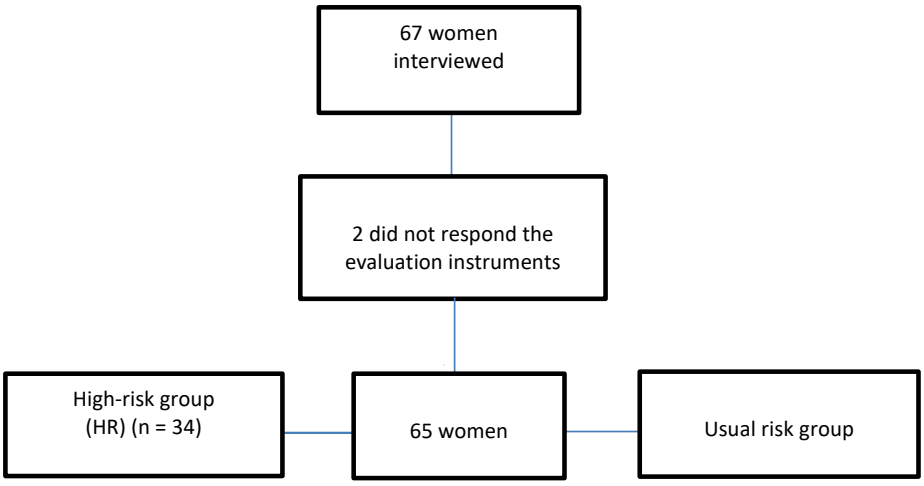
Lastly, the Body Image Measure Scale (EMIC) was used to evaluate the women's body image. This scale was created by Souto[15], aiming to facilitate the identification of body image disorders in nursery practice, and individualize interventions. Used previously in pregnant women[6], EMIC consists of 23 affirmations, five of which having favorable meaning, and 18 unfavorable meaning. The items are disposed on a Likert scale. In the positive affirmations, the score is given as follows: 1 = never; 2 = rarely; 3 = sometimes; 4 = frequently; 5 = always. In the negative items, the score is reversed. Overall score varies between 23 and 115 points. The instrument does not have a cut-off point, thus low scores indicate a negative body image, while high scores are related to a favorable body image[6,15].

Data normality was checked using the Shapiro-Wilk test. To compare parametric variables, two-tailed Student t test for independent samples was applied. Mann-Whitney test was used for comparison between nonparametric variables. The association between categorical variables was calculated by the CHI^2 test. For the analysis of correlation between ordinal variables, the Spearman's test was used. All tests were applied with a significance level of 95% ($p < 0.05$).

RESULTS

Sixty-five pregnant women, whose prenatal care monitoring was conducted at the healthcare network, participated on the study. Eligibility criteria are shown in Figure 1.

Figure 1 – Eligibility criteria flowchart



Source: Elaborated by the authors.

Table 1 presents the socio-demographic characterization. The high-risk (HR) and usual risk (UR) groups were homogenous regarding age, obstetric history, skin color and marital status. The UR group reported more years of education when compared to HR (p=0.004).

Table 1 – Identification data from high-risk (HR, n=34) and usual risk (UR, n=31) pregnant women, presented as mean, standard deviation, absolute number (n) and percentage (%)

	HR group	UR group	P*
Age	31.12(±7.05)	28.50(±5.20)	0.091
Gestational age (weeks)	29.18(±6.95)	26.40(±9.10)	0.266
Number of pregnancies	2.59(±1.52)	1.8(±0,8)	0.124
Number of deliveries	1.24(±1.33)	0.6(±0.7)	0.188
Number of abortions	0.35(±0.54)	0.2(±0.4)	0.257
Skin color			
White	20 (58.8%)	26 (83.9%)	0.124
Black	8 (23.5%)	2 (6.5%)	
Asian	0 (0%)	0 (0%)	
Mulatto	5 (14.7%)	3 (9.7%)	
Indigenous	0 (0%)	0 (0%)	
Non-informed	1 (2.9%)	0 (0%)	
Education			
Illiterate	0 (0%)	0 (0%)	0.004
Incomplete Elementary Education	4 (11.8%)	2 (6.5%)	
Complete Elementary Education	3 (8.8%)	1 (3.2%)	
Incomplete Secondary Education	10 (29.4%)	1 (3.2%)	
Complete Secondary Education	15 (44.1%)	14 (45.2%)	
Incomplete Higher Education	0 (0%)	4 (12.9%)	
Complete Higher Education	2 (5.9%)	9 (29.0%)	
Marital Status			
With Partner	26 (76.5%)	25 (80.6%)	0.226
Without Partner	8 (23.5%)	6 (19.4%)	

*P values for two-tailed Student t test (parametric variables) and Mann-Whitney test (nonparametric variables).

Source: Elaborated by the authors.

The number of incontinent pregnant women on the study was 41 (58.8%), with 20 (58.8%) in the HR group and 21 (67.8%) in the UR group, without statistical difference between groups (p = 0.385). The characteristics of urinary losses are shown in Table 2.

Table 2 – Characteristics of high-risk (HR, n=34) and usual risk (UR, n=31) pregnant women's urinary losses, presented as absolute number (n), percentage and *p* value

	HR	UR	
Amount of urinary loss	n (%)	n (%)	P*
None	14 (41.2)	10 (32.3)	0.148
Small	13 (38.2)	18 (58.1)	
Moderate	03 (08.8)	13 (9.7)	
Severe	04 (11.8)	0(0)	
Frequency of urinary loss			
Never	14 (41.2)	10 (32.3)	0.457
Once a week or less	08 (23.5)	09 (29.0)	
Two or three times a week	05 (14.7)	02 (06.5)	
Once a day	01 (02.9)	03 (09.7)	
Multiple times a day	05 (14.7)	03 (09.7)	
All the time	01 (02.9)	04 (12.9)	
Impact of urinary loss			
Continent	14 (41.2)	10 (32.3)	0.385
Mild	06 (17.6)	02 (06.5)	
Moderate	04 (11.8)	07 (22.6)	
Severe	05 (14.7)	04 (12.9)	
Very severe	05 (14.7)	08 (25.8)	
UI type			
Continent	14 (41.2)	10 (32.3)	0.428
SUI	09 (26.5)	12 (38.7)	
UUI	02 (05.9)	04 (12.9)	
MUI	09 (26.5)	05 (16.1)	

UI: urinary incontinence. SUI: stress urinary incontinence. UUI: urge urinary incontinence. MUI: mixed urinary incontinence.
*P values for two-tailed Student t test (parametric variables) and Mann-Whitney test (nonparametric variables).

Source: Elaborated by the authors.

Table 3 shows the comparison between high-risk (HR, n=34) and usual risk (UR, n=31) pregnant women's body image. There were no statistically significant differences between the groups.

Table 3 – High-risk (HR, n=34) and usual risk (UR, n=31) pregnant women's body image, presented as EMIC scores in mean, standard deviation and *p* value.

Domains	HR	UR	P*
Total score	89.71(±19.53)	92.7(±17.5)	0.519
BR	27.68 (±6.13)	28.20 (±5.40)	0.906
BI	41.91 (±10.44)	43.00 (±9.70)	0.655
BP	20.12 (±4.92)	21.50 (±3.50)	0.403

BR: body reality. BI: body ideal. BP: body presentation.
*P values for two-tailed Student t test (parametric variables) and Mann-Whitney test (nonparametric variables).

Source: Elaborated by the authors.

It was observed that both groups presented body dissatisfaction (p = 0.290) according to the equilibrium analyses between the three components of body image (BR%, BI%, BP%)[16]. These data are shown in Table 4.

Table 4 – High-risk (HR, n=34) and usual risk (UR, n=31) pregnant women's body satisfaction, presented as absolute number, percentage and *p* value.

	HR	UR	P*
Body Satisfaction	n = 34	n = 31	
Satisfied	08(23.53%)	11(35.48%)	0.290
Dissatisfied	26(76.47%)	20(64.52%)	

*P values for two-tailed Student t test (parametric variables) and Mann-Whitney test (nonparametric variables).

Source: Elaborated by the authors.

There was no relationship between UI and body satisfaction. This was observed considering all the pregnant women (p = 0.723), usual risk group (p = 0.723), and high-risk group (p = 0.923).

DISCUSSION

The present study evaluated high-risk and usual risk pregnant women's body image, aiming to relate it to the occurrence of urinary incontinence. The sample found was characterized, on average, by adult, white women at the second trimester of pregnancy, and thus with a small number of prenatal care visits until the moment of the study. Mean age was 29.8 years, similar to the study by Meireles[7], which found a mean age of 29.3 years, indicating a preference for a more delayed pregnancy.

In terms of educational level, the UR group presented more years of education (complete or incomplete higher education), while HR group had complete or incomplete secondary education, which could suggest schooling as a protective factor for pregnant women, or perhaps because a higher education stage could be related to a higher income and, consequently, the seek for medical care at a private network. No other studies were found regarding the relationship between education and high-risk pregnancy.

With respect to body image, both groups were dissatisfied, with no significant difference between them. Overall score was 91.2 points, and UR and HR groups' scores were, respectively, 89.7 and 92.7 points, within the variation of 23 to 115. The obtained scores are similar to what was observed in the study by Meireles[6], in which 55 pregnant women between first and third gestational trimester were assessed, and which presented the average of 85.7 points using EMIC.

A total of 58.8% of the pregnant women presented UI, similar to the study by Farias [16], in which 53.8% of the pregnant women interviewed were incontinent. These numbers are slightly higher than the estimate that 50% of Brazilian women present IU, especially during the pregnancy-puerperium cycle[9,17]. There was no significant difference in the occurrence of UI between the groups, which

can be due to the fact that most of the women on HR group were not at rest, so that a greater functional decrease in the pelvic floor muscles would not occur.

At the HR group, the predominant type of UI was stress, corroborating previous studies by Duarte[18] and Rocha[19.] At the UR group, the prevalence was the same for SUI and MUI. The occurrence of UI during pregnancy can be explained by the anatomic changes characteristic at this period, such as the increased intra-abdominal pressure due to the physiological weight gain and fetal growth, as well as the hormonal alterations, such as the rise in progesterone levels, which can be related to bladder and urethra smooth muscle tone decrease[19,20,21.]

The presence of UI can bring along negative psychosocial effects regarding self-esteem, body image, anxiety and depression.[22] A study with pregnant women at the third trimester found a prevalence of 59.9% of UI among the 242 participants, and an association between the presence of UI symptoms and depressive episodes was observed. [23] With respect to women at the first year after delivery, it was demonstrated that UI affects the psychological well-being in this group.[24] That way, UI could be related to a negative body image during pregnancy, adding to the other factors mentioned previously.

The initial hypothesis brought by this study presupposes that high-risk pregnant women, tending to remain more time at rest, may have an impaired body image due to the inactivity period when compared to usual risk pregnant women. This resting period can also influence the function of the pelvic floor muscles, facilitating the occurrence of UI. Hence, UI could have a relationship, even if indirectly, with body image. However, no relationship was found between body satisfaction and occurrence of UI.

The majority of the women on HR group were not in absolute rest, performing their daily life activities, even if in an adapted manner. Thus, the occurrence of high-risk pregnancy may not have been able to influence body image, justifying the result of the study. The body dissatisfaction in both groups can be explained by many factors reported in the literature. Weight gain along with a higher BMI during pregnancy appears as one of the main factors of dissatisfaction, with a greater discrepancy between real and idealized body. Furthermore, many women fear the loss of their pre-pregnancy body, although understanding that the changes in their bodies are physiological and necessary[25,26,27.]

Body image is still neglected by health professionals when it comes to pregnant patients[25.] However, a good communication with this population can allow a better understanding about which changes to expect throughout pregnancy, as well as the adjustment of one's ideals of body image and adjustment to changes[26.]

A few limitations can be identified in the present study, such as convenience sampling, sample size, and variables that were not assessed, in particular the resting period. We highlight the importance of more national studies on the subject, with larger sample sizes, aiming to better understand how Brazilian pregnant women deal with their body image.

CONCLUSION

No relationship between UI and body image was observed in the groups studied. In both groups the pregnant women were dissatisfied with their body image, which suggests that the health team should be prepared to identify these alterations and provide better assistance, and the occurrence of UI was slightly higher than the rate reported in the literature. It is therefore suggested that future studies compare the trimesters of pregnancy and analyze gestational BMI and the effects of weight gain on the variables, relating it to factors such as socioeconomic condition and anxiety. It is also suggested more national studies on the subject, for a better understanding about how Brazilian pregnant women deal with body image, and how physical therapy can assist them during that period.

DISCLOSURE STATEMENT

The authors declare no conflicts of interest.

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