

# Body Image, Sexual Function, and Sexual Satisfaction Among Couples Before and After Gynecologic Cosmetic Surgery

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## Abstract

**Objective:** This study aimed to compare women's body image, sexual function and satisfaction before and after gynecologic cosmetic surgery. The study also aimed to assess women husband's sexual satisfaction.

**Materials and methods:** This was a pretest-posttest study. A sample of 50 women attending the pelvic floor clinic of Tehran University of Medical Sciences for gynecologic cosmetic surgery was entered into the study. Surgeries included labiaplasty, clitoral hoodectomy, vaginoplasty, vaginal rejuvenation, anterior and posterior colporrhaphy, perineoplasty, and perineorrhaphy. Women were assessed for the Body Image Quality of Life Inventory (BIQLI), the Larson Sexual Satisfaction Questionnaire (LSSQ-F), and Female Sexual Function Inventory (FSFI-6) at two points in time: baseline (one week before surgery) and 3 months after surgery. Similarly, the male partners were assed for sexual satisfaction using the Larson Sexual Satisfaction Questionnaire (LSSQ-M). To analyze the data paired samples t-test was applied.

**Results:** The mean (SD) age of women was 43.36 (8.6) years and the mean (SD) duration of marriage was 22.18 (9.7) years. Ninety-four percent had history of vaginal delivery and 58.7 percent attend surgery due to husband's sexual dissatisfaction. The results showed that women's body image, sexual function and couples' sexual satisfaction improved significantly after gynecologic cosmetic surgery ( $p \leq 0.001$ ).

**Conclusion:** The findings suggest that female genital cosmetic surgery improved the body image and sexual function of women and sexual satisfaction in couples that might lead to a more pleasurable and healthier marital relationship.

**Keywords:** Plastic Surgery; Body Image; Sexual Behavior; Orgasm

## Introduction

Gynecologic cosmetic surgery is a relatively new

approach for improving appearance or sexual satisfaction (1). This includes surgeries such as 'vaginal rejuvenation', 'G-spot amplification', 'designer vaginoplasty', clitoral hood reduction and perineoplasty (2). However, these procedures are not

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medically defined nor indicated, and evidence regarding the safety and effectiveness of such measures remain (3).

It is argued that the most important reason for asking for gynecologic cosmetic surgery is the fact that women think that the surgery could improve their body image, sexual satisfaction and marital relationship (4). Goodman et al. found that sexual satisfaction and genital self-image improved after female genital plastic/cosmetic surgery when the surgery was performed by an experienced surgeon up to two years (5). Another study indicated that women looking for gynecologic cosmetic surgery had lower satisfaction with their body than those who did not interest in surgery (6).

More specifically studies have shown that social and intrapersonal factors are important motivation factors leading to cosmetic surgery (7). Social networks may include aspects such as media exposure and personal relationships especially appearance conversations with peers (8-10). For example, a systematic review with 26 studies showed that frequency of pornography exposure was associated with negatively perceived sexual body image (11).

Although experts have suggested several complications of gynecologic cosmetic surgery, the decision to have these surgeries has been dramatically increased in recent years. A similar condition was observed in Iran where along with other cosmetic surgery procedures, it is believed that request for gynecologic cosmetic surgery is very high (personal communication). Moreover, Eftekhar et al. reported that body image and sexual function were the most important reasons associated with a request for genital cosmetic surgery among Iranian women (12). As a result, it seems that pressure for requesting gynecologic cosmetic surgery might be due to cultural context that women would like to satisfy their partners.

To the best of our knowledge, the information on sexual satisfaction of partners of women who request gynecologic cosmetic surgery are scarce. Therefore, this study aimed to compare not only women's body image, their sexual function and satisfaction but also their partners' sexual satisfaction, before and after gynecologic cosmetic surgery that included labiaplasty, clitoral hoodectomy, vaginoplasty, vaginal rejuvenation, anterior and posterior colporrhaphy, perineoplasty, and perineorrhaphy.

## **Materials and methods**

**Study design and participants:** This study was a

sample of women attending a pelvic floor clinic affiliated to Tehran University of Medical Sciences in Tehran, Iran from September 2019 to January 2020. All women who requested genital cosmetic surgery due to difficulty in a sexual relationships or with unsatisfactory genital images were identified and entered into the study. There were no other indications for surgery candidates. In order to achieve the study objectives, partners of women also were asked to participate in the study. The inclusion criteria were having informed consent, being married at least for five years, and being aged 18-45 years. The exclusion criteria were having neuromuscular diseases or musculodermal such as scleroderma, psychological disorders, and prior genital cosmetic surgery. Women and their partners then responded to the study questionnaires at two points in time: one week before surgery and three-month follow-up assessments. All methods were performed in accordance with the relevant guidelines and the declaration of Helsinki. All participants signed informed consent.

**Sample size:** To calculate the minimum sample size for the study we assumed a 10-point improvement in body image after surgery considering a power of 80% at 5% significant level. As such using the following formula a sample size of 45 women was estimated:

$$n = Z_{\alpha/2}^2 * \sigma^2 / d^2$$

We considered  $Z_{\alpha/2} = 1.96$ , and from previous study (12)  $\sigma$  (population variance = 17), and  $d$  (precision) = +/- 5. However, with a 10% drop out a sample of 50 women was thought.

## **Measures**

**1. Demographic information:** A self-designed questionnaire was used to obtain information on age, duration of marriage, number of children and delivery type, educational and job status.

**2. The Female Sexual Function Index (FSFI-6):** The FSFI-6 is a valid measure for screening women that are probably suffering from sexual dysfunction. The index assesses sexual desire, arousal, lubrication, orgasm, satisfaction and pain. A score of less than 19 indicates the need for further investigations (13). The reliability and validity of the Persian version of FSFI-6 are well documented (14).

**3. The Body Image Quality of Life Inventory (BIQLI):** This is a 19-item self-reported measure of the impact of body image on one's life. It measures feelings about the self and life in general, psychological situations, same and other-sex

relationships, eating and exercise, tutoring activities, sexual experiences, and family and work/school settings. A higher BIQLI total score was associated with higher body satisfaction, less body shame, less of a preoccupation with being/becoming a fat, less dysfunctional investment in the appearance, lower body surveillance and less internalized cultural beauty standards. A higher BIQLI total score indicates a higher body satisfaction (15). Psychometric properties of the Persian version of the BIQLI are reported elsewhere (16).

**4. The Larson Sexual Satisfaction Questionnaire (LSSQ):** The LSSQ is a multidimensional 25-item questionnaire that assesses the quality of sexual life, sexual adjustment and sexual attitude. The scores on the scale ranges from 0 to 125 and could be interpreted as follows: 25-50 dissatisfaction, 51-75 low satisfaction, 76-100 moderate satisfaction and 101-125 high satisfaction (17). The Iranian version of the LSSQ proved to be valid and reliable (18).

**Intervention:** After primary clinical evaluation and selecting the eligible participants, regional anesthesia was scheduled. The candidates for surgery presented with different problems including large or dysmorphic labia major, long clitoral hood, loose genital hiatus, prolapsed perineal body, and grade 1 and grade 2 anterior and posterior vaginal prolapse. Thus, depending on women's conditions, the following procedures were performed: labiaplasty, clitoral hoodectomy, vaginoplasty, vaginal rejuvenation anterior and posterior colporrhaphy, perineoplasty, and perineorrhaphy.

**Statistical analysis:** The SPSS version 23 was used for data analysis. Descriptive statistics including mean, standard deviation, frequencies and percentages were used to explore the data. The paired samples t-test was applied for comparing the before and after surgery data. A significant level was set at  $P < 0.05$ .

**Ethics:** The Review Board of the Tehran University of Medical Sciences approved the study (IR.TUMS.VCR.REC. 1398.682).

## Results

**Women's characteristics:** The characteristics of couples are shown in Tables 1 and 2. The mean (SD) age of women was 43.36 (8.6) years. Twenty-seven women (54%) had primary education and forty-four (88%) were housewives. Twenty-three (46%) women had two children and twenty-three (46%) had three or more.

**Table 1:** The characteristics of the participants (women)

	Mean (SD)	No. (%)
Age (years)	43.36 (8.6)	
Duration of marriage	22.18 (9.7)	
Education status		
Primary		27 (54)
Secondary		21 (42)
Higher		2 (4)
Child number		
1		4 (8)
2		23 (46)
$\geq 3$		23 (46)
Employment		
Employed		6 (12)
Housewife		44 (88)
Delivery type		
Vaginal		41 (82)
C/S		3 (6)
Both		6 (12)

The mean age was 47.2 (8.9) years for male partners. Twenty-six partners (52%) had primary education and forty-seven (94%) were employed.

**Table 2:** The characteristics of the participants (men)

	Mean (SD)	No. (%)
Age (years)	47.2 (8.9)	
Education		
Primary		26 (52)
Secondary		18 (36)
Higher		5 (10)
Employment		
Employed		47 (94)
Unemployed		3 (6)

**The body image quality of life:** The results obtained from paired t-test analysis indicated that there was a significant improvement in body image after gynecologic cosmetic surgery ( $P < 0.001$ ). Also, the biggest effect size for improvements was for body image (effect size = 1.1).

**Female sexual function:** The female sexual functioning improved significantly ( $P < 0.001$ ). The mean (SD) of female sexual function increased from 18.8 (4.2) at baseline to 22.7 (3.5) at follow up after gynecologic cosmetic surgery.

**Sexual satisfaction:** The couples' sexual satisfaction for both women and partners had improved significantly after genital cosmetic surgery ( $P < 0.001$ ).

**Table 3:** Comparing body image quality of life, sexual satisfaction, female sexual function derived from Paired Sample t Test

	Baseline Mean (SD)	Follow-up Mean (SD)	Effect size	P
Body Image Quality of Life (BIQL)*	29.7 (11)	42 (7.8)	1.1	<0.001
Female Sexual Function Index (FSFI)*	18.8 (4.2)	22.7 (3.5)	0.90	<0.001
Larson Sexual Satisfaction Questionnaire (LSSQ)-(Female)*	90.6 (10.5)	98.8 (10.3)	0.77	<0.001
Larson Sexual Satisfaction Questionnaire (LSSQ)-(Male)*	93.9 (12.5)	99.8 (10.5)	0.47	<0.001

\*Higher scores indicate better conditions

Women's sexual satisfaction increased from 90.6 (SD = 10.5) to 98.8 (SD = 10.3) and partners' satisfaction changed from 93.9 (SD = 12.5) to 99.8 (SD = 10.5).

The findings for all outcome measures are presented in Table 3.

## Discussion

The present study indicated that the women's body image and sexual functioning increased significantly after gynecologic cosmetic surgery. Also, couple's sexual satisfaction improved significantly. This was comparable with other studies that showed sexual functioning was related to and significant predictor of both own and partner's sexual satisfaction (19, 20). Also, Goodman et al evaluated both 'patient satisfaction' and 'enhancement of sexual function'. They found positive outcomes where 97% of women reported overall satisfaction and the majority indicated sexuality enhancement after female genital cosmetic surgery (21). Sharp et al. in a retrospective study that involved 48 women who had undergone a labiaplasty procedure found women very satisfied with the results of their labiaplasty and they also seem to experience improvements in their sexual satisfaction and psychological well-being and physical/functional motivations for undergoing labiaplasty are associated with greater satisfaction with outcomes (22).

Culligan-Patrick et al. showed that men's and women's sexual experience improved after successful prolapse repair (23). In addition, as we know mutual pleasure is a crucial component of sexual satisfaction and that sexual satisfaction derives from positive sexual experiences and not from the absence of conflict or dysfunction (20). On the other hand, sexual satisfaction considers to be an important component of sexual health, a sexual right, and an outcome of sexual well-being (24). Studies have shown that an appropriate (satisfying and safe) sexual relationship is one of the most important dimensions

that have the highest effect on marital satisfaction. Thus, the improvement of sexual satisfaction could improve marital satisfaction (25-27).

This study showed that couple's sexual satisfaction improved after gynecologic cosmetic surgery. In fact, the study findings indicated that if we improve sexual function in women, their male partner also could benefit from such improvement. As such one might argue this could lead to more stable marital relationships (28).

Body image usually is another concern when women seek gynecologic cosmetic surgery. A study has shown several aspects of body image, including weight concern, physical condition, sexual attractiveness, and thoughts about the body during sexual activity predict sexual satisfaction in women. The findings suggest that women who experience low sexual satisfaction may benefit from treatments that target these specific aspects of body image (29). A study from the Netherlands found that interventions focusing on developing and maintaining a positive body image may be helpful in building on a more satisfying sex life and higher perceived relationship quality (4). The impact of various types of aesthetic surgery on body image is well documented where orange et al. found a link between aesthetic surgery and physical and mental health (30). Also, in another study Al-Jumah et al. showed that female cosmetic genital surgery was safe and effective, and the majority of women reported overall satisfaction and improvement of sexual function and genital appearance (31). Studies have shown that negative body image significantly improved after female genital plastic surgery (32, 5).

The findings showed that the majority of women were housewives and had primary education. This is in parallel with another study that found most women who desired cosmetic surgery had undergraduate educational levels (33). Similarly, Eftekhar et al. found that educational level was significantly lower in women seeking genital cosmetic surgery (12). Also,

Rowen et al. showed that women were less likely to report genital dissatisfaction if they were older, had an education level of high school or above (34).

Although, this study had strengths including novelty in Iran and evaluation of women's partners. The present findings, encountered some limitations. Firstly, due to convenience sampling, generalizing the findings will be restricted. Secondly, this was a before- after study without a control group and thus a cause and effect relationship could not be established. Thirdly, we did not evaluate other psychological variables that might interfere with sexual function and satisfaction such as stress, depression or anxiety. Finally, one should note that we assessed outcomes in short-term and thus we are not able to claim that whether the benefits of surgery would be achieving in long term assessments. In long term prolapse might appear again and even make the condition worth more than the pre-surgery intervention. However, it seems that future studies with longer follow up and including possible influencing variables are needed.

## Conclusion

The findings suggest that female genital cosmetic surgery improves the body image and sexual function of women and sexual satisfaction in couples. Perhaps improving these factors might lead to a more pleasurable and healthier marital relationship.

## Conflict of Interests

Authors have no conflict of interests.

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