

# Self-perception of Genital Appearance following a Vaginal Delivery, C-section and Nulliparous Women in a Hispanic Population in Puerto Rico

Jeyka Marin-Alvarez, MD\*; Lorena Gonzalez, MS†; Erika Benabe, MD\*

**Objective:** Childbirth is considered to be both beautiful and traumatic. Following a vaginal delivery, some women express discontent with the appearance of their genitalia on social media and/or websites. This study explored how some women perceived their genitalia, post-childbirth. Three groups were compared: women with a vaginal delivery, those with a cesarean-section, and those who had never given birth.

**Methods:** After the study received approval from the institutional review board, 224 female participants living in Puerto Rico and aged 21 to 42 years completed a questionnaire about their genital self-image.

**Results:** Approximately 51% (n = 115) of the participants had never given birth; the others had given birth via C-section 23% (n = 51) or vaginally 26% (n = 58). In all 3 groups, 84% felt positive about their genitals, 79% expressed their satisfaction with the appearance of their genitals and 84%, with their size; 81% were not ashamed of their genitals.

**Conclusion:** Logistic regression found no significant difference in genital self-perception between delivery groups or nulliparous women. The adjusted odds ratios for positive genital image varied slightly between delivery methods but were not statistically significant (ranging from 0.65 to 1.11 for vaginal deliveries, and 0.42 to 1.00 for C-sections;  $P > .05$ ). This suggests that the method of delivery does not have a significant impact on women's genital self-perception. However, for the 21% with negative perceptions, targeted support is essential; for those struggling with their self-image after childbirth, our results can inform support services to address concerns.

**[PR Health Sci J 2024;43(3):139-144]**

*Key words: Genital appearance, Perception, Vaginal delivery, Cesarean section, Genital satisfaction*

Childbirth is often considered to be one of the most beautiful yet traumatic events for a woman. During pregnancy, every organ in the body prepares, nourishes, and supports the fetus. During this process, the body changes dramatically to provide the growing fetus with the nourishment it needs. The key elements of a vaginal delivery include the distension of the perineum and the stretching of the overlying skin until the separating labia reveal the fetal scalp (1). During contractions, the vulvovaginal opening gradually widens, creating a progressively larger circular opening, until the fetal head is able to pass through. This stage, at which point the largest diameter of the head is visible at the vulvar opening, is known as “crowning” (1). This process may create spontaneous lacerations, especially in women who have never delivered vaginally before. In addition, the anterior wall of the rectum becomes visible as the anus dilates (1). This process can be very traumatic physically and mentally for the delivering patient. Some women on social media (2,3) have opined that, after having undergone a vaginal delivery, their vaginas are now “too loose”. Specific genital changes associated with vaginal birth, such as those caused by an episiotomy and anal sphincter lacerations, can cause pain with intercourse and delay the resumption of sexual activity (4). It is possible that the negative perceptions that some women have regarding the changes to the vaginal area that can be caused by vaginal delivery are due to the expressed opinions alluded on social media. This may misinform pregnant women, leading them to avoid vaginal birth and opt for a cesarean section, increasing the

overall mortality rate and cesarean-related maternal mortality (5). Nevertheless, this avoidance (and the subsequent decision to have a C-section) has not been proven by any study.

Women can be eager to preserve the natural look of their vaginas, postpartum. Questions about vaginal self-perception and body esteem should be asked as part of the postpartum care of a patient at every one of her gynecologic visits, especially the 3-month postpartum visit. Body esteem has been described as the self-evaluation of one's body (4). It is important to identify the levels of body esteem of the patients, postpartum, as these levels could affect these patients' daily routines and even their mental health. A study by Zielinski et al in 2017, about body image following birth, found that 84% of the study participants felt they had experienced vaginal/rectal changes associated with childbirth. While most of the participating women acknowledged having perceived genital changes post-childbirth, they tended to exhibit positive levels of vaginal-, sexual-, and self-esteem. An exception to these generally positive levels was participants who underwent an episiotomy at the time of delivery. Women in this group perceived changes

\*Department of Obstetrics & Gynecology, San Juan City Hospital, San Juan, Puerto Rico; †Department of Statistics, University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico

*The authors have no conflict of interest to disclose.*

*Address correspondence to:* Jeyka Marin-Alvarez, MD. San Juan City Hospital, PO Box 70344, San Juan, Puerto Rico, 00936. Email: jeykamarin.md@gmail.com

to their rectal and/or vaginal areas, and these perceived changes negatively impacted their sexual/body esteem (4). The study team concluded that a majority of the women who participated did not perceive bothersome changes to their vaginal or genital areas, post childbirth; nevertheless, some of the women did have negative perceptions of their bodies, postpartum.

Our study aimed to describe genital self-image in women who had undergone a vaginal delivery or C-section and in women who had never had a prior delivery in a population living in Puerto Rico. To our knowledge, this is the first study comparing women's genital perceptions after their having had a vaginal birth or cesarean or never having delivered a child.

**Materials and Methods**

Institutional review board approval was obtained at San Juan City Hospital prior the recruitment of the participants. An online questionnaire was given to women living in Puerto Rico who were from 21 to 42 years old. The questionnaire was administered at 2 different time points. The first data collection was performed as a secondary analysis for a study that was initially created to assess genital self-perception in adults living in Puerto Rico and had male and female participants. The parent study was also performed to assess the perception of females regarding their genitalia and its association with female sexual distress. The first data collection was made from June 2018 through July 2020. After analyzing the data, we discovered that the sample was too small (n = 118); for this reason, the data were recollected (from November 2021 to January 2022) with an online questionnaire, in a similar fashion to that of the initial data collection. The questionnaire included questions regarding sociodemographics and delivery methods, as well as the participants' vaginal self-perceptions, these latter specifically including the following comments that were to be rated: "I feel positive about my genitals," "I am satisfied with the appearance of my genitals," "I am satisfied with the size of my genitals," and "I am not ashamed of my genitals." The answer choices were "Strongly agree," "Agree," "Disagree," and "Strongly disagree." As already indicated, the questionnaire also asked about delivery method, which was categorized as either vaginal delivery—which included women who had delivered vaginally, only, and those who had a history of cesarean section but who also had delivered vaginally—and cesarean section, only, which included only those women who had delivered through cesarean section and had never had a vaginal delivery; there was a control group of women who had never been pregnant or, if ever having been pregnant, had never delivered. The exclusions for this study included women who did not live in Puerto Rico and those who were either over the age of 42 or under the age of 21. A statistical analysis was conducted, and age-adjusted logistic regression models and multinomial logistic regression were performed; a P value of less than .05 was considered significant.

**Results**

A total of 224 women were recruited for this study. Most of the participants were aged from 21 to 31 years (52.2%) and had been born in Puerto Rico (92.0%). All the participants (100.0%)

had been assigned as female at birth and considered themselves women; about 92% of them said that they were heterosexual. Table 1 shows the sociodemographic characteristics of the participants.

Overall, about 84% of the women felt positive about their genitals, 79% were satisfied with their genitals' appearance, 84% were satisfied with the size of their genitals, and 81% were not ashamed of their genitals. Differences in the participants' genital perceptions were not observed between age groups, education level, or sexual orientation (P > .05; Table 2). However, women that were married/living with their partners, that had partners but were not living with them, and that were divorced/separated showed higher odds of feeling more positive about genitals, being more satisfied (size and appearance) with genitals, and not being ashamed of their genitals than did women that had never married; in those who had partners but were not living with them, the results were significant for feeling positive about their genitals (adjusted odds ratio [OR] = 6.10; 95% CI: 1.24, 30.10), being satisfied with the appearance of their genitals (adjusted OR = 4.14; 95% CI: 1.21, 14.19), and not feeling ashamed of their genitals (adjusted OR = 7.07; 95% CI: 1.84, 27.10). Married women also showed significantly higher odds of not feeling ashamed of their genitals (adjusted OR = 4.06; 95% CI: 1.67, 9.85) than did women that had never married.

In our study, 51.3% of the women had never been pregnant; Figure 1 shows the distribution of the types of birth in the

**Table 1.** Characteristics of study participants (n = 224)

	n	%
<i>Region of Puerto Rico</i>		
Metro	180	80.4
Non-metro	44	19.6
<i>Place of birth</i>		
Puerto Rico	206	92.0
United States (excluding Puerto Rico)	14	6.2
Other country	4	1.8
<i>Age (in years)</i>		
21–31	117	52.2
32–42	107	47.8
<i>Ethnicity</i>		
Hispanic	210	94.6
Non-Hispanic	12	5.4
<i>Sexual orientation</i>		
Heterosexual	207	92.4
Non-heterosexual	16	7.1
Unknown	1	0.4
<i>Marital status</i>		
Not married	40	17.9
Married/living with partner	121	54.0
With partner, not living together	40	17.9
Divorced/separated	19	8.5
Unknown	4	1.8
<i>Level of education</i>		
≤ High school	29	12.9
Bachelor's degree	115	51.3
Post-graduate	78	34.8
Unknown	2	0.9

**Table 2.** Association between Demographics and Sexual orientation with Genital self-perception in Study participants (n = 224)

	I feel positive about my genitals			I am satisfied with the appearance of my genitals			I am satisfied with the size of my genitals			I am not ashamed of my genitals		
	Strongly Disagree/Disagree n (%) <sup>a</sup>	Strongly Agree/Agree n (%) <sup>a</sup>	Age-adjusted OR (95% CI) <sup>b</sup>	Strongly Disagree/Disagree n (%) <sup>a</sup>	Strongly Agree/Agree n (%) <sup>a</sup>	Age-adjusted OR (95% CI) <sup>b</sup>	Strongly Disagree/Disagree n (%) <sup>a</sup>	Strongly Agree/Agree n (%) <sup>a</sup>	Age-adjusted OR (95% CI) <sup>b</sup>	Strongly Disagree/Disagree n (%) <sup>a</sup>	Strongly Agree/Agree n (%) <sup>a</sup>	Age-adjusted OR (95% CI) <sup>b</sup>
<b>Age (in years)</b>												
21-31	17 (14.5)	100 (85.5)	1.00	22 (18.8)	95 (81.2)	1.00	17 (14.5)	100 (85.5)	1.00	21 (18.0)	96 (82.1)	1.00
32-42	18 (16.8)	89 (83.2)	0.84 (0.41, 1.73)	26 (24.3)	81 (75.7)	0.72 (0.38, 1.37)	18 (16.8)	89 (83.2)	0.84 (0.41, 1.73)	21 (19.6)	86 (80.4)	0.90 (0.46, 1.75)
<b>Education</b>												
≤ High school	4 (13.8)	25 (86.2)	1.00	8 (27.6)	21 (72.4)	1.00	4 (13.8)	25 (86.2)	1.00	7 (24.1)	22 (75.9)	1.00
Bachelor's degree	21 (18.3)	94 (81.7)	0.72 (0.23, 2.30)	26 (22.6)	89 (77.4)	1.33 (0.53, 3.37)	19 (16.5)	96 (83.5)	0.82 (0.25, 2.62)	24 (20.9)	91 (79.1)	1.22 (0.46, 3.19)
Post-graduate	10 (12.8)	68 (87.2)	1.11 (0.32, 3.87)	14 (18.0)	64 (82.1)	1.81 (0.66, 4.94)	12 (15.4)	66 (84.6)	0.90 (0.26, 3.04)	11 (14.1)	67 (85.9)	1.97 (0.68, 5.71)
<b>Civil status</b>												
Never married	10 (25.0)	30 (75.0)	1.00	13 (32.5)	27 (67.5)	1.00	7 (17.5)	33 (82.5)	1.00	15 (37.5)	25 (62.5)	1.00
Married/living with partner	19 (15.7)	102 (84.3)	2.02 (0.79, 5.12)	26 (21.5)	95 (78.5)	2.05 (0.88, 4.79)	20 (16.5)	101 (83.5)	1.18 (0.43, 3.21)	18 (14.9)	103 (85.1)	4.06 (1.67, 9.85)*
With partner, not living together	2 (5.0)	388 (95.0)	6.10 (1.24, 30.10)*	4 (10.0)	36 (90.0)	4.14 (1.21, 14.19)*	5 (12.5)	35 (87.5)	1.44 (0.41, 5.01)	3 (7.5)	37 (92.5)	7.07 (1.84, 27.10)*
Divorced/separated	2 (10.5)	17 (89.5)	3.29 (0.61, 17.74)	4 (21.1)	15 (79.0)	2.18 (0.57, 8.34)	2 (10.5)	17 (89.5)	2.04 (0.36, 11.44)	4 (21.1)	15 (79.0)	2.76 (0.72, 10.58)
<b>Sexual orientation</b>												
Non-heterosexual	4 (25.0)	12 (75.0)	1.00	5 (31.3)	11 (68.8)	1.00	4 (25.0)	12 (75.0)	1.00	5 (31.3)	11 (68.8)	1.00
Heterosexual	31 (15.0)	176 (85.0)	1.94 (0.58, 6.43)	43 (20.8)	164 (79.2)	1.81 (0.59, 5.52)	31 (15.0)	176 (85.0)	1.94 (0.58, 6.43)	37 (17.9)	170 (82.1)	2.12 (0.69, 6.50)

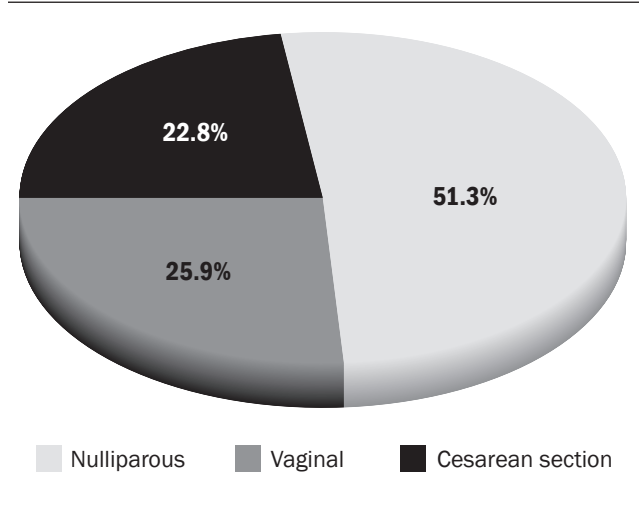
Abbreviation: OR, odds ratio  
<sup>a</sup>Row percentage is shown.  
<sup>b</sup>Logistic regression models were performed to estimate ORs and 95% CIs between independent variables (i.e., age, education, civil status, and sexual orientation) and genital self-perception.  
 \*Results were statistically significant (P < .05).

study participants. Women with a vaginal delivery or a cesarean section showed higher odds of feeling positive about their genitals, being satisfied with the appearance of their genitals and not being ashamed of their genitals than did women who had never been pregnant ( $P > .05$ ; Table 3). Women with a vaginal delivery were less likely to be satisfied with the size of their genitals (adjusted OR = 0.90; 95% CI: 0.27, 2.95) than nulliparous women were. Compared to women who had a vaginal delivery, women who had undergone a cesarean section have higher likelihood of feeling positive about their genitals, being satisfied with the appearance of their genitals, being satisfied with the size of their genitals, and not feeling ashamed of their genitals in a 87% (95% CI: 0.46, 7.61), 66% (95% CI: 0.51, 5.42), 11% (95% CI: 0.32, 3.85), and 9% (95% CI: 0.32, 3.80), respectively (Figure 2).

## Discussion

Some women revealed that they had feared they would lose their pre-pregnancy bodies after the delivery of their child. There are many online resources and blogs that discuss the physical changes women may undergo post-childbirth: a wider vagina, excessive discharge, vaginal dryness, vaginal soreness, a change of vulvar color, and vaginal/vulvar scarring resulting from lacerations during the birth (6). The information on these websites may misinform women and lead them to have a cesarean section based on the contention that women who have a vaginal delivery experience negative changes to their genitals, although the direct association of the increase of cesarean section by maternal request due to negative experience during vaginal delivery has yet to be studied. It has been determined that about 2.5% to 3% of the cesarean sections performed

**Figure 1.** Distribution of types of birth among study participants (n = 224)



The distribution of types of birth in the study. 51.3% were nulliparous (control group); 22.8% had had a prior cesarean section, and 25.9% had had a vaginal delivery.

in the United States are carried out at the request of the patient (5). The overall severe morbidity and mortality risk associated with cesarean delivery is 9.2% compared to 8.6% for vaginal deliveries. Globally, the maternal mortality for cesarean delivery is 13.3:100,000 compared to 3.6:100,000 for vaginal delivery (5). Overall, vaginal deliveries are safer and have fewer mortality and morbidity risks than do cesarean deliveries. The available data on cesarean delivery by maternal request compared with planned vaginal delivery are minimal and mostly based on indirect comparisons (7). Critical life experiences (e.i., trauma, violence, or poor obstetric outcomes) and anxiety about the birth process may prompt the request for a cesarean delivery (7). Fear of the pain and discomfort associated with labor and vaginal delivery also may prompt the request for a cesarean delivery (7). More studies are needed to provide clarification for why pregnant women undergo cesarean delivery at their own request. Women who perceive that giving birth vaginally will have a negative effect on their genitalia and so request a cesarian should be informed of and educated about our findings. In terms of the statements that follow, this study shows no statistically significant difference in genital self-perception between women who have had vaginal deliveries, those who have had

cesarean sections, and those who have never borne a child: “I feel positive about my genitals,” “I am satisfied with the appearance of my genitals,” “I am satisfied with the size of my genitals,” and “I am not ashamed of my genitals.” According to a recent study, the most important sources of information about vulvar changes associated with delivery are gynecologists and other physicians, followed by the internet and friends (8). With that in mind, it is of utmost importance that physicians be able to educate patients about these findings. On the other hand, even though many of our participants had a positive genital self-perception, there was a large population of women who were not satisfied with the appearance of their genitalia. Additional support and assistance should be given to the 21% of participants with negative self-perceptions of their genitals.

In a recent study (2023) by Dominoni et al, 365 women were questioned about their genital self-perceptions up to 6 months after delivery (8). They were divided into 3 groups (spontaneous vaginal delivery, operative vaginal delivery, and cesarean section); multiple questions about genital self-perception and sexual activity and satisfaction were made. The study team concluded that the 3 groups were similarly satisfied with their genital appearance after delivery ( $P = .898$ ) and did not report any detected changes in the elasticity of vaginal tissue after childbirth. The women in

**Table 3.** Association between the type of Birth and Genital Self-perception

	Strongly Disagree/ Disagree n (%) <sup>a</sup>	Strongly Agree/ Agree n (%) <sup>a</sup>	Age-adjusted OR <sup>b</sup> (95% CI)		
			Vaginal vs. Nulliparous	Cesarean Section vs. Nulliparous	Cesarean Section vs. Vaginal
<i>I feel positive about my genitals</i>					
Nulliparous	20 (17.4)	95 (82.6)	1.00	1.00	-
Vaginal	10 (17.2)	48 (82.8)	1.27 (0.39, 4.09)	-	1.00
Cesarean section	5 (9.8)	46 (90.2)	-	2.37 (0.60, 9.39)	1.87 (0.46, 7.61)
<i>I am satisfied with the appearance of my genitals</i>					
Nulliparous	26 (22.6)	89 (77.4)	1.00	1.00	-
Vaginal	14 (24.1)	44 (75.9)	1.23 (0.43, 3.50)	-	1.00
Cesarean section	8 (15.7)	43 (84.3)	-	2.04 (0.64, 6.56)	1.66 (0.51, 5.42)
<i>I am satisfied with the size of my genitals</i>					
Nulliparous	17 (14.8)	98 (85.2)	1.00	1.00	-
Vaginal	10 (17.2)	48 (82.8)	0.90 (0.27, 2.95)	-	1.00
Cesarean section	8 (15.7)	43 (84.3)	-	1.00 (0.29, 3.39)	1.11 (0.32, 3.85)
<i>I am not ashamed of my genitals</i>					
Nulliparous	24 (20.9)	91 (79.1)	1.00	1.00	-
Vaginal	10 (17.2)	48 (82.8)	1.54 (0.50, 4.77)	-	1.00
Cesarean section	8 (15.7)	43 (84.3)	-	1.68 (0.52, 5.45)	1.09 (0.32, 3.80)

<sup>a</sup> Row percentage is shown.

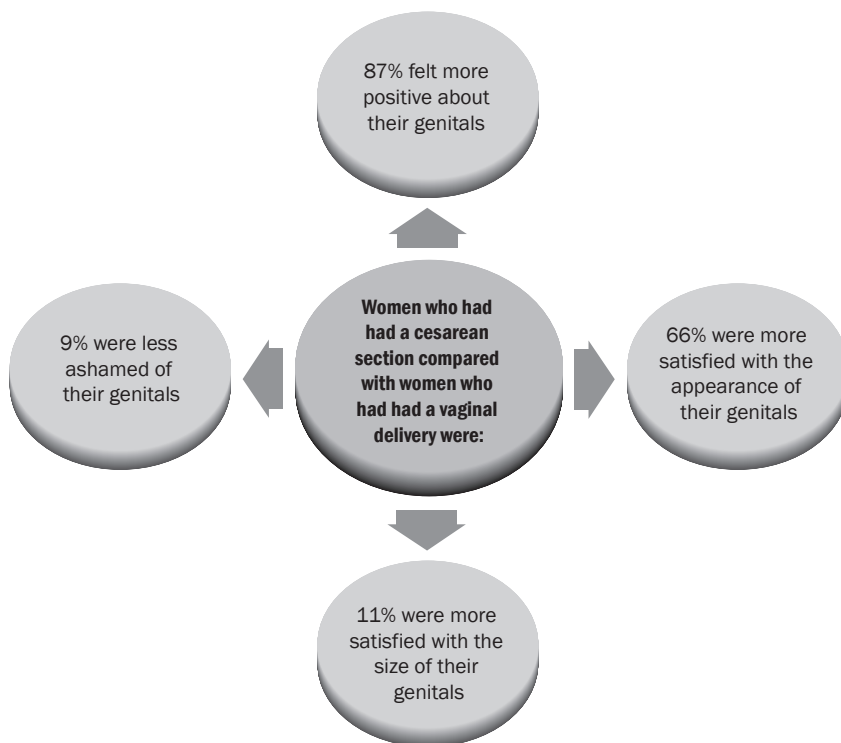
<sup>b</sup> Logistic regression models were performed with pairwise comparison using Bonferroni adjustments to estimate ORs and 95% CI.

the study were generally satisfied with the appearance of their vulvas, but the frequency of vulvar inspection among the 3 groups was different ( $P < .0001$ ) as women with spontaneous vaginal delivery were more inclined to do more vulvar inspection after childbirth. This study concluded that vaginal delivery impacted the perception of vulvar modification after childbirth but had no effect on vaginal elasticity or genital appearance (8).

In the parent study, from which the data for this study was collected, the researchers concluded that the most common negative thoughts and perceptions of the participants had to do with dissatisfaction with the size of their genitalia (21.9%). It also mentioned that up to 21.3% of the women who expressed dissatisfaction with the size of their genitalia contemplated undergoing cosmetic surgery, mainly to increase and improve sensation (9). The inclusion criteria for the study required that the participants be from 21 to 65 years old, be living in Puerto Rico, identify as heterosexual, bisexual, or lesbian, and be sexually active. Both our current study and the one alluded to in the previous sentence had similar populations, the only difference being that the participants in the latter study included the age from 42 to 65 years, which was not the case for this study. As occurred in the study mentioned before, our study also identified dissatisfaction with size and appearance, feeling positive about genitalia, and feeling ashamed of genitalia as being present in 16% to 21% of the same population. It is important to evaluate and identify the association between the discontent with genitalia and the Puerto Rican culture, traditions, and ethnicity in order to find opportunities to educate girls and women and thereby be able to decrease dissatisfaction in this population. A screening instrument can also be created to assess how the members of this population have developed their expectations concerning their genital self-image.

Body dysmorphic disorder of female genitalia is a psychological disorder defined as a distressing preoccupation with a perceived defect in one's appearance, in this case, one's (female) genitalia (10). The criteria for this disorder (according to the Diagnostic and Statistical Manual of Mental Disorders V) are being preoccupied with one's appearance, being distressed about one's appearance, and engaging in repetitive behaviors or mental actions in response to concerns, which concerns cannot be attributed to any other mental disorder (10). Negative feelings about one's genitalia have been linked to sexual function and self-esteem, including sexual esteem and overall body satisfaction (10). This kind of dissatisfaction increases the number of surgical procedures (such as labiaplasty) aimed at achieving self-acceptance of the genitalia.

**Figure 2.** Self-perception of Genital appearance with a Cesarean section vs Vaginal Delivery



Women who had had a cesarean section were more positive about their genitals, more satisfied with the appearance and size of the genitals, and less ashamed of their genitals compared with women who had had vaginal delivery.

Regarding age and genital self-perception, our older participants (32–42 years) appeared to be more comfortable with their genitalia than were their younger counterparts. In terms of sexual orientation and genital self-perception, heterosexual women were found to be less comfortable/less satisfied with their genitalia than were the homosexual women who participated. Women with a bachelor's degree were more comfortable with their genitalia and their size but less satisfied with the appearance of their genitals and more ashamed of their genitalia compared with high school degree and post graduate degree. It is important to help women increase their level of satisfaction and feel comfortable with their genitalia, as such positive attitudes affect, sexual self-esteem, general self-esteem, and body satisfaction. In the end, just as a fingerprint is unique to a single human being, the appearance of the genitals is also considered unique to and different for each person, which makes all genitals beautiful in their own way.

The limitations of this study include its small sample size, which could have impacted the power of the study. Also, the time between the vaginal/cesarean section delivery and the completion of the questionnaire was not documented, which may have affected the results of the study by allowing more/less time for the vulvar/perineal area to heal between the time of the delivery and the administering of the questionnaire. Finally, the data collected did not document the use of an episiotomy or complications

involving vulvar and/or perineal lacerations. On the plus side, the questions developed during our study have the potential to lead to many research opportunities. Studies must be conducted to determine both precisely why so many women in Puerto Rico request a cesarean section and the association of this request with vaginal perception. In addition, other studies could be carried out to evaluate such complications as vulvar and perineal lacerations as well as the performance of an episiotomy during vaginal delivery; such studies would assess the association of these occurrences with vaginal perception in Puerto Rico. Finally, this study should be done internationally to assess vaginal perception in those populations as well and to determine how it differs (if it does) from that of Hispanic women living in Puerto Rico.

## Resumen

**Objetivos:** El parto es considerado un evento hermoso y traumático. Algunas mujeres han expresado su descontento con la apariencia de su genitalia luego de un parto vaginal. Éste estudio explora como algunas mujeres perciben su genitalia luego de dar a luz. Se compararon tres grupos de mujeres: parto vaginal, cesáreas y mujeres que nunca han dado a luz. **Metodología:** Luego de la aprobación por Instituto de Investigación; 224 participantes residentes de Puerto Rico, de 21-42 años, completaron un cuestionario sobre la percepción de la imagen genital. **Resultados:** Aproximadamente 51% (n=115) nunca ha tenido partos, el resto tuvo cesárea 23% (n=51), o parto vaginal 26% (n=58). En los 3 grupos, el 84% de las mujeres se sienten positivas con sus genitales, el 79% están satisfechas con la apariencia, el 84% están satisfechas con su tamaño y el 81% no se avergüenzan de sus genitales. **Conclusión:** Luego de regresión logística no se encontró diferencia significativa en percepción genital entre los tres grupos. La razón de probabilidades ajustada para las percepciones positivas sobre la imagen genital oscilaron entre los grupos (0.65-1.11 para parto vaginal y 0.42-1.00 para cesárea  $P > .05$ ) sin ser estadísticamente significativos. Ésto sugiere que el método de nacimiento no tiene un impacto significativo en la percepción de imagen genital de la mujer. Sin embargo, se debe facilitar asistencia al 21% de los participantes con percepción negativa de sus genitales. Nuestros resultados pueden informar y apoyar aquellas mujeres luchando con su percepción de imagen genital luego de dar a luz.

## Acknowledgments

The Hispanic Alliance for Clinical and Translational Research (Alliance) is supported by the National Institute of General Medical Sciences (NIGMS) of the National Institutes of Health under award number U54GM133807. The statistical analysis done by Lorena Gonzalez was made possible due to this award.

## References

1. Cunningham FG, Williams JW. Vaginal Delivery. In: Cunningham FG, Leveno KJ, Bloom SI, et al., eds. *Williams Obstetrics*. 24th ed. McGraw-Hill Education; 2014:536-557.
2. Sykes G. Vaginal looseness after giving birth. *Obstetric Excellence*. January 20, 2021. Accessed March 25, 2024. <https://www.obstetricexcellence.com.au/postnatal/vaginal-looseness-postnatally/#:~:text=Vaginal%20looseness%20is%20a%20common,problem%20after%20a%20Caesarean%20section>
3. Davey L. Vaginal Laxity and Childbirth: Is a "Loose Vagina" Common? Treatable? *Toronto Physiotherapy*. June 7, 2019. Accessed March 25, 2024. <https://torontophysiotherapy.ca/vaginal-laxity-and-childbirth-is-a-loose-vagina-common/>
4. Zielinski R, Kane Low L, Smith AR, Miller JM. Body after baby: a pilot survey of genital body image and sexual esteem following vaginal birth. *Int J Womens Health*. 2017;9:189-198. Published 2017 April 13. doi:10.2147/IJWH.S123051. <https://doi.org/10.2147/IJWH.S123051>
5. Obstetric care consensus no. 1: safe prevention of the primary cesarean delivery. *Obstet Gynecol*. 2014;123(3):693-711. doi:10.1097/01.AOG.0000444441.04111.1d
6. Miller K. 9 Ways your vagina might change after you give birth. *SELF*. Sept 18, 2019. Accessed September 27, 2022. <https://www.self.com/story/vagina-changes-after-birth>
7. ACOG Committee Opinion No. 761: Cesarean Delivery on Maternal Request. *Obstet Gynecol*. 2019;133(1):e73-e77. doi:10.1097/AOG.0000000000003006
8. Dominoni M, Gritti A, Bergante C, et al. Genital perception and vulvar appearance after childbirth: a cohort analysis of genital body image and sexuality. *Arch Gynecol Obstet*. 2023;307(3):813-819. doi:10.1007/s00404-022-06826-4
9. Benabe E, Fuentes Y, Roldan G, Ramos M, Pastrana M, Romaguera J. The perceptions of female genital self-image and its associations with female sexual distress. *Int J Gynaecol Obstet*. 2022;157(1):90-95. doi:10.1002/ijgo.13827
10. Dworakowski O, Drüge M, Schlunegger M, Watzke B. Body dysmorphic disorder of female genitalia: a qualitative study of Swiss obstetrician-gynecologists' experiences and practices. *Arch Gynecol Obstet*. 2022;305(2):379-387. doi:10.1007/s00404-021-06270-w