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The Effect of Body Image Satisfaction on Women's Sexual Function in Postpartum Period

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Abstract

Background: Postpartum is considered as one of the most vulnerable and stressful periods for women Changes in physical appearance after pregnancy and childbirth could result in attitudinal changes of women towards their body and subsequently disorders in women's sexual behavior.

Objectives: sexual function and the body image of women, this on Regarding the effect of pregnancy and childbirth Care to Health sexual function of Iranian women referring on body image satisfaction y aims to assess the effect ofdstu child birth after ityc Center of Zanjan.

Methods: This cross-sectional study was conducted on 420 mothers who had referred to health care centers affiliated to Zanjan University of Medical Sciences between 2018-19. A checklist including questions about demographic and reproductive information, Female Sexual Function Index (FSFI) and the Multidimensional Body–Self Relations Questionnaire (MBSRQ) were filled up for all of the participants. The data were analyzed by SPSS 16 software through using the Pearson correlation coefficient.

Results: A positive relationship was observed between body image satisfaction and sexual function (SF) of women (r=0.23, p<0.001). The participating women's BMI (r=0.27, p<0.001), marriage duration (r=0.11, p<0.05) and their age (r=0.28, p<0.001) were associated with their body image satisfaction. The levels of body image satisfaction showed significant difference between women with and without sexual dysfunction (p=0.008).

Conclusion: Women experience changes in SF and body image during the postpartum period. Changes in women's SF can leave negative impact on women's family relationship. Therefore, in that period, women need breastfeeding and nutritional support as well as psychosocial support with regards to their body image. As a strategy, health care providers are recommended to pay more attention to women's mental and sexual issues while offering postpartum routine checks.

Keywords: postpartum, sexual function, body image satisfaction

Introduction

considered as one of the most vulnerable Postpartum is and stressful periods for most women Hormonal, physical, mood and social changes, changes in body image, sleep disorders, compatibility with parental role, breastfeeding and taking care of children can be coupled with concerns and many problems for mothers [1,2].

This period may also represent changes in the sexual life of women. Vaginal discharges and bleeding after delivery, perineal pain, hemorrhoid, less vagina lubrication following breastfeeding, hormonal changes, accepting parental role, mastalgia, fatigue, night sleep disorders, fear of child waking up, feeling of being less

attractive in appearance, change in mental perception of body image and mood changes could result in lower motivation in sexual activity. The symptoms can result in destabilization of life, impotency, and lowering the quality of life and jeopardizing family and social health [3-6].

The postpartum sexual dysfunction is estimated to be 22-88 percent [7]. About half of women in Iran experience sexual problems after childbirth [8]. Many factors are involved in differences in the prevalence of sexual dysfunction in various societies, including personal and biological factors, socio-economic conditions, and even cultural differences [6].

Changes in physical appearance, especially in genitalia after delivery and pregnancy, could result in attitudinal changes of women towards their body subsequently disorders in women's sexual behavior [4]. Many women, experiencing discrepancy in body image, are getting highly worried about negative assessment of others, then becoming highly dissatisfied with body image. Continuation of the dissatisfaction results in depression, low self-esteem, and then sexual dysfunction [8]. Body image is referred to one's thoughts, perceptions, and attitudes concerning their physical appearance. If there is too much disharmony between the person's body image and the expected favorable conditions, social, personal, and family relationships, which act as influential factors in one's life, would be affected, too [9.10]. Body image of a woman can influence her mental health such as selfconfidence, depression, marital satisfaction and SF [6]. Despite ample research in the area of Iranian men and women's SF, the research is still novel. Regarding the effect of pregnancy and delivery on SF, this study aims to investigate the effect of body image satisfaction on women's SF of the Iranian women referring to the health centers in Zanjan after childbirth.

Methods

This study is a cross-sectional study, dealing with the effect of body image satisfaction on women's SF in the postpartum period. This study was conducted on 420 women between 2018- 2019 after receiving agreement of the Ethics Committee of Medical Research (IR.ZUMS.REC.1398.112) and confirmation of the Research Department of Zanjan University of Medical Sciences. Written informed consent was obtained from all participants and they were assured that the information from the administered questionnaire would be kept strictly confidential.

First of all, samples of this study were taken from among those referring to health care centers affiliated to Zanjan University of Medical Sciences. The samples met the requirements for participation in this study and were drawn on systematic randomized sampling method. The inclusion criteria were being of Iranian race, not experiencing stressful event in the past three months, satisfaction for participation in the study, and childbirth in the past six months. Initially, all of the participants were provided with a checklist, containing questions about demographic and reproductive factors such as age, socio-economic status, occupational status, education, smoking, number of pregnancies, number of deliveries, breastfeeding condition, the type of contraceptive methods, as well as the mode of delivery. Body image satisfaction was measured based on the Multidimensional Body-Self Relations Questionnaire (MBSRQ) [11]. This questionnaire

contained 68 items to find out about the attitude of the participants on various dimensions of body image structure. The questionnaire sub-scales were as follows: appearance evaluation. appearance orientation, fitness evaluation, fitness orientation, evaluation, health health orientation, illness orientation, body areas satisfaction, self-classified preoccupation. and overweight weight, Participants' responses are ranked on a 5-point Likert scale ranging from 1 (totally dissatisfied) to 5 (totally satisfied). Khodabandelu et al. confirmed the validity and reliability of the instrument in Iran [11].

Female Sexual Function Index questionnaires, developed by Rosen et al. (2000), were filled up to investigate women's SF. This questionnaire consisted of 19 questions designed based on the Likerttype scale. Based on the guidelines of the developer of the questionnaire on the quality of scoring, each question was rated on a scale from 0 or 1 to 5. The scores of each domain was obtained through summing up the scores of questions in each part and multiplied in its certain factor. The overall scale score ranged from 2 to 36 in which higher scores indicate better sexual function. The cutoff point for all the scales and sub-scales were as follows: total scale 28; sexual desire 3.3; subjective arousal 4.3, lubrication 4.3, orgasm 4.3, satisfaction 8.3, and pain 8.3. To put it differently, higher scores of the cutoff points showed a good function. Total score lower than 28 was considered as sexual dysfunction. This scale has good validity and reliability among Iranian women.

The data were then analyzed using SPSS, version 16 software. The data were reported in number and percentage. Moreover, the relationship between women's SF and body image satisfaction in the postpartum period was estimated using the Pearson correlation coefficient. A p value less than 0.05 was considered statistically significant.

Results

Out of 420 female participants in this study, 28.81 percent were academic graduates and only 10 percent were employed. The mean age of the participants was 28.82±6.08. The income level and BMI of the participants were 2.67±1.47 million IR Tumans and 25.44±3.45, respectively. Mean number of the participants' parity was 1.72±0.91. Sixty two percent of the women suffered from sexual dysfunction and total score of the MBSRQ of the participants was 164.75±31.65 (Table 1). No significant difference was observed in the mode of the delivery in women with and without sexual dysfunction (p=0.02).

Standard Deviation Mean Age 28.82 6.08 1/72 0.91 **Parity** 2/67 1.47 Income l **BMI** 25/44 3.45 body image satisfaction 164/75 31.65 number present Academic 121 28/81 **Education** 71/19 Non-academic 299 Housewife 378 **Profession** Employed 42 10 Sexual Observed 268 62 dysfunction Not observed 158 37.1

Table 1: The Socio-demographic and Anthropometric Characteristics of the Participants

The total score of MBSRQ (p=0.008), and the scores for the appearance evaluation (p=0.005), appearance orientation (p<0.001), health evaluation (p<0.001), illness orientation (p=0.02), Body areas satisfaction (p=0.02) and self-classified weight (p=0.02) were significantly different between women with and without sexual dysfunction.

Table 2: Correlation between Sexual Function, Body Image satisfaction, Age, Marriage Duration, and BMI

	FSFI	Body Image	Age	Marital Age
FSFI	1.00			
Body Image	0.23**			
Age	0.06	-0.28**		
Marital Duration	0.03	0.11	0.60**	
BMI	0.02	0.27**	0.15*	0.09

^{**}p<0.05, *p<0.001

To study the correlation between the variables of SF and body image satisfaction, Pearson Correlational Index was used. A positive relationship was observed between body image satisfaction and women's SF

(r=0.23, p<0.001). The BMI of women (r=0.27, p<0.001). p<0.001), marriage duration (r=0.11, p<0.05) and age of women (r=0.28, p<0.001) were among factors relating to body image satisfaction (Table 3).

Table 3: Body Image Satisfaction in Women with and without Sexual Dysfunction

	With FSD	Without FSD	P value
Appearance Evaluation	16.48±5.02	16.79±3.79	0.005
Appearance Orientation	28.83±9.24	30.88±6.48	>0.001
Fitness Evaluation	8.12±3.67	8.18±2.74	0.31
Fitness Orientation	37.18±14.50	36.89±9.03	0.88
Health Evaluation	15.78±4.19	15.81±3.34	>0.001
Health Orientation	19.41±6.22	21.06±5.11	0.79
Illness Orientation	13.11±3.96	13.87±4.02	0.02
Body Areas Satisfaction	4.08±2.11	4.44±1.94	0.02
Self-classified Weight	6.76±1.38	6.24±1.88	0.02
Overweight Preoccupation	12.18±2.49	11.91±2.18	0.39
Total score	161±39.89	166±25.56	0.008
*Delivery Type	•		
Natural	192 (71.64)	116(73.41)	0.73
Caesarian Section	76(28.35)	42(26.58)	

^{*}The data are reported in percentages, and the p-value was estimated using Chi-square 2 test

Discussion

Sexual health accounts for a substantial share of women's quality of life in all ages. Women's SF is subject to major changes after child birth due to hormonal and physical changes owing to pregnancy and delivery. The findings of this study showed that an individuals' SF is affected by factors such as satisfaction with body image, BMI, and marital duration. The women with a higher body image satisfaction enjoyed better SF, as well.

Body image is one of the important aspects of women's sexual health. Women's sexual arousal is, to a large extent, dependent on physical appearance attraction to the extent that women's beliefs in body image and physical appearance in sexual relationship act as determining factors in their SF. Moreover, our findings revealed that women having a higher body image satisfaction experienced a better degree of satisfaction and SF [1,12].

Likewise, Paul et al. reported that women's SF level decreases after pregnancy and does not return back to its former condition after delivery. Though body image does not undergo considerable change during sexual intercourse in the pregnancy period, it has considerable relationship with urinary incontinence after childbirth due to delivery [13]. Jawed-Wesse et al. consider body satisfaction, self-awareness of the outer body, personal image of the reproductive organ among factors influential in women's SF [14].

For many pregnant women it is considered as a seal of approval and endorsement to their womanhood, especially those who had a period of experience in infertility. Karsmidekhordi et al. reported that pregnancy and childbirth could result in less sensitivity of women, especially their beauty and appearance attractiveness. Therefore, infertile women had less body image satisfaction than their fertile counterparts [9]. Rallis et al. demonstrated that women had less body image satisfaction in the postpartum period. They were more concerned with body image before pregnancy, late pregnancy and in the first six months after delivery. Furthermore, factors such as depression, nutritional behavior, and appearance orientations were important predictors of body image satisfaction in the first one year following childbirth [10].

Rogers et al. contended that depression, interest in weight loss, and appearance changes in connection with breastfeeding could serve as important factors for body image satisfaction during breastfeeding period [15]. Rallis et al. reported that depression, nutritional behaviors, and spike in physical activities in six months after childbirth are the main predictors of body image satisfaction among women in the first year following their childbirth [10]. Another study showed eating disorder and appetite, higher weight of women, weaker mental health, non-black race, non-

breastfeeding, and weak family relationship stood as the most important factors governing women's dissatisfaction with body image [16].

This study showed that women with had higher ages, more marital duration, and less BMI had more body image satisfaction. In this regard, Erbil et al. showed that women with a higher BMI, increased weight, disorder in appetite, high weight level, weak mental health, and baby feeding with bottle milk, single parent, and fewer children enjoyed more body image dissatisfaction [17].

Our results confirm that the mode of delivery does not have a significant effect on body image satisfaction and SF. Similarly, Gutzeit et al. showed that delivery mode had no significant effect on short- and long-term SF. Furthermore, episiotomy did not have a favorable impact on the women's sexual performance, whereas breastfeeding was found to have a little unfavorable impact on women's SF [18]. A meta-analytical study also confirms the finding [19]. Griffiths et al. showed that women who had vaginal delivery were less sexually satisfied in the first two years after delivery compared to the those with elective c-section. It seems that women with natural delivery had urinary incontinence, dyspareunia and depression, which were positive factors in their less sexual satisfaction [20].

The findings of another study showed that dyspareunia went up significantly in the first three months after vaginal delivery, but the changes were not evident in the second three months after delivery [21].

Among strong points of this study is that it is the first such study conducted in Iran to look into the role of body image satisfaction on women's function in the postpartum period.

The cross-sectional nature of this study marks as limitations of this research because the correlation which was found between SF and body image satisfaction precisely indicates the causal relationship. Moreover, many factors like the personality of women, sincerity of spouses, and family violence are among other factors that could affect women's SF. These factors have not been taken into consideration in this study. It is recommended that future studies consider these factors, too.

Women undergo a series of changes in their SF and body image satisfaction during postpartum period. Women's perception of their body image serves as an influential factor in their SF. Presumably, the education of women on weight changes in the postpartum period, compatibility with and acceptance of appearance changes during pregnancy and after childbirth, as well as recommendations on weight loss can serve as a viable solution to deal with body image changes and could ultimately lead to better SF among women. Changes in women's SF play a pivotal role in marital relationship. Therefore, In addition to breastfeeding

and nutritional support, women in this period require receiving psychological support as far as their body image is concerned. As a strategy, health care providers are suggested to go on with routine checkups after delivery and pay closer attention to women's mental health and sexual issues.

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Conflict of interest

In this study, no conflict of interest is at work.

References

- 1. Boivin J, Bunting L, Collins JA, Nygren KG. International estimates of infertility prevalence and treatment-seeking: potential need and demand for infertility medical care. Hum Reprod. 2007; 22(6): 1506-12.
- 2. Teshigawara T, Mouri A, Kubo H, Nakamura Y, Shiino T, Okada T, et al. Changes in tryptophan metabolism during pregnancy and postpartum periods: Potential involvement in postpartum depressive symptoms. J Affect Disord. 2019; 255:168-76.
- 3. Harrison M, Obeid N, Haslett K, McLean N, Clarkin C. Embodied motherhood: Exploring body image in pregnant and parenting youth. J Pediatr Adolesc Gynecol. 2019; 32(1): 44-50.
- 4. Gillen MM, Markey CH. A review of research linking body image and sexual well-being. Body image. 31: 2019; 294-301.
- 5. Alp Yılmaz F, Sener Taplak A, Polat S. Breastfeeding and Sexual Activity and Sexual Quality in Postpartum Women. Breastfeed Med. 2019; 14(8): 587-91.
- 6. Sahin E, Erenel AS. A study examining women's sexual function
- in twelve months postpartum. Med Science. 2019.
- 7. Shirvani M, Nesami M, Bavand M. Maternal sexuality after child birth among Iranian women. Pakistan journal of biological sciences: PJBS. 2010:13(8):385-9.
- 8. Dalrymple KL, Herbert JD. Acceptance and commitment therapy for generalized social anxiety disorder: A pilot study. Behav Modif. 2007; 31(5):
- 9. Karamidehkordi A, Roudsari RL. Body image and its relationship with sexual function and marital

- adjustment in infertile women. Iran J Nurs Midwifery Res. 2014; 19(7 Suppl1): S51-S58.
- 10. Rallis S, Skouteris H, Wertheim EH, Paxton SJ. Predictors of body image during the first year postpartum: A prospective study. Women Health. 2007; 45(1): 87-104.
- 11. Khodabandeloo Y, Fat'h-Abadi J, Motamed-Yeganeh N, Yadollahi S. Factor Structure and Psychometric Properties of the Multidimensional Body-Self Relations Questionnaire (MBSRQ) in Female Iranian University Students. Pract Clin Psychol. 2019; 7(3): 187-96.
- 12. Group W. The development of the World Health Organization quality of life assessment instrument (the WHOOOL). Quality of life assessment: International perspectives: Springer; 1994. p. 41-57.
- 13. Pauls RN, Occhino JA, Dryfhout VL. Effects of pregnancy on female sexual function and body image: A prospective study. J Sex Med. 2008; 5(8): 1915-22.
- 14. Jawed-Wessel S, Herbenick D, Schick V. The relationship between body image, female genital selfimage, and sexual function among first-time mothers. J Sex Marital Ther. 2017; 43(7): 618-32.
- 15. Rodgers RF, O'Flynn JL, Bourdeau A, Zimmerman E. A biopsychosocial model of body image, disordered eating, and breastfeeding among postpartum women. Appetite. 2018; 126: 163-68.
- 16. Gjerdingen D, Fontaine P, Crow S, McGovern P, Center B, Miner M. Predictors of Mothers' Postpartum Body Dissatisfaction. Women Health. 2009; 49(6): 491-504.
- 17. Erbil N, Senkul A, Basara GF, Saglam Y, Gezer M. Body image among Turkish women during the first year postpartum. Health Care Women Int. 2012; 33(2): 125-37.
- 18. Gutzeit O, Levy G, Lowenstein L. Postpartum Female Sexual Function :Risk Factors for Postpartum Sexual Dysfunction. Sex Med. 2020; 8(1):8-13.
- 19. Fan D, Li S, Wang W, et al. Sexual dysfunction and mode of delivery in Chinese primiparous women: systematic review and meta-analysis. BMC Pregnancy Childbirth. 2017; 17(1): 408.
- 20. Griffiths A, Watermeyer S, Sidhu K, Amso N, Nix B. Female genital tract morbidity and sexual function following vaginal delivery or lower segment caesarean section. J Obstet Gynaecol. 2006; 26(7): 645-49.
- 21. Galbally M, Watson SJ, Permezel M, Lewis AJ. Depression across pregnancy and the postpartum, antidepressant use and the association with female sexual function. Psychol Med. 2019; 49(9):1490-99.