Journal of Obstetrics, Gynecology and Cancer Research | ISSN: 2476-5848

Pregnant Women's Attitude Towards Sexual Desire and Its Relationship with Quality of Life and Rumination in the Last Trimester of Pregnancy

Masoumeh Rahimian[1], Setare Nassiri[2], Elham Saffarieh[3*]

1. *MA, Department of Psychology, Semnan Branch, Islamic Azad University, Semnan, Iran*
2. *Assistant Professor, Obstetrics and Gynecology Department of Firoozgar Teaching Hospital, Faculty of Medicine, Iran University of Medical Sciences, Tehran, Iran*
3. *Abnormal Uterine Bleeding Research Center, Semnan University of Medical Sciences, Semnan, Iran*

Article Info

10.30699/jogcr.4.1.16

Received: 2018/10/04;
Accepted: 2019/01/18;
Published Online: 01 Mar 2019;

Use your device to scan and read the article online

Corresponding Information:
Elham Saffarieh, Abnormal Uterine Bleeding Research Center, Semnan University of Medical Sciences, Semnan, Iran
Email: setrae_n99@yahoo.com
Tel: 023-33329858

ABSTRACT

Background & Objective: Pregnancy is one of the most important stages of a woman's life. Although this is a pleasant period for most women, it is often considered as a stressful period accompanied by physiological and psychological changes. This study aimed to examine pregnant women's attitude towards sexual desire and its relationship with quality of life and rumination in the last trimester of pregnancy.

Materials & Methods: The statistical population of this descriptive correlational study included all pregnant women in the last trimester of pregnancy. A total of 280 women were selected using a random sampling method. Data were collected using the Index of Sexual Desire, Rumination Scale, and Quality of Life Questionnaire. The data were analyzed by SPSS 11.5 using simultaneous regression analysis.

Results: The results showed that rumination was significantly and negatively predicted by sexual desire. Moreover, the subscales of physical functioning, emotional problems, and general health were positively and significantly predicted by sexual desire. However, sexual desire could not significantly predict other subscales of quality of life, namely fatigue or vitality, emotional health, social functioning, pain, and physical health status.

Conclusion: Our finding revealed that, if guided and employed properly, sexual desire during pregnancy can moderate stress.

Keywords: Pregnant women, Quality of life, Rumination, Sexual desire

Introduction

In general, pregnant women respond variously to sexual relations. Several investigations have illustrated the adverse effects of pregnancy on sexual desire and satisfaction which may lead to a decreased number of sexual intercourses. Factors such as physiological and anatomical changes in a pregnant woman, boycotting sexual activities, feeling guilty about having sexual intercourses during pregnancy, altered mental image of the body, decreased attractiveness to the spouse, fear of hurting the fetus, unfounded fear of miscarriage and preterm delivery, and the like can have significant impacts on a person's sexual response and, consequently, on a couple's relationship and can highly endanger the sexual health of the couple **(1)**.

Pregnancy is a phenomenon that affects various aspects of a couple's relationships, such as sex. Apart from physiological justifications, including nausea and vomiting in the first trimester and abdominal enlargement in the third trimester of pregnancy, psychological factors **(2,3,4)**, such as declined sexual desire **(5)** and superstitious beliefs, such as the possibility of hurting the fetus during sex **(6)** also have an impact on the issue. Many studies have revealed a decline in sexual desire and sexual relations during pregnancy **(7)**. Anzaku *et al.* argued that although the frequency of sexual relations significantly decreases during pregnancy, many people have positive attitudes towards sex in this period worldwide **(8)**. Pregnancy is one of the most important stages of a woman's life. While this is an enjoyable period for most women, it is often considered as a stressful period accompanied by physiological and psychological changes and every woman sorely needs to conform herself to the relationship causing reinforcement **(9)**.

Evidences suggest that pregnancy not only brings about significant and noticeable changes in women's social and mental health status but also decreases their social functioning and vitality **(10)**. That is why pregnant women's quality of life is expected to be lower than that of their non-pregnant counterparts **(11)**. The World Health Organization (WHO) defines the term *quality of life* as people's perceptions of their status in life in the context of the culture and value systems in which they live

in concerning their goals, expectations, standards, and priorities. It is, therefore, a purely personal issue which cannot be observed by others and is based on people's understanding of different aspects of life **(12)**. Quality of life encompasses a wide range of fields, including areas of development, healthcare, politics, and international engagement. But it should not be confused with the concept of living standard, which is primarily income-based **(13,14)**. Quality of life is one of the most important health consequences that need to be addressed in such cases as evaluating health interventions and measuring them **(15)**.

Rumination is similar to worry, except that rumination focuses on bad feelings and past experiences, while worry is concerned with the potential possibility for future bad events to happen. Both rumination and worry are associated with anxiety and other negative emotional states **(16)**. The role of rumination in exacerbating and prolonging the depressed mood was the main focus of many experimental, cross-sectional, and longitudinal studies conducted using different evaluation approaches in both clinical and nonclinical areas among adult, adolescent, and child samples **(17)**. Overall, the rumination that arises in response to negative moods is persistent and is more prevalent in females than in males **(17)**. Ali *et al*. (2009) stated that positive beliefs about rumination and lack of social support were significantly higher in depressed pregnant women than in non-depressed pregnant ones **(18)**. Hence several studies have been carried out to investigate the relationship of quality of life and rumination with the attitude towards desires, few comprehensive studies can be found which have examined these variables altogether. Therefore, the present study aimed to investigate pregnant women's attitude towards sexual desire and its relationship with quality of life and rumination in the last trimester of pregnancy.

Materials and Methods

The statistical population of this descriptive correlational study included all pregnant women in the last trimester of pregnancy in Semnan province, Iran. A random sampling method was used to collect research data. The data were selected by referring to the medical records registered in healthcare centers and gynecologists' offices in Semnan in 2014 and completing the research questionnaires. A total of 280 pregnant women in the last trimester of pregnancy were studied. The obtained data were analyzed by SPSS 11.5 (SPSS Inc., Chicago, IL. USA) using simultaneous regression analysis.

Research Tools

A) Index of Sexual Desire: The Hurlbert Index of Sexual Desire (HISD) was used to measure sexual desire. This index consists of 25 items scored based on a 5-point Likert-type scale. Responses are scored from never to always (0-4). When implemented by David F. Hurlbert, the test-retest reliability of the index was 0.86. Besides, Shafiei **(19)** conducted this index on 40 married female students and indicated that its Cronbach's alpha coefficient was 0.92. The HISD has a structured content validity with an internal consistency of 0.89.

B) Rumination Scale: This scale contains 24 self-report items that measure people's tendency to use reflective self-awareness and rumination. The scale includes two sections, i.e., a subscale of rumination (12 items) and a subscale of reflection (12 items). Each item is scored on a 5-point Likert-type scale ranging from 5 (strongly agree) to 1 (strongly disagree).

C) SF-36 Quality of Life Questionnaire: The SF-36 questionnaire consists of 36 items (0-100) designed by Ware and Sherbourne **(20)**. A higher score indicates a more desirable quality of life. The internal validity of different subscales of this questionnaire was assessed by Montazeri *et al.* in Iran in **(21)**. They reported that their Cronbach's alpha coefficients varied from 0.77 to 0.90 **(22)**.

Procedure

The research tools were distributed among the subjects after determining the sample size and sampling method. At the beginning and after distributing all three research tools to the selected women, in addition to a written description provided in the questionnaires, an oral explanation about the main objectives of conducting this study was presented. Overall, by referring to healthcare centers, clinics, pregnancy classes, and gynecologists' offices, 280 questionnaires were distributed among the pregnant women over a specified period of 5 months and were filled out in 25 minutes. Furthermore, the researcher reminded all participants that their information would be kept confidential.

Results

Table 1 shows the descriptive statistics of the predictive variable of sexual desire, the two subscales of rumination, and the eight subscales of quality of life. In this table, the central tendency statistics for sexual desire were almost closed, indicating that there were no outliers and large boundary values in the data. The negative kurtosis coefficient confirmed this as well. Additionally, the positive skewness coefficient demonstrated that the scores of sexual desire obtained by the sample group were low.

The first research hypothesis, i.e., pregnant women have positive attitudes towards sexual desire in the last trimester of pregnancy, was investigated.

Table 2 shows the results of the assumption of data normality for sexual desire. The z-statistic value for the mean of this variable indicated that the data were not significantly different from the normal distribution of the data and the obtained data were normal (P>0.01).

Table 1. The descriptive statistics of the central indices and the dispersion of the three variables in this study

Variable	Subscales	Mean	Median	Mode	Standard Deviation	Skewness	Kurtosis
Sexual desire	-	71.11	70	64	15.49	0.131	-0.414
Rumination	Rumination	3.25	3.33	3.5	0.85	-0.267	-0.495
	Reflective self-awareness	3.20	3.25	3.33	0.80	-0.116	-0.139
Quality of life	Sexual functioning	61.07	65	75	26.23	-0.533	-0.463
	Physical health	36.64	25	30	32.30	0.529	0.755
	Emotional problems	3.43	3.33	3.33	0.87	-0.084	-0.504
	Fatigue or vitality	57.50	60	55	17.53	0.247	0.143
	Emotional health	68.73	72	72	17.16	-0.495	0.363
	Social functioning	68.43	62.50	62	21.86	0.297	0.282
	Pain	61.07	57.50	45	23.95	-0.160	-0.426
	General health	67.90	70	75	15.15	-0.191	-0.142

Table 2. The assumption of data normality for sexual desire

Variable	Mean	Z	Sig
Sexual desire	71.11	0.833	0.492

Table 3 shows the results of the one-sample t-test carried out to assess the women's sexual desire in the last trimester of pregnancy and compare it to the mean variable, i.e., a score of 50. As it can be seen, the data presented in this table reveal that there was a significant difference between the sample's sexual desire and the mean value of the sample. According to Table 1, these pregnant women's sexual desire was high and positive in the last trimester of pregnancy (P<0.01).

The second research hypothesis, i.e., predicting rumination via sexual desire in the last trimester of pregnancy, was investigated.

Table 4 shows the assumption of data normality for rumination. The z-statistic value for the mean of this variable indicated that the data were not significantly different from the normal distribution of the data and the obtained data were normal (P>0.01). The scatter plot was used to examine the linearity of the relationship between attachment styles. The results showed that the relationship between the variables was linear. Additionally, the distribution graph of the cumulative distribution of observed and expected values showed a 45-degree slope of the variables with almost all points on the line, indicating the normal distribution of residuals. The same assumption of variances was investigated by considering the cleared residuals versus standard predicted values. The points were scattered randomly, indicating the similarity of the variances. The Durbin-Watson statistic was used to investigate the independence of errors. The results confirmed the assumption of independence (DW=1.73). The multiple linear hypotheses were tested by using tolerance statistics and variance inflation factor (VIF). The results demonstrated that the minimum tolerance in the original model was 1 and the maximum variance inflation was 1, indicating that there were no multiple correlations between rumination and reflective self-awareness.

Table 3. The one-sample t-test conducted to examine the women's sexual desire during the last trimester of pregnancy

Variable	The Default Value is 50.			
	t	df	Sig	Mean difference
Sexual desire	24.44	321	0.000	21.11

Table 4. The assumption of data normality for sexual desire

Variable	Mean	Z	Sig
Rumination	71.11	0.833	0.492

Table 5 shows the characteristics of the regression analysis model for predicting rumination via sexual desire. The data presented in the above table indicated that the correlation between sexual desire and rumination was 0.726 during the last trimester of pregnancy, which was high. Furthermore, 0.52 of the variances in rumination could be explained by sexual desire. Based on these data, the prediction coefficient tables are presented below.

Table 6 shows the results of the univariate analysis of variance conducted to examine the power of the rumination predictive model via sexual desire. As it can be seen, the rumination predictive model via sexual desire was a proper model and the independent variable had power for predicting the dependent variable since the F value was significant at 0.01 level (P<0.01).

Table 5. The characteristics of the regression analysis model for predicting rumination via sexual desire

Model	R	R^2	Adjusted R^2	Estimated Standard Error
1	0.726	0.527	0.524	10.68

Table 6. The univariate analysis of variance conducted to examine the power of the rumination predictive model via sexual desire

Model	Source of the Variance	Sum of the Squares	df	Mean of the Squares	F	Sig
1	Regression	40660.49	2	20330.24	177.95	0.000
	Residual	36443.84	319	114.24	-	
	Total	77103.97	321	-	-	

Table 7 shows the coefficients for predicting the two subscales of rumination, i.e., rumination and reflective self-awareness. As it can be seen, the regression coefficients predicting both subscales of rumination and reflective self-awareness via sexual desire were significant. Moreover, the mentioned coefficients also indicated that rumination was negatively predicted by sexual desire. Furthermore, the standard coefficients showed that both subscales of rumination were equally predicted by sexual desire.

The third research hypothesis, i.e., predicting the quality of life via sexual desire in the last trimester of pregnancy, was investigated.

Table 8 shows the assumption of data normality for quality of life. The z-statistic value for the mean of this variable indicated that the data were not significantly different from the normal distribution of the data and the obtained data were normal (P>0.01). The scatter plot was used to examine the linearity of the relationship between attachment styles. The results showed that the relationship between the variables was linear. Besides, the distribution graph of the cumulative distribution of observed and expected values showed a 45-degree slope of the variables with almost all points on the line, indicating the normal distribution of residuals. The same assumption of variances was investigated by considering the cleared residuals versus standard predicted values. The points were scattered randomly, indicating the similarity of the variances. The Durbin-Watson statistic was used to investigate the independence of errors. The results demonstrated the assumption of independence (DW=1.89). The multiple linear hypotheses were tested by using tolerance statistics. The results revealed that, in the original model, the minimum tolerance for the predictive variable of sexual functioning, physical health, emotional problems, fatigue and vitality, emotional health, social functioning, pain, and general health was 0.750, 0.665, 0.838, 0.478, 0.517, 0.638, 0.658, and 710, respectively. These indices indicated that there was a small number of multiple correlations between the predictor variables. Additionally, the statistical index of the VIF was less than 2 for all the variables, which complemented the tolerance index. Therefore, it was not necessary to omit any predictive variables.

Table 9 shows the characteristics of the regression analysis model for predicting their quality of life via sexual desire. The data presented in the above table demonstrated that the correlation between sexual desire and quality of life was 0.66 during the last trimester of pregnancy, which was high. Furthermore, 0.44 of the variances in quality of life could be explained by sexual desire. Based on these data, the prediction coefficients tables are presented below.

Table 7. The coefficients for predicting the subscales of rumination via sexual desire

Variables	Non-standard Coefficients		Standard Coefficients	T	Sig
	Regression coefficient (b)	Standard error	Regression coefficient (B)		
Y-intercept	70.27	4.61	-	15.23	0.000
Rumination	-7.64	0.796	-0.423	-9.60	0.000
Reflective self-awareness	8.03	0.847	0.418	9.48	0.000

Table 8. The assumption of data normality for sexual desire

Variable	Mean	Z	Sig
Rumination	80.53	0.766	0.601

Table 9. The characteristics of the regression analysis model for predicting the quality of life via sexual desire

Model	R	R^2	Adjusted R^2	Estimated Standard Error
1	0.667	0.445	0.429	11.61

Table 10 shows the results of the univariate analysis of variance conducted to examine the power of the quality of life predictive model via sexual desire. As it can be seen, the quality of life predictive model via sexual desire was a proper model and the independent variable had power for predicting the dependent variable since the F value was significant at 0.01 level (P<0.01).

Table 11 shows the coefficients for predicting the quality of life. According to these data, the regression coefficients for predicting the subscales of quality of life indicated that the subscales of sexual functioning, emotional problems, and general health were positively and significantly predicted by sexual desire. Moreover, the standard beta coefficients showed that most of the explanations made by sexual desire were for the subscale of emotional problems. The coefficients also indicated that by a unit increase in the standard deviation of sexual desire, sexual functioning increased by 0.165 of the standard deviation, emotional problems increased by 0.515 of the standard deviation, and general health increased by 0.284 of the standard deviation. However, other data demonstrated that sexual desire could not significantly predict other subscales of quality of life, namely fatigue or vitality, emotional health, social functioning, pain, and physical health status.

Table 10. The univariate analysis of variance conducted to examine the power of the quality of life predictive model via sexual desire

Model	Source of the Variance	Sum of the Squares	Df	Mean of the Squares	F	Sig
1	Regression	29478.79	2	3684.84	27.33	0.000
	Residual	36798.34	273	134.79	-	
	Total	66277.13	281	-	-	

Table 11. The coefficients for predicting the subscales of rumination via sexual desire

Variables	Non-standard Coefficients		Standard Coefficients	T	Sig
	Regression coefficient (b)	Standard error	Regression coefficient (B)		
Y-intercept	20.47	4.15	-	4.92	0.000
Sexual functioning	0.099	0.031	0.165	3.17	0.002
Physical health	0.007	0.026	0.015	0.270	0.787
Emotional problems	9.08	0.869	0.515	10.45	0.000
Fatigue or vitality	0.038	0.056	0.044	0.672	0.502
Emotional health	-0.053	0.056	-0.058	-0.931	0.353

Variables	Non-standard Coefficients		Standard Coefficients	T	Sig
	Regression coefficient (b)	Standard error	Regression coefficient (B)		
Social functioning	-0.056	0.039	-0.080	-1.42	0.156
Pain	-0.023	0.036	-0.036	-0.656	0.512
General health	0.286	0.054	-0.284	5.30	0.000

Discussion

The first research hypothesis was that pregnant women's attitude towards sexual desire is positive in the last trimester of pregnancy. The data analysis revealed that the sample's sexual desire had a significant difference with the mean value and the pregnant women's sexual desire was positive and high in the last trimester of pregnancy. A few points should be mentioned when talking about previously studies which are/are not in line with these findings. These results are consistent with the results of several previous studies **(23,24,25)**. In explaining these results, it should be noted that all of the above studies have addressed attitudes and schemas of sexual dysfunction during pregnancy; in fact, they have taken the attitude and thinking dimension into account. However, in this study, the main objective was to examine sexual desire and to assess interests in sexual matters or activities, either as a desire, need, or drive to pursue sexual issues and/or engage in sexual activities. Moreover, reviewing the studies which examined aspects of sexual desires other than what was considered in this study showed that a number of reasons, such as fear of hurting the fetus, pain, history of miscarriage, considering one's comfort, believing that having a sexual relationship is sinful during pregnancy, fatigue, abdominal enlargement, nausea, and vomiting had been cited as justifications for avoiding having sexual intercourses. These are not the reasons for the lack of sexual desire, need, and power.

What we found in this study was that sexual desire was present in pregnant women and it was above average. The results of the current study were consistent with the results of other study **(26)**. During pregnancy, sexual desire and activity of pregnant women and their spouses are unpredictable. This means that they may increase, decrease, or remain unchanged **(26,27)**. Pregnancy can both deepen and break up marital relationships **(23)**. According to our results, both men and women need to be studied and consulted, especially by physicians, during pregnancy. Thanks to the accessibility and availability of information which can be gained from media, television, online sources, and the like, people are now more aware of the harmlessness of having sexual intercourses during pregnancy and this has provided the ground for addressing negative attitudes towards having sexual relations during pregnancy. Besides, Bostani stated that pregnancy may increase sexual desire in women **(28)**. Getting rid of worries about getting pregnant may give some women a sense of relief. In some cases, a pregnant woman experiences a peak of pleasure for the first time or for several times. This is due to the increased activity of the hormone and promoted pelvic circulation. These can be attributed to the high levels of pregnant women's sexual desire in the last trimester of pregnancy.

The second hypothesis of the study was that sexual desire in the third trimester of pregnancy is associated with rumination. According to the objective and selection of specific research tools for this study, two subscales, i.e., rumination and reflection, were considered for rumination. The analysis of the research data showed that sexual desire was negatively correlated with rumination in the last trimester of pregnancy and sexual desire predicted rumination negatively. In other words, the more sexual desire, the less rumination there will be. This finding is in line with the findings of several other studies which demonstrated that rumination predicts low sexual desire and satisfaction during pregnancy. Among such studies, those conducted by **(23,24,25,29,30)** can be mentioned. All the mentioned studies have pointed out a negative and inverse relationship between sexual desire and rumination about sexuality. A few points can be made in explaining the above results. First, sexual desire and rumination during pregnancy have a bilateral relationship, and sexual desire does not necessarily increase or decrease rumination. High sexual desire may lead one to satisfy this need and the rumination may not be capable of holding it. In this case, the desirability and satisfaction of fulfilling the need will decrease the rumination. Second, it can be argued that the experiences of not having the consequences of sexual intercourses during pregnancy and what is considered as rumination can decrease having wrong schemes about the dangers and harms of sexual intercourse. In this regard, the influence of sexual desire on another factor can be mentioned. Likely, sexual desire and the necessity to satisfy this need during pregnancy lead couples, especially mothers, to study and gain awareness. Rumination will

likely be reduced by acquiring the necessary knowledge of sexual desire and sexual intercourse and ensuring the safety of the mother and fetus in such intercourses. These results could also be found in the research literature of the current study. Bartellas, and Trutnovsky stated that rumination predicts low sexual desire during pregnancy **(2,31,32)**. They mentioned that there are many wrong beliefs and superstitions about pregnancy among women. These beliefs transcend a country's borders and recognize no ethnic or racial restrictions. Apart from physiological reasons, such as nausea and vomiting in the first trimester and abdominal enlargement in the third trimester of pregnancy, psychological factors, such as beliefs about decreased sexual desire, and superstitious beliefs, such as hurting the fetus during the intercourse, are effective in reducing sexual desire. Erylmaza, **(6)** also acknowledged this. Furthermore, Shojah **(33)** discussed the process by which beliefs and rumination during pregnancy affect sexual functioning. Some misconceptions about spouse relationships during this period can cause stress for the spouse and bring about discomfort for the pregnant woman. Sexual activity during pregnancy is influenced by physical and emotional changes as well as beliefs; however, most of the sexual problems in this period are due to misconceptions and misunderstandings of physical and emotional changes. Inadequate information about sexual intercourse during pregnancy and negative attitudes towards sex during this period can lead to problems such that a decrease in the number of sexual intercourses or a complete cessation of having such intercourses can diminish the emotional connection which may bring about anxiety and mistrust in the mother **(24,27)**.

The third hypothesis of the study was that sexual desire in the last trimester of pregnancy is related to the quality of life. The data analysis presented in the previous section showed that the subscales of sexual functioning, emotional problems, and general health were positively and significantly predicted by sexual desire. However, other subscales of quality of life, namely fatigue or vitality, emotional health, social functioning, pain, and physical health status were not significantly predicted by sexual desire. Concerning the positive and significant relationship of sexual desire, it should be noted that this finding is in line with the findings of these studies **(6,24,25,27,34)**. In explaining this research result, it may seem obvious that having/not having sex is directly related to the performance of this desire and having/not having a relationship. Sexual desire can be affected by two general states and these two states can create or decrease sexual desire, thereby increasing or decreasing sexual functioning. These two factors include psychological and hormonal effects. Jahanfar and Heydari **(24,27)** stated that pregnancy is correlated with physiological changes and its associated complications, as well as the specific psychological changes of this period and the emergence of new concerns caused by the existence of the fetus can make sex undesirable and can drastically reduce sexual desire. Sexual activity during pregnancy is affected by physical and emotional changes as well as beliefs about it.

Acknowledgements

We would like to thank the Clinical Research Development Unit of Amir Al-momenin Educational and Research and Therapeutic center of Semnan University of Medical Sciences for providing facilities to this work.

Conflict of Interest

Authors declared no conflict of interests.

References

1. Read J. Sexual problems associated with infertility, pregnancy, and ageing. BMJ. 2004 Sep 4;329(7465):559-61 [DOI:10.1136/bmj.329.7465.559] [PMID] [PMCID]
2. Trutnovsky, G., Haas, J., Lang, U. et al .Women's perception of sexuality during pregnancy and after birth. Aust N Z J Obstet Gynaecol. 2006 Aug;46(4):282-7. [DOI:10.1111/j.1479-828X.2006.00592.x] [PMID]
3. Zahedi M, Edris F. Quality of life in pregnant women in Farsakhshahr city in 2012. Journal of Nursing Clinical and Midwifery. 2014; 3(3); 63-69.
4. Abbaszadeh F, Bagheri A, Mehran N. Different Dimensions of Quality of Life in Pregnant Women. Monitoring, Quarterly Journal of Hygiene Sciences. 2009; 9; 69-75.
5. Von-Sydow, K. Sexuality during pregnancy and after childbirth: a metacontent analysis of 59 studies. Journal of Psychosomatic Researches, 47, 27-49. [DOI:10.1016/S0022-3999(98)00106-8]
6. Erylmaza, G., Egeb, E., & Zincirb, H. Factors affecting sexual life during pregnancy in Eastern Turkey. Gynecologic and Obstetric Investigation. Gynecol Obstet Invest. 2004;57(2):103-8. Epub 2003 Dec 15. [DOI:10.1159/000075582] [PMID]
7. Fok W Y, Chan L Y-S, Yuen P M. "Sexual behavior and activity in Chinese pregnant women". Acta Obstetricia et Gynecologica Scandinavica First published: 15 September 2005. [DOI:10.1111/j.0001-6349.2005.00743.x] [PMID]
8. Anzaku, A.S., Okoye Florence Ngozi, Bulus Ayuba Dabu Bassey Edet. (2015). Frequency, perceptions and complications of sexual activity during pregnancy among a group of Nigerian women. IAIM, 2(6): 54-63.
9. Mckee MD, Cunningham M, Jankowski KR, et al. Health-related functional status in pregnancy: relationship to depression and social support in a multi-ethnic population.

Obstet Gynecol. 2001 Jun;97(6):988-93. [DOI:10.1097/00006250-200106000-00022] [PMID]

10. Otchet F, Carey MS, Adam L. General health and psychological symptom status in pregnancy and the puerperium: what is normal? Obstet Gynecol. 1999 Dec;94(6):935-41. [DOI:10.1097/00006250-199912000-00007] [PMID]
11. Semiha Taşdemir, Balci, and Osman Günay. Comparison of life quality of pregnant adolescents with that of pregnant adults in Turkey. Ups J Med Sci. 2010 Oct; 115(4): 275-281. [DOI:10.3109/03009731003628724] [PMID] [PMCID]
12. Bonomi AE, Patrick DL, Bushnell DM,et al. Validation of the United States' version of the World Health Organization Quality of Life (WHOQOL) instrument. J Clin Epidemiol. 2000 Jan;53(1):1-12. [DOI:10.1016/S0895-4356(99)00123-7]
13. Nejat S. Quality of life and its measurement. Journal of Epidemiology. 2008; 4(2); 62-57.
14. Mackvandi S, Etemadi Kermani. Quality of life of pregnant women referring to Izeh city health centers (2010). Journal of Kermanshah University of Medical Sciences. 2012; 16(1).
15. Peter M. Fayers David Machin. Quality of Life: Assessment, Analysis and Interpretation. First published:18 April 2000. [DOI:10.1002/0470846283]
16. Nolen-Hoeksema S. The role of rumination in depressive disorders and mixed anxiety/depressive symptom. J Abnorm Psychol. 2000 Aug;109(3):504-11. [DOI:10.1037//0021-843X.109.3.504] [PMID]
17. Müller, Teismann, Havemann, et al. Ruminative Thinking as a Predictor of Perceived Postpartum Mother-Infant Bonding. Cognitive Therapy Research 37(1) · February 2012. [DOI:10.1007/s10608-012-9454-7]
18. Isa Alfaraj A, Spada M, Nikcevic A, et al. Positive beliefs about rumination in depressed and non-depressed pregnant women: a preliminary investigation . Journal of Reproductive and Infant Psychology. Volume 27, 2009 - Issue 1. [DOI:10.1080/02646830701759678]
19. Shafiee , P .Surveying the Relationship between Married Female Student Sexual Desire & Identity Crystallization ,Thesis ,2005, PP 20-30.
20. Ware JE Jr1, Sherbourne CD. The MOS 36-item short-form health survey (SF-36). I. Conceptual framework and item selection. Med Care. 1992 Jun;30(6):473-83. [DOI:10.1097/00005650-199206000-00002] [PMID]
21. Montazeri A, Azita Goshtasebi ,Vahdaninia M, et al. The Short Form Health Survey (SF-36): Translation and validation study of the Iranian version. Quality of Life Research.April 2005, Volume 14, Issue 3, pp 875-882 [DOI:10.1007/s11136-004-1014-5] [PMID]
22. Li L, Wang HM, Shen Y: Chinese SF-36 Health Survey: translation, cultural adaptation, validation, and normalization. J Epidemiol Community Health. 2003, 57: 259-263. [DOI:10.1136/jech.57.4.259] [PMID] [PMCID]
23. Bayrami R, Satarzadeh N, RanjbarF, et al. Sexual dysfunction of couples and some related factors during pregnancy .Journal of reproduction and infertility, 2008; 271-282.
24. Heydari M, Kiani Asiabar A, Faghiehzadeh S. Study of knowledge and attitude of couples about sexual relations during pregnancy. Journal of Tehran University of Medical Sciences. 2006; 64(9).
25. Nematollahzadeh M, Masoumi R, Lamiyan M, et al.Evaluating the Attitudes and Status of Women's Sexual Function during Pregnancy. Journal of Ardabil University of Medical Sciences. 2010; 10(2); 241-244.
26. Jennifer S. Barber, Yasamin Kusunoki, Heather Gatny, et al. The Relationship Context of Young Pregnancies. US National Library of Medicine National Institutes of Health. Law Inequal. 2017; 35(2): 175.
27. Jahanfard Sh, MolaieNejad M. Sexual Dysfunction Syllabus. Print First, Tehran, 2001; 11-61.
28. Bostani Khalesi Z, Bokaie M, Attari M. Effect of pregnancy on sexual function of couples. Afr Health Sci. 2018 Jun; 18(2): 227-234. [DOI:10.4314/ahs.v18i2.5]
29. Onah HE, Iloabachie GC, Obi SN, et al . Nigerian male sexual activity during pregnancy. Int J Gynaecol Obstet. 2002 Feb;76(2):219-23. [DOI:10.1016/S0020-7292(01)00579-3]
30. Abbasi F, Yousefi Z, Maroufi M. The multiple relationships among forgiveness, and family communication with rumination in pregnant women. Merit Research Journal of Art, Social Science and Humanities (ISSN: 2350-2258) Vol. 2(4) pp. 043-047, May, 2014.
31. Bartellas, E., Grane, J., Daley, M, et al. . Sexuality and sexual activity in pregnancy. British Journal of Obstetrics and Gynecology, 107, 964-968. [DOI:10.1111/j.1471-0528.2000.tb10397.x] [PMID]
32. Battle CL, Uebelacker LA, Magee SR, et al. (2015). Potential for prenatal yoga to serve as an intervention to treat depression during pregnancy. Womens Health Issues . 2015 Mar-Apr;25(2):134-41. DOI: 10.1016/j.whi.2014.12.003. [DOI:10.1016/j.whi.2014.12.003] [PMID] [PMCID]
33. Shojah M, Joybary L, Sanguo A. Common beliefs among women about proximity during pregnancy. Iranian Journal of Psychiatry and Clinical Psychology, 2008, 2; 220 -221.
34. Gustafsson MK, Stafne SN, Romundstad PR, et al.The effects of an exercise program during pregnancy on health-related quality of life in pregnant women: a Norwegian randomized controlled trial. BJOG. 2016 Jun;123(7):1152-60. [DOI:10.1111/1471-0528.13570] [PMID]

How to Cite This Article:

Rahimian M, Nassiri S, Saffarieh E. Pregnant Women's Attitude towards Sexual Desire and Its Relationship with Quality of Life and Rumination in the Last Trimester of Pregnancy. jogcr. 2019; 4 (1) :16-23

Download citation:
BibTeX | RIS | EndNote | Medlars | ProCite | Reference Manager | RefWorks