

*Original Article***Quality of life in physical and sexual dimensions among women undergoing hysterectomy and hormone-therapy because of abnormal uterine bleeding***Ashraf Kazemi*, Mina Homayuni**, Roshanak Hassanzahraie*, Maryam Marufi******Abstract**

BACKGROUND: Menstruation is a physiologic phenomenon and the hallmark of reproduction for women in reproductive age. However, sometimes abnormal bleeding needs hormone-therapy or hysterectomy and each of these treatments can affect women's physical and sexual health and quality of life. Therefore, the quality of life assessment after such treatments can prepare the health care system to confront the poor quality of life in these women.

METHODS: This was a descriptive comparative study. Subjects included women in reproductive age, who were under hormone therapy for at least 6 months because of abnormal uterine bleeding (54 women) or had a hysterectomy 6 months ago (54 women). Data were collected by a questionnaire measured the physical and sexual dimensions of women's lives.

RESULTS: Comparing the quality of life in the physical and sexual health dimensions, after removing the effects of background factors, showed that the scores of sexual dimension of the quality of life is significantly different between the two groups ($p = 0.046$), and the physical dimension of quality of life was lower in the hysterectomy group. But the scores of sexual dimension of life in hysterectomy group were higher than hormone-therapy group ($p = 0.001$).

CONCLUSION: Hysterectomy and hormone-therapy, as treatments of abnormal uterine bleedings, change the quality of life in physical and sexual dimensions; so that in hormone-therapy group, the quality of life in physical dimension is higher than hysterectomy group but women with hysterectomy history had a better sexual life.

KEY WORDS: Hysterectomy, hormone-therapy, physical dimension, sexual dimension, quality of life

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People health in the society, is the most important factor for social and economical development and every financial or educational investment in this field should be considered essential. Having a good quality of life has always been a wish for human beings. For long times, finding the true meaning of "good life" and the way to achieve it have been the major thoughts of philosophers.¹ Women experience some special phenomenon in their life, which deeply affect their lives; one of these phenomena is menstruation.

Menstruation is a physiologic phenomenon and the most important hallmark of reproduction for women in reproductive age.² However;

sometimes it turns to abnormal bleedings and makes women worried. Usual treatments for abnormal uterine bleeding include medications, IUDs, and surgeries. Hysterectomy is the most common surgery and sometimes the last treatment for abnormal uterine bleeding.³ Studies in the US show that 75% of women who had a hysterectomy were in the age of 41-45 year-old.⁴ In Isfahan, during 1993-1997 there were 802 hysterectomies in Shahid Beheshti Hospital, most of them for women between 41-45 years of age.⁵

Since uterus is one of the main reproductive organs and a major part of self-image in women,⁶ its removal may change a woman's under-

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standing of her health. Hormonal treatments such as synthesized androgens (as Danazol), progestones (as Medroxy Progesterone Acetate) or a combination of estrogen and progesterone (as contraceptives with low dosage of estrogen) may control massive abnormal bleeding of menstruation.⁷ But, they are associated with some side effects such as headache, depression, change in mood, hot flash, dryness of vagina, and reducing sexual desire, which can affect women's quality of life.³ Some of the studies showed that after hysterectomy, many women think that this surgery will reduce their womanhood and interfere their sexual satisfaction.⁴ Also, hysterectomy can lead to undesirable psychological outcomes, which increase referring to doctors and using anti-depression medications,⁷ and put the women in a critical situation in the family.⁸ However, some other studies reported that hysterectomy is associated with increasing quality of life in some dimensions. Kupperman et al compared the physical and mental health, self-image, and sleep of women with abnormal uterine bleeding who had hysterectomy and women who followed other treatments and concluded that women with hysterectomy were more satisfied, had better self-image, mental health and sleep, and expressed to have good physical health.⁹ Hurskainen et al studied the quality of life in women who had hysterectomy and compared it with other treatments for abnormal uterine bleeding. The results showed that 12 months after the treatment, hysterectomy group had sexual problems and the other group had sexual dissatisfaction.¹⁰

One of the goals of health for everybody in 21st century, is the improvement of quality of life; and to find the best treatments for medical problems, it is not just enough to evaluate the results of interventions on morbidity and mortality in clinical studies, but the outcome of interventions on the quality of life is an important criteria in this evaluation.¹¹ Evaluation of hysterectomy and hormone-therapy outcomes as the last treatments for abnormal uterine bleedings is also necessary in the study of these women's quality of life.¹² Quality of life is a term to ex-

press life satisfaction, a wide notion which is influenced by individual health, mental satisfaction, level of independence, social relations and relation with surroundings in a complicated way. Anything that has negative effect on feeling good and carrying daily activities make the quality of life poor.¹³

The important point is that the effects of each process on quality of life happens within the social culture, and the quality of life in women undergo various treatments due to abnormal bleedings would be different in different societies and cultures, knowing which can provide wide horizons for health system to evaluate the effects of treatments for abnormal uterine bleeding.¹

Since there has not been such a research in Iran, this study was an effort to find the advantages and disadvantages of different treatments for abnormal uterine bleeding on the physical and sexual dimensions of quality of life by comparing the quality of life in women who had hysterectomy with those who had other treatments.

Methods

This was a qualitative study using the phenomenology method. The area of the study limited to the diabetes center of the Social Insurance, the health clinic center under the Khurasgan Social Insurance, and several private clinics in Isfahan. The sampling period was from November 2005 to August 2006. The studied participants included health care provider of the above centers (regardless of their educational degree), who directly were in contact with the diabetes women of the productive age. It was also considered as inclusion criteria that the participants should have the experience in preconceptional care of diabetes and should be eager to participate in the study. The researcher referred to the health centers and clinics to select the participants, explain the research goals to them, carry out a nonstructural interview with them and record all the interviews on a cassette tape with the participants' permission. Each interview lasted between 20-60 minutes as necessary. All interviews were transcribed. Fif-

teen participants provided sufficient data and there was no new code in extra interviews. Final data were shared with the participants to ensure the results' consistency and it was proved that the final data agreed with their real opinion. Data were analyzed using the Colaizzi's method, which comprises seven steps. In the first step, the researcher carefully read each transcript and reviewed them several times to get an overall sense of them. In the second step, significant statements and terms were extracted from the transcripts, which in the third step of Colaizzi's method, were conceptualized, formulated and set in 64 codes. In the fourth step, the researcher organized obtained concepts in significant categories. In the fifth step of Colaizzi's method, the two major notions and six sub-notions were put together with a complete description of details as a general and pivotal notion of "patients' faced with the disease and pregnancy". This notion provided the basis for the study.

Results

Comparison between the physical and sexual dimensions of quality of life, 6 months after the treatments in 54 women with hysterectomy and 54 women with hormone-therapy showed that

the mean age of hysterectomy group and hormone-therapy group were $42.68 (\pm 4.33)$ and $38.24 (\pm 6.32)$ years respectively. T-test showed a significant difference between the two groups age ($p = 0.029$). Comparison between the family income and educational level of the two groups with Mann-Whitney showed a significant difference in the income ($p = 0.03$, $z = 2.1$ and $p = 0.03$, $z = 2.59$).

However, the t-test showed no significant difference between the two groups number of children ($p = 0.07$, $t = 1.8$). The physical and sexual healths of the two groups were compared based on 100 once the scores were calculated. Table 1 shows the quality of life in physical dimension for the two groups.

The results showed that most subjects in hysterectomy group (38.9%) had a score of 40.1–60 for the quality of life in physical dimension; in the hormone-therapy group, majority (63%) had a score of 60.1–80 in the physical dimension of quality of life. Comparison of the mean scores of physical health with t-test showed a significant difference between the two groups. ANOVA after removing the factors of age, income, and education showed a significant difference between in the physical dimension of quality of life.

Table 1. The frequency distribution and comparison between the mean scores of physical dimension of quality of life in the two groups.

Group Physical dimension scores	Hysterectomy		hormone-therapy	
	Number	Percentage	Number	Percentage
0-20	0	0	0	0
20.1-40	6	11.1	1	1.9
40.1-60	21	38.9	13	24
60.1-80	17	31.5	34	63
80.1-100	10	18.5	6	11.1
Total	54	100	54	100
Mean \pm SD	61.28 \pm 19.02		67.59 \pm 12.38	
t-test			2.05	
p value			0.044	

Table 2. Frequency distribution and comparison between the mean scores of sexual dimension of quality of life in the two groups.

Group Sexual dimension of quality of life	Hysterectomy		Hormone-therapy	
	Number	Percentage	Number	Percentage
0-20	2	3.7	5	9.3
20.1-40	5	9.3	30	55.5
40.1-60	17	31.4	12	22.2
60.1-80	25	46.3	5	9.3
80.1-100	5	9.3	2	3.7
Total	54	100	54	100
Mean \pm SD	61.96 \pm 13.79		39.51 \pm 14.21	
t-test			6.67	
p value			0.001	

Table 2 shows the two groups' situation in the physical dimension of quality of life. As the table show, 3.7% (lowest frequency) of hysterectomy group's scores was 0-20 and 46.3% (highest frequency) had a score of 60.1-80, also in the hormone-therapy group, 3.7% (lowest frequency) had a score of 80.1-100 and 55.6% (highest frequency) had a score of 20.1-40.

The results of comparison show that ignoring the background factors, the sexual dimension scores were significantly different. ANOVA after removing factors of age, income and educational level showed a significant difference in the sexual quality of life ($p = 0.001$).

Discussion

The results show a significant difference between the two groups in the physical dimension of quality of life, and that the hormone-therapy group has a better situation compared with hysterectomy group. This result is opposite to the findings of Kupperman et al study, which showed a better quality of life in physical dimension among hysterectomy group (75 scores out of 100) compared with medication group and the difference between the scores of the two groups was significant.⁹ Varner et al concluded that the physical dimension of quality of life in hysterectomy group was better than hormone-

therapy group.⁷ The difference between the results of these studies and the findings of the present study can be related to several factors such as culture. Hysterectomy may associate with negative attitudes toward physical health. Most women believe that menstruation is a sign of physical health and being reproductive. Menstruation continues among those who follow hormone-therapy, but it will end in those who select hysterectomy, and this can affect the physical dimension of quality of life. Therefore, education and changing attitudes before the hysterectomy is obviously very important.

The other reason for the difference in the results of above-mentioned studies can be the length of the treatments. The subjects of the present study started hormone-therapy 6 months before the study, which reflects the effectiveness of hormone-therapy and its' no serious side effect yet. Because if there is a serious and health threatening problem for these patients, they would be advised for hysterectomy.

The results of this research showed that the hysterectomy group had a higher quality of life in sexual dimension compared with the hormone-therapy group. Kupperman et al study reported that women in hysterectomy group had a better sexual function with medication group.⁹ Hurskainen et al¹² found that months

after hysterectomy and levonorgestrel IUD, the sexual problems were decreased in hysterectomy group compared with before the surgery, and in the medication group, the scores of sexual function and sex partner's satisfaction was reduced compared with before the treatment.¹⁰ The results of Goetsch et al, Dragisic et al, and Lambden et al studies showed that the sexual function significantly improves and dyspareunia decreases after hysterectomy.¹⁴⁻¹⁵

An effective factor on the quality of sexual relations is the limitation of sexual intercourse when there is bleeding. Since hysterectomy ends the abnormal uterine bleeding, women can probably have better sexual intercourse. In addition, hysterectomy and the zero possibility of pregnancy in this group increase a feeling of healthy sex. Although uterine, as a reproductive

organ may affect the sexual satisfaction, bleeding can bring bigger anxiety to the sexual life. Therefore, it is important to find patients who have a poor quality of life in the sexual dimension due to uterine bleeding and provide appropriate advices and consultation program for them.

Based on the findings of this study, it is suggested that in counseling sessions before selecting a treatment for abnormal uterine bleedings, the patients' attitude toward different treatments and also the undesirable effects of uterine bleeding on dimensions of quality of life be considered.

The researchers declare that they had no conflict of interest in this study and it was done under the research ethics.

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