



Marital Adjustment, Sexual Function, and Body Image After Hysterectomy

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Abstract

Background: Hysterectomy is a common surgery among women in which the uterus, cervix, and sometimes ovaries and fallopian tubes are removed. As women's reproductive organs are important to their sexual image, hysterectomy can affect their psychological status, personal interactions, and especially marital adjustment and sexual function. Moreover, sexual function and marital adjustment can be affected by women's thoughts about their body image.

Objectives: The current study aimed at comparing marital adjustment and sexual function in women's job, focusing on the moderating role of body image.

Methods: This causal-comparative study was conducted among 200 women (100 with hysterectomy and 100 without hysterectomy) recruited via the purposive sampling method. The cases were assigned into two groups of control and study based on their age range, level of education, marital status, and lack of chronic mental and physical disorders. Data collection instruments were the female sexual function index (FSFI), dyadic adjustment scales (DAS), the body image concern inventory (BICI), and a demographic checklist.

Results: Independent *t*-test showed that the total score of marital adjustment ($t = -6.108, P = 0.001$) and each of its subscales, dyadic agreement ($t = -4.44, P = 0.001$), marital satisfaction ($t = -5.98; P = 0.001$), dyadic cohesion ($t = -4.38, P = 0.001$), expressing affection ($t = -5.91; P = 0.001$), and sexual function ($t = -6.55, P = 0.001$) were significantly lower in women undergoing hysterectomy than in those not undergoing hysterectomy. However, according to regression analysis and results of bootstrapping, the upper and lower bounds of the effect of body image on marital adjustment and sexual function were within the overlapping section. Hence, these effects were similar in both groups of the study [95% confidence interval (CI)], and the differences were insignificant.

Conclusions: According to the study, marital adjustment and sexual function decrease after hysterectomy. Therefore, specialist treatment and family counseling interventions seem to be essential in order to improve sexual performance and marital adjustment in women who underwent hysterectomy.

Keywords: Hysterectomy, Marital Adjustment, Sexual Function, Body Image

1. Background

Hysterectomy is a surgery to remove the uterus, cervix, and sometimes ovaries and fallopian tubes. It is mostly used as a surgical therapy for endometriosis and uterus cancer (1). In the last 150 years, hysterectomy, after Cesarean section, has been the most common surgery among the female population worldwide. It is estimated that 45% of women older than 65 years old experience such a surgery (2). Recently, hysterectomy at the premenopausal ages is prevalent to cope with benign disorders of the reproductive system.

Hysterectomy in women at both pre- and postmenopausal ages can have detrimental impacts on

psychological and physical well-being. Especially, hysterectomy at premenopausal ages stops menstruation in women and can have detrimental psychological effects (3). Different studies have shown that sexual outcomes of hysterectomy are the main concern in patients who need the surgery (4). In addition, since ancient times, the uterus has been considered as a sexual organ regulating and controlling important physiological functions, and as a source of power, conserving youth and attractiveness (2). Hence, quite a few women believe that hysterectomy has negative effects on their sexual health and sexuality (1). In addition, studies have shown that physical disabilities and chronic diseases can have an effect on one's sexual functioning. They can also influence marital relationship

and satisfaction from a sexual partner (5).

Satisfaction of sexual needs is an important factor influencing mental and physiological health, and it increases the strength of family foundation (6-8). At the same time, one of the most significant problems that influences one's personal and social life is sexual satisfaction which plays a crucial role in personality development. Just like other fundamental motivations, sexual motivation and desire constitute an inevitable part of the biological, psychological, and social aspects of human beings (9). Studies indicate remarkable complications in sexual function among women who have undergone hysterectomy (10). Dyspareunia and orgasm disorder are the most common post-hysterectomy sexual complications (11). Dyspareunia can be caused by vaginal dryness, vaginal shortness, and abnormal granulation of vaginal cuff, which increases following the ovarian removal (12). Also, the role of estrogen in the reduction of dyspareunia has been indicated (13).

Orgasm disorders due to the decreased genital sensation are induced in pelvic floor surgeries and are intensified by hysterectomy which disrupts the local nerve supply and anatomical relations of the pelvic organs (1). On the other hand, it seems that some post-hysterectomy sexual problems result from psychological complications of such surgeries. Some studies indicate that hysterectomy has serious effects on womanhood (14). Pre- and post-surgical body image is different in women who undergo hysterectomy because every surgery may have a multitude of psychological outcomes such as body image dissatisfaction, especially if the surgery is associated with an organ removal or dysfunction. Results of a study in Turkey showed that women who had undergone hysterectomy had less satisfaction with their body image and lower self-confidence and marital adjustment than healthy women (15).

Marital adjustment is the state in which husband and wife have a feeling of happiness and satisfaction with each other most of the time and their satisfying relationship can be assessed through mutual interest, mutual care, acceptance, and mutual understanding. For most adults, happiness in life mostly depends on successful marriage and satisfactory marital adjustment (16). Studies have shown the remarkable effect of marital adjustment on mental health (17), physical health (18), job satisfaction, and even longevity (19). Most studies have indicated that most women who had undergone hysterectomy expressed their concerns about changes in their sexuality and fear of no longer being accepted by their husbands (20). According to the results of many studies, relief of pain was the main cause of satisfaction in women who underwent hysterectomy. However, these women were concerned about their sexual partners, and even in many cases hid it from

their husbands. Considering the increasing rate of gynecologic diseases among women and the probable effects of hysterectomy on sexuality and marital relationships, the current study aimed at determining the difference in sexual function and marital adjustment between women who had undergone hysterectomy and those who had not, considering the modifying role of body image.

2. Objectives

This study seeks to validate the following hypotheses: (1) the level of marital adjustment in women with hysterectomy is lower than that of the women without hysterectomy; (2) the effect of body image on marital adjustment is higher among women who undergo hysterectomy, compared with the ones who do not; (3) the level of sexual function in women who undergo hysterectomy is lower than the ones who do not; and (4) the effect of body image on sexual function is higher among women who undergo hysterectomy, compared with the ones who do not.

3. Methods

3.1. Participants

Considering an alpha = 0.05, effect size of 0.60, $\beta = 0.05$ and the test power level of 0.95 the standard sample size was calculated to be 186 people (21) (93 women with hysterectomy and 93 women without hysterectomy). To increase validity and considering sample attrition, 100 cases were assigned to each group. All the participants provided written consent for participation in the study. The participants were chosen using the purposive sampling method and according to the following inclusion criteria: being married, having lived with the spouse (no separation) for at least 2 years, not having chronic diseases such as mental disorders, physical disabilities, AIDS and hepatitis according to patients' self-report, lack of drug abuse and alcohol addiction based on self-report, having at least 2 months passed from hysterectomy (intercourse in these women is inhibited for at least 1 month). Sampling for this study was performed from October 23 to January 20, 2018.

3.2. Procedure

Sampling was performed in 2014 among patients admitted to Baqiyatallah, Najmiye, Moheb, Erfan and Tehran Clinic. The names of patients who had undergone hysterectomy in the past two years were extracted and samples were selected based on the inclusion criteria. The selected patients were invited to participate in the research. Five cases had filled out the questionnaire incompletely due to fatigue, lack of interest or lack of time, and these

were excluded from the study. Seven questionnaires were also omitted due to the fact that the applicants' spouses used drugs or alcohol. Six questionnaires were removed due to severe illness of the participants. In such cases, other patients were replaced.

3.3. Measures

In this study, the following data collection instruments were employed: (1) Dyadic Adjustment scales (DAS), (2) Female Sexual Function Index (FSFI), (3) Body Image Concern Inventory (BICI), and (4) demographic checklist.

The DAS is used to measure the level of marital adjustment. This scale includes 32 items and the Likert-based scorecard is used to evaluate the quality of marital relationship from the viewpoint of wife, husband, or both of them. The scores of this questionnaire range from 0 to 151, which means that scores equal to or more than 100 mean the compatibility and scores less than 100 means that there is a problem in marital relations and incompatibility and family understanding. The scoring of questions 1 to 15 is: (1) 5 = we always agree, (2) 4 = we almost always agree, (3) 3 = sometimes we agree, (4) 2 = we often disagree, (5) 1 = we almost always disagree and (6) 0 = we always disagree; and the scoring of questions 16 to 32 is: (1) 1 = always, (2) 2 = often, (3) 3 = usually, (4) 4 = sometimes, and (5) 5 = rarely. The scale was developed in 1976 by Spanier to assess the level of marital satisfaction. Using the total score of DAS, the total satisfaction in an intimate relationship can be measured. Factor analysis indicated that DAS evaluates four aspects of a relationship, namely dyadic satisfaction, dyadic coherence, dyadic consensus, and affectional expression (22). In a study by Sharply and Cross (1982), reliability coefficient was 0.96, which was similar to that of Spanier. The use of this scale is recommended because its psychometric bases are more advanced than other similar scales. The validity of DAS for certain groups was approved by its ability to differentiate married and divorced cases (23). Additionally, in a research conducted in Iran by Molazadeh et al. (2002), the validity and reliability of DAS were established with the reliability coefficient and Cronbach's alpha of 0.86 and 0.89, respectively (24).

The FSFI was developed by Rosen et al. in 2000. It is the gold standard to assess women's sexual function among other different instruments translated and validated in more than 30 countries (25). This 19-item questionnaire evaluates sexual function of women in the six areas of desire, mental stimulation, moisture, orgasm, satisfaction, and sexual pain during the past four weeks (26). The scoring of FSFI uses the Likert scale and the answers are 1 = never, 2 = sometimes, 3 = usually, 4 = often and 5 = always. The scores of each section are obtained by adding the scores of the questions of each section and multiplying it

by the invoice number. Since in the FSFI questionnaire, the numbers of questions on the scales are not equal to each other, first the scores obtained from the questions in each domain are added together and then multiplied by the invoice number in order to weigh the scales with each other. A score of zero indicates that the person has not had sexual activity in the last 4 weeks. By adding the scores of the six scales together, the total score of the scale is obtained. Accordingly, the maximum score for each scale will be 6 and for the whole scale 36. The FSFI has been used in many studies and indicated high degrees of internal consistency and reliability; also, a significant validity was observed between the study and control groups regarding the scores of all the six evaluated areas, while the previous inventories did not have adequate diagnostic accuracy in a wide range of clinical groups (27). Also, in a study by Mohammadi et al. (2008), the findings showed that the Persian version of FSFI is a reliable and valid instrument for measuring sexual function in women (28).

The BICI, developed by Littleton et al. was selected out of a multitude of available scales due to its shortness, ease of implementation, and coordination between the questions and culture of the community. This questionnaire has 19 items of self-report. The subject should answer the questions on a five-point Likert scale from 1 = never, 2 = sometimes, 3 = usually, 4 = often and 5 = always. Scores range from 19 to 95, and the higher the score, the higher the concern for body image. The BICI aims at assessing dissatisfaction with body image in complications such as body dysmorphic deformation, eating deformation, or evaluation of similar semiotic patterns at clinical and non-clinical levels (29). In Iran, the findings of the research conducted by Mohammadi and Sajadinezhad (2007) confirmed appropriate validity and reliability of the Persian version of body image concern Inventory and showed that the instrument can be simply applied in clinical and research settings for the evaluation of attitude toward personal appearance (30).

3.4. Data Analysis

Data were analyzed based on frequency, mean, and standard deviation and using regression, Chi-square, and independent t-test. SPSS version 19 was used for data analysis, and a P-value of less than 0.05 was considered significant

4. Results

According to the demographic data, the mean age of women with and without hysterectomy was 48.89 ± 3.82 and 48.36 ± 3.56 years, respectively. In both groups, most

had a high school diploma or bachelor's degree, and they were mostly homemakers. The majority of the participants had a moderate economic situation and had two children (Table 1).

To evaluate the hypothesis that "marital adjustment in women with hysterectomy is lower than those without hysterectomy", the independent *t*-test was used. The results showed that the mean score of women with hysterectomy was significantly lower than those without marital adjustment ($t = -6.108$, $P = 0.001$), dyadic agreement ($t = -4.44$, $P = 0.001$), marital satisfaction ($t = -5.98$; $P = 0.001$), dyadic coherence ($t = -4.38$, $P = 0.001$), and affectional expression ($t = -5.91$; $P = 0.001$). Therefore, this hypothesis of the study was approved (Table 2).

To evaluate the hypothesis that "the effect of body image on marital adjustment is higher among women with hysterectomy, against other group", regression analysis was used. According to the results of the analysis, the effect of body image on marital adjustment was significant among both groups of women with hysterectomy ($t = -4.61$, $P = 0.001$), and those who had not undergone hysterectomy ($t = -4.03$, $P = 0.001$). However, this effect was higher in the hysterectomy group ($\beta = 0.42$), compared to the control group ($\beta = 0.37$). Results of bootstrapping showed that the upper and lower bounds of the effect of body image on marital adjustment were within the overlapping section. Hence, this effect was similar in both groups of the study [95% confidence interval (CI)] and the difference was insignificant. Therefore, according to the obtained result, the second hypothesis was not approved (Table 3).

In the evaluation of sexual function level in women with and without hysterectomy, using independent *t*-test, results showed that the mean scores of women who had undergone hysterectomy [sexual function ($t = -6.55$, $P = 0.001$), vaginal lubrication ($t = -6.75$, $P = 0.001$), orgasm ($t = -6.40$, $P = 0.001$), sexual satisfaction ($t = -6.31$, $P = 0.001$), and pain ($t = -5.34$, $P = 0.001$) were significantly lower than those of women who had not (Table 4).

Regarding the role of body image in sexual function among women with and without hysterectomy, the results of regression analysis showed the significant role of body image on sexual function of both groups of women with ($t = -2.31$, $P = 0.03$) and without hysterectomy ($t = -2.21$, $P = 0.02$). According to the results of the current study, there was no significant difference between the women who had undergone hysterectomy ($\beta = 0.21$) and the ones who had not ($\beta = 0.21$) regarding the effect of the body image on the sexual function. Results of bootstrapping showed that the upper and lower bounds of the effect of body image on sexual function were within the overlapping section. Hence, according to the insignificant difference between the two groups regarding the effect of the body image on the sex-

ual function, this hypothesis was not approved (Table 5).

Analysis of covariance (ANCOVA) by using a general linear model (GLM) for each of the three variables: (1) marital adjustment, (2) sexual function and (3) body image in two groups with and without hysterectomy with elimination of the effect of variables: (1) age, (2) age of marriage, (3) number of children and (4) education showed that: The effect for marital adjustment was $F = 32.026$, $P = 0.001$, ($\text{Eta} = 0.142$); for sexual function $F = 42.456$, $P = 0.001$, ($\text{Eta} = 0.180$); and for body image $F = 25.087$, $P = 0.001$, ($\text{Eta} = 0.115$) (Table 6).

5. Discussion

Results of the first hypothesis on the total score of DAS and its four subscales (i.e., dyadic agreement, marital satisfaction, dyadic cohesion, and expressing affection) showed that the mean scores of women who had undergone hysterectomy were significantly lower than those of the women who had not. Pinar et al. (2012) studied the effect of hysterectomy on body image, self-confidence, and dyadic adjustment in Turkish women with a history of gynecologic cancer and hysterectomy (15). The results of their study indicated that the level of self-confidence and dyadic adjustment were lower in women who had undergone hysterectomy, compared with those of the healthy women. Hoga et al. (2012) evaluated the psychological viewpoints of a group of Brazilian males whose wives had undergone elective hysterectomy (31). The study had a qualitative design and was based on narrative analysis (interviewing 22 husbands); results of the study showed that emotional and psychological support given by husbands to their wives increased their marital satisfaction. Konstam et al. reported that chronic diseases can affect the total quality of life and dyadic satisfaction (32). Results of the current study were consistent with those of the other studies on the relationship between hysterectomy or other chronic diseases and marital adjustment. Also, reduction of marital adjustment after hysterectomy or incidence of other chronic diseases was approved.

According to the results of the second hypothesis, the effect of body image on dyadic adjustment was similar in both study groups and the difference between the groups in this regard was insignificant. Pinar et al. (2012) reported that body image satisfaction, self-confidence, and dyadic adjustment were lower in women who had undergone hysterectomy, compared with those of healthy ones (15). In addition, body image dissatisfaction was higher in women with lower levels of income and education. Results of their study also indicated the negative effects of hysterectomy on the body image of women with hysterectomy, which was inconsistent with the results of the current study. It

Table 1. Age, Education, Job, Financial Satisfaction and Number of Children in Two Groups of Women With and Without Hysterectomy

Demographic Variables	Groups		Compare Groups	
	Women Who Underwent Hysterectomy (N = 100)	Women Who Did Not Undergo Hysterectomy (N = 100)	t/f/z - Score	P-Value
Age	48.89 ± 3.82	48.36 ± 3.56	t = 1.00	0.318
Age of marriage	20.58 ± 3.68	23.23 ± 3.69	t = 5.08	0.001
Number of children	2.39 ± 1.12	1.62 ± 1.28	t = 4.53	0.001
Level of education			Z = 2.223	0.026
Primary school	7	0		
Middle school	5	2		
High school	2	6		
Diploma	34	25		
Associate	9	12		
Bachelor	32	38		
Master	9	15		
Ph.D.	2	2		
Job			Z = 1.148	0.251
Employee	39	47		
Student	2	2		
Homemaker	59	51		
Financial satisfaction			Z = 0.550	0.582
Completely satisfied	5	7		
Slightly satisfied	28	32		
Satisfied	60	51		
Slightly unsatisfied	6	10		
Completely unsatisfied	1	0		
Number of children			Z = 4.405	0.001
0	3	23		
1	13	26		
2	46	27		
3	24	16		
4	10	6		
5	2	2		
6	2	0		

^a Values are expressed as mean ± SD and percentage unless otherwise indicated.

Table 2. Comparison of the Study Groups Regarding the Marital Adjustment, Using the Independent Samples t-Test

Scale/Groups	Mean ± SD	Difference Between Means	t	P-value
Total score of marital adjustment		-18.86	-6.108	0.001
Women who underwent hysterectomy	87.03 ± 25.03			
Women who did not undergo hysterectomy	105.89 ± 17.89			
Dyadic agreement		-5.92	-4.44	0.001
Women who underwent hysterectomy	43.70 ± 10.22			
Women who did not undergo hysterectomy	49.62 ± 8.52			
Marital satisfaction		-7.96	-5.98	0.001
Women who underwent hysterectomy	28.84 ± 11.46			
Women who did not undergo hysterectomy	38.80 ± 6.75			
Dyadic coherence		-2.7	-4.38	0.001
Women who underwent hysterectomy	8.12 ± 4.76			
Women who did not undergo hysterectomy	10.84 ± 3.96			
Affectional expression		-2.26	-5.91	0.001
Women who underwent hysterectomy	6.37 ± 3			
Women who did not undergo hysterectomy	8.63 ± 2.35			

Table 3. The Effect of Body Image on Marital Adjustment in the Study Groups, Using Regression Model Analysis

Index	B	SEB	β	t	P-Value
Body image of women who underwent hysterectomy	-0.67	0.14	0.42	-4.61	0.001
Body image of women who did not undergo hysterectomy	-0.71	0.17	0.37	-4.03	0.001

Table 4. Comparison of the Study Groups Regarding Sexual Function, Using Independent Samples -Test

Scale/Groups	Mean \pm SD	Difference Between Means	t	P-Value
Total score of sexual function		-7.81	-6.92	0.001
Women who underwent hysterectomy	15.81 \pm 8.53			
Women who did not undergo hysterectomy	23.62 \pm 7.37			
Sexual desire		-0.66	-4.58	0.001
Women who underwent hysterectomy	2.91 \pm 1.03			
Women who did not undergo hysterectomy	3.57 \pm 1.01			
Sexual arousal		-1.26	-6.55	0.001
Women who underwent hysterectomy	1.95 \pm 1.35			
Women who did not undergo hysterectomy	3.22 \pm 1.38			
Vaginal lubrication		-1.55	-6.75	0.001
Women who underwent hysterectomy	2.46 \pm 1.69			
Women who did not undergo hysterectomy	4.02 \pm 1.56			
Orgasm		-1.54	-6.40	0.001
Women who underwent hysterectomy	2.36 \pm 1.82			
Women who did not undergo hysterectomy	3.90 \pm 1.56			
Sexual satisfaction		-1.34	-6.31	0.001
Women who underwent hysterectomy	2.80 \pm 1.66			
Women who did not undergo hysterectomy	4.15 \pm 1.32			
Pain		-1.43	-5.34	0.001
Women who underwent hysterectomy	3.31 \pm 2.11			
Women who did not undergo hysterectomy	4.75 \pm 1.66			

Table 5. The Effect of Body Image on Sexual Function in the Study Groups, Using Regression Model Analysis

Index	B	SEB	β	t	P-Value
Body image of women who underwent hysterectomy	-0.11	0.05	0.21	-2.31	0.03
Body image of women who did not undergo hysterectomy	-0.17	0.07	0.21	-2.21	0.02

seems that many factors are associated with this issue. For instance, time is an important determining factor, since people adapt to their physical properties over time and their body image is gradually improved (33). Therefore, if the BICI were completed at different intervals from hysterectomy, different results would have been obtained.

In addition, Williams and Clark (2000) reported that partner’s support is a significant factor, in those women who had the benefit of their partners’ support such as assisting them in the decision-making process, helping them during the recovery period, etc., would be less affected by hysterectomy (34). The contradictory results of different studies may result from the point that their investigated groups were not matched in this regard. Also, different data collection instruments and cultural attitudes toward women and the importance of fertility in the society and family may cause contradictory results. Body image is one

of the main factors influencing women’s mental health, which can explain their healthy or unhealthy behaviors due to its association with physical, psychological, and emotional aspects. According to the results of different studies, women’s negative and positive attitudes toward their body image affect their marital relationships. However, according to the aforementioned issues, time is an important factor in evaluating body image, and due to the long interval between undergoing hysterectomy and completion of the questionnaire in the current study (about 5.28 years), it seems that neglecting this issue is the main cause of rejection of the second hypothesis. Not only is body image a perception, but also it can be affected by the active participation of culture.

According to the results of the third hypothesis, the total and every six of the subscale scores of FSFI (i.e., sexual desire, sexual arousal, vaginal lubrication, orgasm, sexual

Table 6. Results of Covariance Analysis of Hysterectomy on Marital Adjustment, Sexual Function and Body Image

Dependent Variables/Source	B	F	P-Value	Eta Squared
Marital adjustment				
Corrected model		8.149	0.001	0.174
Intercept	98.446	21.075	0.001	0.098
Age	0.258	0.347	0.556	0.002
Age of marriage	-6.03	1.179	0.279	0.006
Number of children	-2.991	2.984	.086	0.015
Education	-.943	0.506	0.478	0.003
Surgery	18.819	32.026	0.001	0.142
Sexual function				
Corrected model		13.392	0.001	0.257
Intercept	23.581	10.855	0.001	0.053
Age	-0.236	2.323	0.129	0.012
Age of marriage	-0.239	1.477	0.226	0.008
Number of children	0.361	0.346	0.557	0.002
Education	1.649	12.350	0.001	0.060
Surgery	7.675	42.456	0.001	0.180
Body image				
Corrected model		8.421	0.001	0.178
Intercept	42.302	7.734	0.006	0.038
Age	-0.556	4.900	0.028	0.025
Age of marriage	1.002	9.895	0.002	0.049
Number of children	3.079	9.591	0.002	0.047
Education	0.668	0.772	0.381	0.004
Surgery	-9.564	25.087	0.001	0.115

satisfaction, and pain) in women who had undergone hysterectomy were significantly lower than those of the ones who had not. However, discrepant results have been obtained from different studies. Rodríguez et al. (2012) evaluated the sexual function of 100 women one year after hysterectomy using FSFI, which was also employed in the current study (10). Results of their study also indicated significant sexual dysfunction in women who had undergone hysterectomy compared with the healthy women. Results of a study by Ye et al. (2014) showed reduced sexual function in women who had undergone hysterectomy; however, vaginal extension could not cause sexual enhancement (35). According to the results of a prospective study by Roovers et al. (2003), sexual pleasure (orgasm) and sexual function were improved in most of the women irrespective of the hysterectomy type (1). Thakar (2015) reported that the reduction of sexual function after hysterectomy is insignificant (36); but, results of the current study were consistent with those of the other studies indicating the reduction of sexual desire and sexual function after hysterectomy. Some other studies have shown lower quality of sexual life in cases with rheumatoid arthritis (37) and ischemic heart disease (38).

Results of the fourth hypothesis indicated no significant difference between women who had undergone hys-

terectomy and the ones who had not regarding the effect of body image on sexual function, based on their β -values. Results of bootstrapping showed that the upper and lower bounds of the effect of body image on sexual function were within the overlapping section. Hence, there was no significant difference between the study groups regarding the effect of body image on sexual function (95% CI). Therefore, the fourth hypothesis was not approved. As formerly discussed in the second hypothesis, a few studies have been conducted in this regard. Recently, Burke and Lowenstein (2016) in a systematic study reported no significant difference between the pre- and post-hysterectomy body image (39), which was in line with the results of the current study. As the parameters of time and husband's support were not considered in their study, it seems that body image was improved in women over time without playing a significant role in their sexual function.

5.1. Conclusion

According to this study, marital adjustment and sexual function decrease after hysterectomy. Therefore, specialist treatment and family counseling interventions seem to be essential in order to improve sexual performance and marital adjustment in women undergoing hysterectomy.

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Footnotes

Authors' Contribution: Both authors did the research, did the statistical analyses, drafted the manuscript, edited the manuscript, and approved the final version. The corresponding author was responsible for the supervision of the study, and the conduct of the investigation was by the first author.

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Ethical Approval: This article is extracted from a Master's thesis submitted to Tehran University of Science and Culture. This university has no ethics committee. Ethical issues are controlled in the approval of the proposal and the research. Additionally, individuals participated in the study with personal consent and completed the consent form.

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