

Original Article

Sexual Quality of Life and Marital Adjustment in Women with Menstrual Irregularity

Tuba Soylu, RN

Adana, Turkey

Evsen Nazik, PhD

Professor, Department of Obstetrics and Gynecologic Nursing, Faculty of Health Sciences, Çukurova University, Adana, Turkey

Correspondence: Evsen Nazik, Department of Obstetrics and Gynecologic Nursing, Faculty of Health Sciences, Cukurova University, Adana, Turkey. E-mail: eceevsen_61@hotmail.com

Abstract

Background: Menstruation perceived as one of the most important functions of womanhood as it is the sign of reproductive and sexuality. Many women consider sexual identity and sexual role with menstrual functions. Therefore; women may perceive changes in these functions as a threat to their sexual identity. Sexual life is one of the main factors affecting marital adjustment. The deterioration of the quality of sexual life can lead to problems in relation to married couples.

Objective: The aim of this study was to analyze the sexual quality of life and marital adjustment in women with menstrual irregularity.

Methodology: A cross-sectional design was employed in this descriptive study. This study was conducted in the gynecology outpatient clinic of a hospital in Turkey. The study was conducted with 211 women who agreed to participate in the study and who met the criteria for participating in the study. Data were collected using Personal Information Form, The Sexual Quality of Life-Female (SQOL-F) and Marital Adjustment Test (MAT).

Results: It was found that 40.8% of the women had menstruation at the age of 13-14, 44.5% had one period in 21-40 days, and 51.2% had menstruation lasting 3-6 days. The total SQOL-F scores of the women was $60,93 \pm 14,61$, and MAT scores was $48,68 \pm 4,18$. A statistically significant positive correlation was detected between SQOL-F and MAT ($r=0,589$ $p<0,001$).

Conclusion: It was found that women with menstrual irregularity have poor quality of sex life and most of them don't have marital adjustment.

Key Words: Menstrual irregularity, quality of sexual life, marital adjustment, women

Introduction

Menstruation occurs in different periods such as childhood, adolescence, adulthood, old age and there are some physical, psychological and social changes in each of these periods (Koyun, Taskin, & Terzioglu, 2011). A significant number of these changes begin with menarche and continue until menopause. Regular changes occur every month during this period in the organism of the woman, especially the reproductive organs. Periodic pouring of the endometrium layer with hormonal changes is called as menstruation and the time between the two menstruations is expressed as a cycle (Taşkın, 2016). The menstrual cycle is

considered normal if the length is 25-30 days, the amount of bleeding is 20-60 ml and the duration of the bleeding is 2-8 days (Esin, Koksall, Hizli & Garipagaoglu, 2016).

However, menstrual cycling can cause problems with the amount, frequency or order of the bleeding. Menstrual irregularities that represent deviations from the normal cycle are called as amenorrhea, menorrhagia, metrorrhagia, hypomenore, hypermenore, oligomenore, and polymenore (Reed & Carr, 2015; Bacon, 2017). Menstrual irregularities can be seen due to factors such as excessive stress, hormonal changes, myom, uterine cancer, intense coffee or cigarette

consumption, diet, sudden weight loss, obesity, a traumatic experience that is so important to life disorder (for example, loss of a family member) (Bacon, 2017; Deligeoroglou & Creatsas, 2012).

Menstruation is a physiological event and shows that the reproductive system works, that things are going well, and that women are fertile. However, menstruation is a matter not to be spoken in society and it is usually seen as taboo. Menstrual taboos shape many applications around the world. For example, menstrual bleeding is seen as a defect in some religious traditions and therefore menstruation women is prohibited from religious ceremonies, sexual intercourse and food preparation (Mendlinger & Cwikel 2006). In fact, the menstrual cycle is one of the most important biological differences between men and women. There is sexism behind the menstruation that has been taboo for centuries.

The indicators of male dominance are reflected in female sexuality. Sexuality is a founding element of the gender regime, as well as a powerful influence on the everyday lives and body perceptions of women and men. In other words, sexuality is not only an experience in the private sphere, it is a founding component of the social position of women and men (Kaya & Aslan 2013). Menstruation is commonly referred to as "female matter". Although menstruation is an experience that can be shared for some women, it is often an issue characterized by privacy, shame and lack of knowledge (Grose & Grabe, 2014; Ozdemir, Nazik & Pasinlioğlu, 2011). Also menstruation has been used to stigma to women throughout history (Johnston, Robledo & Chrisler, 2007; Brantelid, Nilver & Alehagen, 2014).

Menstruation perceived as one of the most important functions of womanhood as it is the sign of reproductive and sexuality. Many women consider sexual identity and sexual role with menstrual functions. Therefore; women may perceive changes in these functions as a threat to their sexual identity (Nappi, 2016). Many physical and psychological factors affect human sexuality and sexual health during the life course. Cayan et al. (2004) found that low education level, advanced age, not working, number of birth, chronic diseases negatively affects on sexual function. Ozdemir and Pehlivan's study (2015) found that age, excess body mass index and low education level increased sexual

dysfunction.

In Ozdemir and Pehlivan's study (2015); it has been found that there is no significant difference between sexual dysfunction with income status, number of people living in the house.

In the study of Yaralı and Hacıoğlu examining sexual dysfunction and sexual life quality in married women (2016); it has been determined that age, education and occupation status, marital status, marriage duration, number of people living at home, income level, number of children, sex education and body mass index affect the quality of sexual life in women. In Flynn et al.'s study (2016), 48% of women were found to be satisfied with their sexual life, and sex, age and health status were found to influence sexual life. In the study of Karakoyunlu and Oncel (2014), it was found that besides many sociodemographic and obstetric factors, regular and irregular menstruation affected women's sexual function and women with menstruation irregularity experienced more sexual dysfunction.

Marriage is the relationship between two people make for living together, sharing life and having children. A healthy marriage and satisfaction with marriage are called as marital adjustment (Erberk, 2005; Galinsky & Waite 2014). It is expected that positive thoughts and attitudes of the spouses, such as happiness, positive communication, sexual satisfaction and wanting to marry the same person if married again for marital adjustment (Galinsky & Waite, 2014). In the literature; sex, age, level of education, occupation, monthly income, number of marriages, age of first marriage, form of marriage, whether or not having children, sharing feelings and thoughts affected marital adjustment (Erberk, 2005; Yalçın, 2014; Basharpour & Sheykholeslami, 2015; Yanikkerem, Goker, Ustgorul & Karakus 2016).

Sexual life is one of the main factors affecting marital adjustment. The deterioration of the quality of sexual life can lead to problems in relation to married couples. Almost half of the women's lives go through the menstruation process and the problems with physical, behavioral and emotional changes towards this process. Menstrual cycle and fertility controlling hormones play an important role in the motivation of women in sexual activity both mentally and physically.

For this reason, physiological and psychological

complaints in women with menstrual irregularities may also directly affect women's sexual lives and indirect marital relationships. There are studies in different groups on marital adjustment and quality of sexual life, but no studies have been conducted on women experiencing menstrual irregularity in the literature. This study is performed to analyze the sexual quality of life and marital adjustment in women with menstrual irregularity.

The specific research questions for this study are:

1. What is the sexual quality of life in women with menstrual irregularity?
2. What is the marital adjustment in women with menstrual irregularity?
3. Is there a relationship between sexual quality of life and marital adjustment in women with menstrual irregularity?

Methods

Study Design and Participants: A cross-sectional design was employed in this descriptive study. This study was conducted in the gynecology outpatient clinic of a hospital in Adana, Turkey. The study was conducted with 211 women who agreed to participate in the study and who met the criteria for participating in the study.

The criteria for inclusion were;

- being in the 18-49 age group,
- be at least a primary school graduate,
- not having any chronic illness,
- not having a psychiatric illness,
- be complaining of menstrual irregularity in the last 3 months,
- be married,
- be living with her husband

Instruments: Collection of data was performed using "Personal Information Form", "The Sexual Quality of Life-Female (SQOL-F)" and "Marital Adjustment Test (MAT)". **The Personal Information Form** is composed of questions that include the socio-demographic (age, educational status, working status, economic status, family type, marriage age, marriage style etc.) and menstrual characteristics (first age, the number of days it lasted, the amount of menstruation, etc.)

of women.

The Sexual Quality of Life-Female (SQOL-F): SQOL-F was developed by Symonds et al. The reliability and the validity of the SQOL-F for the Turkish population have been demonstrated in 2005 by Turgut and Gölbaşı. The validity and reliability of the SQOL-F which can be applied to all women over the age of eighteen years, was based on women in the 18-65 age group. The scale with six likert types consists of 18 items. Each item is expected to be replied with considering sexual life in the last four weeks. It is stated on the scale that each item can be scored between 1-6 or 0-5. In this study, 1-6 points was used (1 = Totally agree, 2 = Extremely Agree, 3 = Partially agree, 4 = Partially disagree, 5 = Extremely disagree, 6 = Never agree). The range of points that can be taken from this scale is between 18-108. The high score on the scale indicates that the quality of sexual life is good. In the reliability study of the scale, the Cronbach Alpha score was found to be 0.83. In this study, the Cronbach Alpha value of the scale was found to be 0.83.

Marital Adjustment Test (MAT): MAT was developed in 1959 by Locke ve Wallace. The reliability and the validity of the MAT for the Turkish population have been demonstrated in 1999 by Kışlak-Tutarel. This scale measures marital satisfaction. In the scale consisting of 15 items, each item gets a score between 0 and 6. It was determined that the score of over 43.5 indicates marital satisfaction and marital adjustment. The scores for all 15 items should be added up together. Scores that can be taken from the scale range from 1 to 60 points. Higher scores indicate greater satisfaction. Cronbach Alpha value was found to be 0.84 in the reliability study of the scale. In this study, the Cronbach Alpha value of the scale was found to be 0.85.

Procedure: A face-to-face interview method to administer the questionnaires by the researcher was used. The interviews, which lasted for about 15 minutes, were conducted by the investigators after gynecologic examinations of the women. . In order to enable women to respond freely to questions, each woman was interviewed in a separate room at the gynecology outpatient clinic. **Ethical consideration:** This study was approved by the board of ethics of the Medicine Faculty at the a university. In order to obtain women's verbal consent and written informed , all participants were informed of the purpose of the study, ensured that the collected information

would be used solely for scientific purposes, would be kept confidential and not shared by others except the researchers. Written informed consent was obtained from all participants in this study.

Statistical analysis: The data were analyzed using SPSS for Windows version 16.0. Mean and standard deviation, one way ANOVA-OWA, Kruskal-Wallis H test (KW), Mann-Whitney U test (MW), independent t test (2t), Spearman correlation analysis used. In all analyses, the significance level was $p < 0.05$.

Results

It was determined that 35.5% of the women were 40 years old and over, 47.9% of them were in high school and above, and 53.6% were not working. It was found that 43.1% of the spouses of the women were over 40 years old, 68.7% of the spouses were in high school and above and 93.4% were working. It was found that 82.5% of the women had family type, 58.8% were equal to the income. It was determined that 44.1% of the women were married 21-25 years, 35.5% were married for 1-5 years and 60.7% married on their voluntarily. 57.3% of women had 1 to 3 pregnancies, 63% of them had 1-3 living children and 46.9% were living with 1-2 children.

When the distribution of menstrual characteristics of women is examined; It was found that 40.8% of the women had menstruation at the age of 13-14, 44.5% had one period in 21-40 days, and 51.2% had menstruation lasting 3-6 days. 39.8% of the women stated that they were very bleeding. It was determined that 49.5% of the women shared their complaints with their husbands, 61.1% applied to the health institution related to the menstrual irregularities and 91.5% of those

who did not apply to the health institution stated that they expected to correct the reason for not applying. The lowest and highest scores and the total score of SQOL-F are given in Table 1. Women with menstrual irregularities were found to have the lowest score of 39, the highest score of 103, and the average score of the SQOL-F was 60.93 ± 14.61

It was determined that 35.5% of the women with menstrual irregularities were satisfaction in their marriage. It was found that the total score of their MAT was $48,68 \pm 4,18$. It was determined that 64.5% of the women with menstrual irregularities had no satisfaction in their marriage and their MAT total score was 36.52 ± 6.05 . The mean MAT total score of women with menstrual irregularities was found to be 40.84 ± 7.98 (Table 2).

There was no statistically significant difference between the mean age of the women, the time of the last menstrual period, the frequency of menstruation, the duration of menstrual bleeding, the amount of menstrual bleeding with SQOL-F and MAT mean score ($p > 0.05$). It was determined that the MAT mean score of women who shared the complaints of menstrual irregularity with their husbands was $43,08 \pm 6,97$ and the difference was statistically significant ($p < 0,05$). It was determined that the SQOL-F mean score of women who shared the complaints of menstrual irregularity with their husbands was $71,48 \pm 8,62$ and the difference was statistically significant ($p < 0,05$) (Table 3).

The Spearman's correlation coefficient between SQOL-F and MAT was found as $r = 0.589$. This result shows a moderately positive correlation ($p < 0,001$) (Table 4) .

Table 1 . SQOL-F score of women with menstrual irregularity

Scale	SQOL-F Min–Max	X±SD
SQOL-F	18-108	60.93± 14.61

Table 2. MAT score of women with menstrual irregularity

Marital Satisfaction	N	%	X±SD
Yes (score>43,5)	75	35.5	48.68±4.18
No (score<43,5)	136	64.5	36.52±6.05
MAT total score	211	100	40.84±7.98

Table 3. Comparing SQOL-F and MAT Score Averages with Women's Menstrual Characteristics

Characteristics	N	%	MAT X ± SD	Test and p value	SQOL-F X ± SD	Test and p value
Age of menarche (years)						
11-12	61	28.9	39,62±7,43	KW =1,892 p= 0,132	59,56±12,51	KW =0,984 p=0,401
13-14	86	40.8	41,86±7,52			
15-16	54	25.6	39,94±8,75			
17-18	10	4.7	44,50±9,64			
Last time to menstruation	105	49.8	40,67±8,42	KW=6,889 p= 0,076	60,59±14,77	KW =2,149 p=0,095
0-20 Days Ago	50	23.7	42,98±7,64			
21-40 Days Ago	46	21.8	39,26±7,47			
41-60 Days Ago	10	4.4	39,30±5,31			
61 Days and Longer						
Frequency of menstruation	49	23.2	39,91±9,56	F=3,022 p=0,221	59,50±15,51	F=1,764 p=0,174
Less than 21 days	94	44.5	41,71±7,10			
Every 21-40 days	68	32.2	40,32±7,88			
Longer than 41 days						
Duration of menstruation				KW=1,106 p=0,348		KW=0,935 p=0,425
Less than 3 days	51	24.2	40,25±7,95			
3-6 days	108	51.2	40,60±7,74			
7-10 days	47	22.3	42,44±7,65			
11 days and over	5	2.4	37,20±14,85		58,71±13,36	
Amount of menstrual bleeding				F=1,833 p=0,162		F=0,832 p=0,437
Little	81	38.4	39,62±8,19			
Normal	46	21.8	40,89±8,18			
Very	84	39.8	42,00±7,57		59,28±14,31	
Person whose menstrual complaints are shared	13	6.2	35,76±13,07	KW =7,014 p=0,000	62,73±18,73	KW =4,506 p=0,004
6	2.8	42,66±14,66				
No one	104	49.3	43,08±6,97			
With children	88	41.7	38,82±6,79			
With my husband						
Friend-brother						

Referral to Health Institution for						
Menstrual Complaints	129	61.1	41,21±7,50	t=0,841	60,25±14,89	t=-0,839
Yes	82	38.9	40,26±8,69	p=0,401	61,99±14,19	p=0,402
No						
The reason for not applying for a health institution						
I expected the correction	75	91.5	40,74±8,50	MW= -1,578	62,40±14,06	MW =0,851
No Health Assurance	7	8.5	35,14±9,75	p= 0,114	57,61±16,00	p=0,397

Table 4. Correlation of SQOL-F and MAT

Scales	SQOL-F	
MAT	r=0.589	p<0.001

Discussion

In the study, it was determined that the average of women's total score of SQOL-F was 60,93 ± 14,61. The lowest score is 39 points and the highest score is 103 points in this scale. The high score indicates that the quality of the sexual life is good, while the low score is bad. It was found that women with menstrual irregularity have poor quality of sex life in the study. Studies which assessing the quality of sexual life of women with menstrual irregularities have not been reached in the literature. However, studies conducted in different groups are available. In the study of Yaralı and Hacıoğlu which determined sexual dysfunction and quality of sexual life in married women, the average score of SQOL-F for women was found as 68.51 ± 21.63. In the study of Kim and Kang (2015), the SQOL-F score average of the middle-aged women was determined as 74.25 ± 13.65. In the study of Kısa et al (2014), the SQOL-F score average of the pregnant women was 35.5. In the study of Faghani and Ghaffari (2016), the SQOL-F score average in women with breast cancer was 26.3 ± 3.76. In a study by Dundon et al. (2010), women with functional hypothalamic amenorrhoea were found to have more sexual problems.

Ertunc et al. (2009) investigated the effect of myomas on sexual function and found that the satisfaction levels of women with myoma were lower than those without myoma. Özkan et al. (2011) investigated the effect of urinary

incontinence on sexual life, and found that women with urinary incontinence negatively affected their sexual life and caused sexual dysfunction. In the study of Karakoyunlu and Öncel (2014), it was found that menstruation affected the sexual function of women (p = 0.000). Women with regular menstruation were found to have less sexual dysfunction compared to those who were irregular (Karakoyunlu & Öncel, 2014). These results show that women's sexual life qualities are generally not good.

Sexuality can be defined as a special life with its biological, psychological and social aspects, stated by rules, value judgments and taboos including sexual satisfaction and the draws of two people. Female sexuality is influenced by the society in which she and her partner live. Social culture plays an important role in the formation and maintenance of the sexual health of both men and women. Traditions determine how a woman should live her sexuality during her lifetime (puberty, marriage, pregnancy, menopause and old age). In traditional societies, the female body acts as a male sexual partner and maintains the continuity of the male species. This is due to the traditions in society. Therefore, a female body that enters adolescence period and menstruation is considered to be ready to marry and to be a wife and mother. However, the odor and secretions of the female body are seen as a condition that needs to be disturbed and suppressed (Bilgin, 2016). From this point of

view, menstrual bleeding negatively affects the sexuality of women.

It was determined that 35.5% of the women with menstrual irregularities were satisfaction in their marriage. It was determined that 64.5% of the women with menstrual irregularities had no satisfaction in their marriage. The mean MAT total score of women with menstrual irregularities was found to be 40.84 ± 7.98 . MAT score was below 43.5 in this study and women with menstrual irregularities had no satisfaction in their marriage. Taşçı et al. (2008); a significant difference was found between marital adjustment score averages and menstruation ($Z = -2.968$ $p = 0.000$). In the same study, marital adjustment was found to be higher for women who experienced irregular menstruation.

Menstruation is one of the most important functions of women and is at the forefront of sexual problems that concern women. Many women consider sexual identity and sexual role with menstrual functions. Therefore; women may perceive the changes in these functions as a threat to their sexual identity (Taşkın, 2016). When the menstrual characteristics of women were compared with the SQOL-F score, it was determined that as the duration and amount of menstrual bleeding decreased, the SQOL-F score average increased. Similarly, in the study of Laughlin-Tommasove et al. (2015), assessed sexual function of women with myoma, it was found that women were not satisfied with their sexual experiences during periods of excess and long menstrual bleeding, and they experienced more problems (pain, desire reduction, etc.). It was found that the women who shared the menstrual irregularity complaints with the husband had the highest SQOL-F score (71.48 ± 8.62) and only this factor had a statistically significant difference in all menstrual characteristics ($p < 0.05$). This result suggests that women talk about menstrual problems and sexuality with their husband.

There was not a statistically significant difference between menstrual characteristics and marital adjustment of women with menstrual irregularity, only it was found that there was a statistically significant difference between the state of sharing the complaints of menstrual irregularity and the MAT total score ($p < 0.05$). It was found that the women who shared the menstrual irregularity

complaints with the husband had the highest MAT score (43.08 ± 6.97) and only this factor had a statistically significant difference in all menstrual characteristics ($p < 0.05$).

There was a moderately positively significant relationship between SQOL-F and MAT in this study. It has been determined that as marriage adjustment increases in women with menstrual irregularity, the quality of sexual life increases. Similar to the study, there are studies showing that women who express their sexual life very well have a higher average of MAT scores (Yalçın, 2014; Yanikkerem, Goker, Ustgorul & Karakus, 2016). In the study of Çağ and Yıldırım (2013); sex life satisfaction and marital satisfaction were positively correlated. In the study of Litzinger and Gordon (2005), sexual satisfaction was positively effect marital satisfaction. The marriage that two people make for living together, sharing their lives and having children affects sexual life. Compliance between partners in marriage is one of the most important factors that can affect all areas of the relationship.

One of the important factors in marital adjustment is sexual adjustment. Sexuality is an important aspect of the relationship in marriage. The problems arising in marriage can affect the sexual life of individuals as well as the problems in the sexual area may be reflected in the marriage relationship. Both marital and sexual functioning can be affected in different degrees by biological, psychological and even socio-cultural factors (Gülsün, Ak & Bozkurt, 2009; Li, Robustelli & Whisman, 2016). In this context, it is thought that the physiological and psychological complaints of women with menstrual irregularities may affect women's sexual life and marital relationships.

Conclusions: It was found that women with menstrual irregularity have poor quality of sex life and most of them don't have marital adjustment. There was a relationship between quality of sex life and marital adjustment and can affect each other mutually in this study. According to these results, it is recommended that the health workers should assess the quality of sexual life and marital adjustment of women with menstrual irregularities. Marriage has a significant impact on the life of individuals. The family is a whole and marriage plays an important role in the foundation of the family. If the factors that affect marital adjustment are not identified, it is difficult to address marital

problems effectively and to maintain marriages. Sexuality is one of the factors affecting marital adjustment. Health workers should identify those who have problems in marriage and should be directed to marriage therapists. In the evaluation of sexual functions and marital adjustment, consultancy services are recommended by using appropriate models and theories.

Acknowledgements: The authors grateful to all the women who participated in this study. This article is a Masters thesis that is completed at Cukurova University, Turkey.

Compliance with Ethical Standards

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent: Informed consent was obtained from all individual participants included in the study.

References

- Bacon, J.L. (2017). Abnormal uterine bleeding: Current classification and clinical management. *Obstet Gynecol Clin North Am.*, 44(2):179-193.
- Basharpoor, S., Sheykhosslami, A. (2015). The relation of marital adjustment and family functions with quality of life in women. *Europe's Journal of Psychology*, 11(3):432-41.
- Bilgin, R. (2016). Body and sexuality of women in traditional and modern society (geleneksel ve modern toplumda kadın bedeni ve cinselliği). *Firat University Journal of Social Science*, 26 (1): 219-243.
- Brantelid, I.E., Nilvér, H., Alehagen, S. (2014) Menstruation during a lifespan: a qualitative study of women's experiences. *Health Care for Women International*, 35, 600–616.
- Cag, P., Yildirim, I. (2013). Relational and personal predictors of marital satisfaction. *Turkish Journal of Psychological Counseling and Guidance*, 4(39):13-23.
- Cayan, S., Akbay, E., Bozlu, M., Canpolat, B., Acar, D., Ulusoy E. (2004). The prevalence of female sexual dysfunction and potential risk factors that may impair sexual function in Turkish women. *University of Mersin School of Medicine*, 72:52–57.
- Deligeoroglou, E., Creatsas, G. 2012. Menstrual disorders. *Endocr Dev.* 22: 160-70.
- Dundon, C.M., Rellini, A.H., Tonani, S., Santamaria, V., & Nappi, R. (2010). Mood disorders and sexual functioning in women with functional hypothalamic amenorrhea. *Fertil Steril*, 94(6):2239-43.
- Erberk, E., Bastepe, E., Akar, H., Eradamlar, N., Alpan, L.R. (2005). Marital adjustment. *Dusunen Adam The Journal of Psychiatry and Neurological Sciences*, 18(1):39-47.
- Ertunc, D., Uzun, R., Tok, E.C., Doruk, A., & Dilek, S. (2009). The effect of myoma uteri and myomectomy on sexual function. *J Sex Med*, 6:1032–1038.
- Esin, K., Koksall, E., Hizli, H., & Garipagaoglu, M. (2016). Effect of menstrual cycle on body composition. *Journal of Health Sciences SDU*, 7(2):24-27.
- Faghani, S., Ghaffari, F. (2016). Effects of sexual rehabilitation using the plissit model on quality of sexual life and sexual functioning in post-mastectomy breast cancer survivors. *Asian Pacific Journal of Cancer Prevention*, 17(11):4845-4851.
- Flynn, K.E., Lin, L., Bruner, D.W., Cyranowski, J.M., Hahn, E.A., Jeffery, D.D., Reese, J.B., Reeve, B.B., Shelby, R.A., Weinfurt, K.P. (2016). Sexual satisfaction and the importance of sexual health to quality of life throughout the life course of U.S. *The Journal of Sexual Medicine*, 13(11):1642-1650.
- Galinsky, A.M., Waite, L.J. (2014). Sexual activity and psychological health as mediators of the relationship between physical health and marital quality. *The Journals of Gerontology*. 69 (3): 482–492.
- Grose, R.G., Grabe, S. (2014) Sociocultural attitudes surrounding menstruation and alternative menstrual products: the explanatory role of self-objectification. *Health Care for Women International*, 35, 677–694.
- Gulsun, M., Ak, M., Bozkurt, M. (2009). Marriage and sexuality from a psychiatric point of view. *Current Approaches in Psychiatry*, 1: 68-79.
- Johnston Robledo, I., Sheffield, K., Voigt, J., Wilcox Constantine, J. (2007). Reproductive shame: self-objectification and young women's attitudes toward their reproductive functioning. *Women and Health*, 46, 25–39.

- Karakoyunlu, F.B., Oncel, S. (2014). Prevalence of sexual dysfunction among married women ages 15-49. *Turkish Clinical Journal of Nursing*, 6(2):63-74.
- Kaya, Y., Aslan, E. (2013). Traditions and culture in female sexuality. *Journal of Androloji*, 54: 214-217.
- Kim, J.S., Kang, S. (2015). A Study on body image, sexual quality of life, depression, and quality of life in middle-aged adults. *Asian Nursing Research*, 9:96-103.
- Kisa, S., Zeyneloglu, S., Yilmaz, D., Guner, T. (2014). Quality of sexual life and its effect on marital adjustment of Turkish women in pregnancy. *Journal Of Sex and Marital Therapy*, 40(4).
- Kislak-Tutarel, Ş. (1999). Validity and reliability study of Turkish version of marital adjustment . 3P *Psikiyatri Psikoloji Psikofarmakoloji Dergisi*, 7(1):54-56.
- Koyun, A., Taskin, L., Terzioglu F. (2011). Women health and psychological functioning in different periods of life: evaluation of nursing approach. *Current Approaches in Psychiatry*, 3(1):67-99.
- Laughlin-Tommaso, S.K., Borah, B.J., Stewart, E.A. (2015). Effect of menses on standardized assessment of sexual dysfunction among women with uterine fibroids: a cohort study. *Fertil Steril*. 104(2):435-9.
- Li, A., Robustelli, B.L., Whisman, M.A. (2016). Marital adjustment and psychological distress in Japan. *J Soc Pers Relat*, 33(7): 855-866.
- Litinger, S., Gordon, K.C. (2005). Exploring relationships among communication, sexual satisfaction and marital satisfaction. *Journal of Sex and Marital Therapy*, 31:409-424.
- Mendlinger, S. Cwikel, J. (2006). Health Behaviors over the Life Cycle among Mothers and Daughters from Ethiopia. *Nashim: A Journal of Jewish Women's Studies & Gender Issues*, 12, 57-94.
- Nappi, P.R., Cucinella, L., Martella, S., Rossi, M., Tiranini, L., Martini E. (2016). Female sexual dysfunction (FSD): Prevalence and impact on quality of life (QoL). *Maturitas*. 94:87-91.
- Ozdemir Ciledag, F., Pehlivan, E. (2015). Evaluation of sexual function levels of women between the ages of 20-50 living in central Malatya. *Medicine Science*, 4(4):2751-61.
- Ozdemir, F., Nazik, E., Pasinlioglu, T. (2011). Determination of the motherly reactions to adolescents' experience of menarche II. *J Pediatr Adolesc Gynecol.*, 24(1):21-4.
- Ozkan, S., Ogce, F., Cakir, D. (2011). The quality of life and sexual function of women with urinary incontinence. *Japan Journal of Nursing Science*, 8(1):11-19.
- Reed, B.G., Carr, B.R. (2015). The normal menstrual cycle and the control of ovulation. Editors In: De Groot LJ et al editors. *South Dartmouth (MA): MDText.com, Inc.*
- Tacsi, E., Bolsoy, N., Kavlak, O., Yucesoy, F. (2008). Marital adjustment in infertile women. *Turkish Journal Of Obstetrics And Gynecology*, 5(2):105- 10.
- Taskin, L. (2016). *Obstetric and gynecologic nursing*. 13. Edition, Academician Bookstore, Ankara 611-625.
- Tugut, N., Golbasi, Z. (2010). Validity and reliability study of Turkish version of the Sexual Quality of Life Questionnaire-Female. *Cumhuriyet Med J*, 32:172-180.
- Yalcin, H. (2014). The relationship between marriage adaptation and sociodemographic characteristics. *Journal of Research in Education and Teaching*, 3(1):250-261.
- Yanikkerem, E., Goker, A., Ustgorul, S., Karakus, A. (2016). Evaluation of sexual functions and marital adjustment of pregnant women in Turkey. *The Journal of Sexual Medicine*, 28(5):176-83.
- Yarali, S., Hacalioglu, N. (2016). Analysis of sexual dysfunction and sexual quality of life in married women. *International Refereed Journal of Nursing Researches*, 6:108-127.