

The Sexual Life and Quality of Life in Women with Vaginitis Treatment

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Abstract

The purpose of this study was to identify relationship to sexual life and quality of life in women with vaginitis treatment. Method: One hundred and twelve vaginitis women were asked to complete the questionnaires which were constructed to include general characteristics, gynecologic characteristics, sexual life, quality of life. Data were analyzed by descriptive statistics, t-test, ANOVA, Pearson's correlation coefficients and regression, using SPSS WIN 20.0 program. Results: There was a negative correlation between sexual attitude and quality of life. There was a positive correlation between sexual character and quality of life. There was a negative correlation between sexual attitude and sexual character. Sexual attitude, post menopause and stress affected quality of life. Conclusion: Results suggest that development of sex related counseling and education programs in order to improve quality of life in women with vaginitis.

Keywords: *Quality of life, Sexual Life, Vaginitis*

1. Introduction

1.1 Necessity of research

Vaginitis is a vaginal infection or state of inflammation [2], the most common women's health condition. Annually, approximately 10 million patients visit obstetrics/gynecology (OB/GYN) to treat vaginitis in the US [10]. Although, the pathogenesis of vaginitis is not clearly known, it is commonly viewed that vaginitis is caused or recurred by sexual behavior and sometimes accompanied by various sexual diseases [3][5][9]. Women with vaginitis experience itching and pain in perineal region, excessive vaginal discharge and distinct odor, which causes physical and psychological discomfort, stress and lowered self-esteem [6]. Vaginitis affects not only women's personal life, but also their social life to a point where they could not concentrate at their work and resulted in decrease in productivity by 266-1,130 Euros annually [8]. When compared to the normal adult female population, physical and mental function and health-related quality of life in vaginitis patients were significantly low, at the level of asthma or chronic obstructive pulmonary disease (COPD) patients [7]. Additionally, the biggest stress from vaginitis was their sex lives [8]. Vaginitis patients lose the sexual desire and refuse sexual behavior completely as a result due to the perineal pain during the intercourse,

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anxiety from thinking the partner might notice the symptoms, and the fear of recurrence of vaginitis [1].

Majority of the vaginitis related studies in South Korea are pharmacological and medical perspectives on its treatment and efficacy or about causative bacteria from histological characterization. In contrast, international studies discuss various perspectives including vaginitis and sex life [3][4], as well as psychological and physical influential factors [1][6]. Etiology of vaginitis and treatment in theoretical aspects are well known; however, there has not been a study which discusses women's sexual function and quality of life in South Korea.

Therefore, this study was to investigate married women with history of vaginitis treatment for their sex life and quality of life before and after the treatment, and identify factors that influence quality of life. This study ultimately aimed to provide basic data to support development of sex education program that will help improving sexual functions and quality of life in women with vaginitis.

2. Methodology

2.1 Design

This study is a descriptive survey research of married women with history of vaginitis treatment to understand their sex life before and after vaginitis treatment and its relevance with quality of life .

2.2 Materials and Methods

1) General and Gynecological Characteristics

By using a structured questionnaire, the study subjects' general characteristics including age, educational background, religion, employment status, and household income were surveyed. In terms of gynecological characteristics, menopausal status, history of childbearing, vaginitis related influential factors, and vaginitis treatment experience were surveyed.

2) Sex Life

The four questions regarding attitude toward sexual behavior was scaled from 1 to 4, in which a higher score meant a more negative attitude towards sexual behavior. The four questions regarding the sexual behavior characteristics were scaled from 1 to 4, in which a higher score meant a higher frequency.

3) Quality of Life

A higher score indicated a higher quality of life.

2.3 Data analysis

Collected data were analyzed by SPSS/WIN 20.0 program and the detailed methods are as follows:

1) The frequency, percentage, mean and standard deviation were calculated in the study subject's general and gynecological characteristics, sex life and quality of life before and after the vaginitis treatment.

2) The t-test and ANOVA were used to analyze relationship between their sex life and quality of life depending on study subject's general and gynecological characteristics. Post-hoc analysis was performed by the Scheffe Test.

3) Pearson's correlation coefficient was used to demonstrate relationship between study subject's sex life and the quality of life.

4) Multiple regression analysis was used to determine the influential factors of quality of life.

3. Results

3.1 Sex life and quality of life based on study subject's characteristics

There was no statistically significant difference in the study subject's sex life based on the general characteristics. However, a statistically significant difference in the quality of life was seen in among different age groups. Compared to the study subjects in 60s, there was a statistically significant difference in younger age group in the 30s and 40s ($F=0.63$, $p=0.007$) and the individual's educational background ($t=2.18$, $p=0.031$).

There was no statistically significant difference in the study subject's sex life based on the gynecological characteristics. However, there was a statistical significant difference in quality of life based on their menopausal status ($t=5.53$, $p=0.000$) and level of stress ($t=2.61$, $p=0.010$) as shown in Table 1.

Table 1. Sexual life and Quality of life by Object's Characteristics

		(N=116)						
Characteristics	Categories	n(%)	Sexual life			Quality of life		
			M±SD	t / F	p	M±SD	t / F	p
			39.42±7.05					
Age(yr)	≤39 ^a	66(56.4)	2.23±0.42			2.70±0.19		
	40-49 ^b	40(34.5)	2.23±0.39	1.69	.936	2.70±0.22	0.63	007* (a>d b>d)
	50-59 ^c	8(6.9)	2.31±0.35			2.53±0.24		
	≥60 ^d	2(1.7)	2.13±0.10			2.21±0.21		
Education	≤High school	56(48.3)	2.19±0.38	-1.34	.183	2.63±0.22	-2.18	.031
	≥College	60(51.7)	2.28±0.41			2.72±0.21		
Husband education	≤High school	41(35.3)	2.16±0.42	-1.96	.105	2.63±0.24	-1.63	.053
	≥College	75(64.7)	2.28±0.38			2.70±0.20		
Religion	Christian	31(26.7)	2.27±0.41			2.50±0.37		
	Buddist	13(11.2)	2.31±0.38	1.09	.298	2.45±0.41	1.22	.272
	Catholic	16(13.8)	2.27±0.47			2.49±0.37		
Occupation	Have not	56(48.3)	2.15±0.18			2.58±0.29		
	Yes	63(54.3)	2.22±0.38	-0.35	.728	2.69±0.23	0.49	.623
	No	53(45.7)	2.25±0.42			2.67±0.20		
Monthly income (10,000won)	<300	43(37.1)	2.14±0.37			2.63±0.23		
	≥300	73(62.9)	2.29±0.25	-1.98	.050	2.70±0.21	-1.68	.096
Post menopause	Yes	10(8.6)	2.28±0.17	0.33	.746	2.36±0.14	-5.53	.000
	No	106(91.4)	2.23±0.41			2.71±0.20		

Child birth	Yes	109(93.9)	2.24±0.39	.026	.979	2.67±0.22	-0.76	.451
	No	7(6.1)	2.23±0.50			2.74±0.18		
Influence factor(1-4)								
1)Sauna	Yes	22(19.0)	2.30±0.37	0.78	.436	2.63±0.24	-1.04	.302
	No	94(81.0)	2.22±0.40			2.69±0.21		
2)Tight clothes	Yes	37(31.9)	2.21±0.39	-0.43	.668	2.67±0.23	-0.31	.758
	No	79(68.1)	2.25±0.40			2.68±0.21		
3)Overwork	Yes	80(69.0)	2.22±0.40	-0.83	.411	2.64±0.21	-2.61	.010
	No	36(31.0)	2.28±0.40			2.75±0.21		
4)Chronic cervicitis	Yes	49(42.2)	2.19±0.41	-1.10	.273	2.69±0.21	0.52	.601
	No	67(57.8)	2.27±0.39			2.67±0.22		
Vaginitis tx.	first	19(16.4)	2.34±0.38	1.28	.202	2.64±0.14	-0.91	.366
	recur	97(83.6)	2.21±0.40			2.69±0.23		

3.2 Sex life before and after onset of vaginitis

The mean score of attitude towards sexual behavior, the sub-factor, increased statistically significant, from 1.45±0.42 to 2.10±0.49 (t=11.41, p=0.000). As shown in Table 2, the mean score of sexual behavior characteristics decreased in statistically significant manner from 2.20±0.55 to 1.52±0.42 (t=10.04, p=0.000).

Table 2. Score of Sexual life before vaginosis and after
(N=116)

Variables	Before	After	t	p
	Mean±SD	Mean±SD		
Attitude of sexual activity	1.45±0.42	2.10±0.49	11.41	.000
Character of sexual activity	2.20± 0.55	1.58±0.42	10.04	.000

3.3 Sex life and Quality of Life

Of 16 being a perfect score, 11.58±1.97 for attitude towards sexual behavior to determine the degree of sex life and 6.31±1.68 for sexual behavior characteristics were scored. As shown in Table 3, , the quality of life scored at 125.89±10.18 out of 235 being a perfect score.

Table 3. Score of Sexual life and Quality of life
(N=116)

Variables		Mean ±SD	Tool range
Sexual life	Attitude of sexual activity	8.42±1.97	4-16
	Character of sexual activity	6.31±1.68	0-16
	Quality of life	125.89±10.18	47-235

3.4 Relationship between sex life and quality of life

The attitude towards the sexual behavior, which is a sub-factor of sexual life, showed a negative correlation with quality of life ($r = -0.299$, $p = 0.001$). There was a positive correlation between sexual behavior characteristics and quality of life ($r = 0.311$, $p = 0.001$). In addition, sexual behavior attitude and sexual behavior characteristics showed a negative correlation ($r = -0.503$, $p = 0.000$) as shown in Table 4.

Table 4. Correlation of Sexual life, Quality of life

(N=116)

Variables	Quality of life	Attitude of sexual activity	Character of sexual activity
	r(p)	r(p)	r(p)
Attitude of sexual activity	-.299(.001)	-	-
Character of sexual activity	.311(.001)	-.503(.000)	-

3.5 Factors that Influence Quality of Life

Of the independent variables, the sexual behavior characteristics had the biggest influence, followed by menopausal status and stress level. The regression coefficients were less than 0.05, indicating that it was statistically significant at 5% of significance level. The regression model estimated statistically significance by 22.470 ($p = 0.000$) with R^2 of 0.376 in explanatory power (Table 5).

Table 5. Factors affecting Quality of life

(N=116)

Variables	B	SE	b	t(p)
Character of sexual activity	.361	.057	.470	6.29(.000)
Post menopause	.171	.039	.331	4.43(.000)
Overwork	.111	.035	.238	3.19(.002)

Adj. $R^2 = .376$, $F = 22.47$ ($p = .000$)

4. Conclusion

The results showed that quality of life differed according to age, educational background, menopausal status, and fatigue, while there were no significant differences in sex life.

Meanwhile, sex life scores decreased after the onset of vaginitis, where the attitude towards sexual behavior changed negatively and frequency of sexual behavior decreased.

With respect to the correlation between sex life and quality of life, a more negative attitude toward sexual behavior and a lower frequency of sex resulted in a lower quality of life.

The factor that had the greatest impact on quality of life was sexual behavior characteristics, which was one of the subcategories of sex life, while the other factors that also had a significant impact included menopausal status and fatigue.

Based on the conclusions above, the following is recommended: First, it is recommended that an experimental study be formed that focuses on the development and application of programs related to vaginitis care intervention and consultations on how sex life improves the quality of life in women with vaginitis.

Second, a broader study on marital sex life through an investigation of not only the women with vaginitis but also the sex life and quality of life of their spouses is also recommended.

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Reference

- [1] Jade EB., Sandra W., Meredith TS., Ruth M., Julie MS., Clare B., Christopher KF., Marcus YC., Catriona B: "The Burden of Bacterial Vaginosis: Women's Experience of the Physical, Emotion, Sexual and Social Impact of Living with Recurrent Bacterial Vaginosis," San Francisco: PLoS One; 8(9)e74378 (2013)
- [2] Debra H: "Nursing Considerations in Patients with Vaginitis," British Journal of Nursing, Vol.19, No.16, PP.1106-1111. (2010)
- [3] Vodstrcil LA, Twin J, Garland SM, Fairley CK, Hocking JS, Law MG, Plummer EL., Fethers KA., Chow EP., Tabrizi SN, Bradshaw CS: "The Influence of Sexual Activity on the Vaginal Microbiota and Gardnerella Vaginalis Clade Diversity in Young Women," San Francisco: PLoS one; 12(2)e0171856 (2017)
- [4] Bradshaw CS, Walker J, Fairley CK, Chen MY, Tabrizi SN, Donovan B, Kaldor JM, McNamee K, Urban E, Walker S, Currie M, Birden H, Bowden F, Garland S, Pirotta M, Gurrin L, Hocking JS: "Prevalent and Incident Bacterial Vaginosis are Associated with Sexual and Contraceptive Behaviours in Young Australian Women," PLoS One.; 8(3)e57688. (2013)
- [5] Bilardi JE, Walker SM, Temple MJ, McNair RP, Mooney J, Vodstrcil LA, Bellhouse CE, Fairley CK, Bradshaw CS: "Women View Key Sexual Behaviors as the Trigger for the Onset and Recurrence of Bacterial Vaginosis," PLoS One. 12(3)e0173637 (2017).
- [6] Payne SC, Cromer PR, Stanek MK and Palmer AA: "Evidence of African-American Women's Frustrations with Chronic Recurrent Bacterial Vaginosis," Journal of the American Academy of Nurse practitioners, Vol.22, No.2, pp. 101-108 (2010).
- [7] Samuel A, Florent G, Julian W, Amine K, Jean PD, Jack S and Mondher T: "Subjective Health Status and Health-Related Quality of Life among Women with Recurrent Vulvovaginal Candidosis in European and the USA," Health and Quality of Life Outcomes, Vol.11, pp.169-180 (2013)
- [8] Powell K. and Vaginal thrush: "Quality of Life and Treatments. British Journal of Nursing," Vol. 19, No.17, pp. 1106-1111 (2010)
- [9] Lewis FM, Bernstein KT and Aral SO: "Vaginal Microbiome and Its Relationship to Behavior, Sexual Health, and Sexually Transmitted Diseases," Obstetrics & Gynecology, Vol.129, No.4, pp. 643-654 (2017)
- [10] Gergova RT, Strateva TV and Mitov IG: "Gardnerella Vaginalis-Associated Bacterial Vaginosis in Bulgarian Women," Brazilian Journal of Infectious Diseases.; Vol. 17, No.3, pp.313-318. (2013)