

Comparison of Sexual Function in Pregnant Women with Different Gestational Age

Fatemeh DAVARI-TANHA^a, Zahra REZAEI A'LAM^b, Mahboobeh SHIRAZI^a, Fariba ASKARI^c, Mahsa GHAJARZADEH^d

^aDepartment of Obstetrics and Gynecology, Women Hospital, Tehran University of Medical Sciences, Tehran, Iran

^bTehran University of Medical Sciences, Tehran, Iran

^cDepartment of Midwifery, Gonabad University of Medical Sciences, Gonabad, Iran

^dBrain and Spinal Injury Research Center, Tehran University of Medical Sciences, Tehran, Iran

ABSTRACT

Objective: To evaluate sexual function in Iranian pregnant women in different trimesters.

Material and method: This cross sectional study was conducted in a women's hospital between August 2013 and August 2014. Four hundred pregnant women were asked to answer the valid and reliable Persian version of Beck depression inventory (BDI) and valid FSFI (Female sexual function index) questionnaires.

Results: Forty five subjects were in the first trimester of pregnancy, 170 in the second trimester and 185 in the third trimester. Except BDI and desire subscale of FSFI, all scores were significantly different between the three groups. By considering 26.55 as the cut off point for FSFI, 38 (84.4%) women in the first trimester, 138 (81.2%) in the second trimester, and 156 (84.3%) in the third trimester had sexual dysfunction. Logistic regression analysis showed that BDI was an independent predictor of sexual dysfunction among participants.

Conclusion: As sexual life is an important aspect of marital life, physicians should pay more attention to it in pregnant women.

Keywords: sexual function, pregnancy, Iran.

Address for correspondence:

Fatemeh Davari-tanha,

Department of Obstetrics and Gynecology, Women Hospital,

Tehran University of Medical Sciences, Tehran, Iran

Tel.: +98 21 66581561

Email: fatedavtanha@gmail.com

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INTRODUCTION

Pregnancy is one of the most important periods of women's lives, which affects psychological wellbeing (1). Sexual function is an important aspect of marital life. Between 86% and 100% of couples continue their sexual relation during the gestational period, while most women show decrease in sexual desire and coital frequency during pregnancy (2-4). Evidence show that sexual wellbeing is important for a better quality of life, and women with sexual dysfunction feel problems in self-esteem and emotional distress (5, 6). On the other hand, men choose masturbation, oral sex, anal intercourse and extra marital relations as a replacement for their women's sexual dysfunction (1, 7).

Although sexual function during pregnancy seems to be an important issue, due to cultural and religious issues it is not considered as it should be. So, we designed this study to evaluate sexual function in Iranian pregnant women in different trimesters. □

METHODS

This cross sectional study was conducted in Women Hospital (affiliated to Tehran University of Medical Sciences) between August 2013 and August 2014.

Exclusion criteria comprised kidney disease, chronic cardiac, or pulmonary disorders, bleeding during pregnancy, and previous preterm labor.

All subjects were asked to fill an informed consent form for their participation in the study, which was approved by the local Ethics Committee.

Participants were asked to answer the valid and reliable Persian version of Beck depression inventory (BDI) and valid FSFI (Female sexual function index) questionnaires.

FSFI is a 19-item self-report instrument for measurement of female sexual function, which is providing scores on six domains of sexual function as well as a total score. These domains include desire (two items, questions 1&2), arousal (four items, questions 3-6), lubrication (four items, questions 7-10), orgasm (three items, questions 11-13), satisfaction (three items, questions 14-16), and pain (three items, questions

17-19), and addition of all 19 items provides the total FSFI score (8).

The BDI consists of 21 questions to which participants answers according to their feelings over the last week. Each item is scored from 0 to 3 to determine individual degree of depression. Subjects with total scores between 0 and 9 are not recognized as depressed, while scores between 10-18 indicate mild to moderate depression, 19-29 moderate to severe depression, and 30-63 severe depression (9).

SPSS software version 20 (SPSS Inc., Chicago, IL, USA) was used for data analysis.

ANOVA test was used to compare continuous variables. Multiple linear regression analyses with FSFI score as dependent variable and the scores of BDI, age, partner age, age at marriage and education level as independent variables were conducted. A P value less than 0.05 was considered as significant. □

RESULTS

Four hundred pregnant women were enrolled in this study, with 45 in the first trimester of pregnancy, 170 in the second trimester and 185 in the third one. Demographic characteristics of all participants were summarized in Table 1.

Of all women, 331 (82.7%) were house wives and 20 (5%) had a history of HTN. Fifteen (3.8%) had a history of pelvic inflammatory disease (PID), while four (1%) had previous endometriosis. Polycystic ovarian disease (PCO), ectopic pregnancy, and pre-term labor were reported in 6.8%, 3.3% and 6% of women, respectively. Premature rupture of membranes (PROM) and gestational diabetes was reported in 15 (3.8%) and 26 (6.5%), respectively.

TABLE 1. Demographic characteristics of patients

Variable	Mean ± SD
Age (year)	29.3±5.2
Partner age (year)	33.6±5.4
Education level (year)	11.9±3.3
Partner's education level (year)	11±3.5
Gravidity	1.9±1.1
Parity	0.5±0.7

	First trimester N=45	Second trimester N=170	Third trimester N=185	P value
BDI	10.1±10.4	12±9.7	10.7±8.2	0.2
Desire	3.3±1	2.9±0.9	3±1.3	0.1
Arousal	3.1±1.2	2.8±1.4	2±1.6	<0.001
Lubrication	1.6±0.2	1.9±0.1	2.1±0.1	<0.001
Orgasm	3.6±1.6	3.1±1.9	2.4±2.1	<0.001
Satisfaction	4.2±1.4	3.7±1.5	3.1±1.8	<0.001
Pain	3.3±1.8	3.2±2	2.4±2.2	<0.001
Total score	21.5±7.1	19.3±8.5	15.5±9.9	<0.001

TABLE 2. Mean scores of BDI, FSFI and its subscales

TABLE 3. Logistic regression analysis

	OR	P value
Age	1	0.9
Partner age	1	0.3
BDI	1.06	0.002
Age at marriage time	0.9	0.1
Education	0.9	0.9

Mean scores of BDI and FSFI and its subscales in participants with different gestational age are reported in Table 2.

By considering 26.55 as the cut off point for FSFI, 38 (84.4%) women in the first trimester, 138 (81.2%) in the second trimester, and 156(84.3%) in the third trimester had sexual dysfunction.

Logistic regression analysis showed that BDI was the independent predictor of sexual dysfunction among participants (Table 3). □

DISCUSSION

The results of the current study showed that 364 out of 400 (91%) participants had sexual dysfunction, which was identified rather in the first and third trimesters than in the second trimester of their pregnancy.

Also, the mean FSFI scores and its subscales, except desire, were significantly different in all three groups, and orgasm, satisfaction and arousal scales were higher among women in the first trimester. This finding could show that sexual

dysfunction increases with advancing gestational age.

In a recent study, Seven *et al.* evaluated 286 pregnant women with a mean age of 29 and found that 77% of them had sexual dysfunction (10).

In another study, Hanafy *et al.* reported sexual dysfunction in 68% of pregnant women in the first trimester, 51% in the second trimester and 72% in the third trimester (11).

Aslan *et al.* evaluated 40 pregnant women in all three trimesters and found that the total FSFI score and its subscales were significantly higher among women in the first trimester (12).

Jamali and Mosalanejad investigated sexual dysfunction in 79% of pregnant women (23% in the first trimester, 30% in the second trimester and 46% in the third trimester). All subscales were higher for the first trimester (1).

During pregnancy, sexual habits tend to change due to various physical and psychological changes, and sexual relations are affected according to culture, religion, tradition and medical condition (1). Our results are in accordance with those of Jamali *et al.*, showing that sexual dysfunction increases with pregnancy progression which is consistent with Byers' study (13).

In a meta-analysis, Sydow *et al.* found that problems in reaching orgasm are more prevalent in the third trimester (14).

The desire item was not significantly different in the three trimesters, while Basson *et al.* believed that sexual desire during the first and third trimesters was lower than the second trimester (14, 15).

Against arousal domain, lubrication item score increased significantly which is against with Jamali et al study. Increase of blood vessels and blood circulation of vagina during pregnancy will result in physiological arousal which will cause vaginal wetness or dryness either (1).

In current study, along with orgasm satisfaction, sexual satisfaction decreased with pregnancy progression. Similar findings had been previously reported by other authors (12).

Abdominal enlargement, body ugliness, abortion, preterm births, and fetal infections would result in dissatisfaction in sexual life during pregnancy (8, 16, 17).

Further studies conducted in other countries confirmed that worries about hurting the fetus was among the major concerns of future mothers, which would decrease sexual behavior during pregnancy (19). □

CONCLUSIONS

As sexual life is an important aspect of marital life, and physicians should pay more attention to it in pregnant women. □

Ethics approval and consent to participate: All subjects were asked to fill an informed consent for their participation in the study. The study was approved by the Ethical Committee of Yas Hospital, which is affiliated to Tehran University of Medical Sciences.

Consent for publication: All participants were informed about making their published data anonymous and each of them signed an informed consent.

Availability of data and material: All data analyzed during this study are included in this published article as a supplementary file.

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