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Research Article

The Relationship between Unwanted Pregnancy and Sexual Unsatisfaction among Iranian Pregnant Women

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Abstract

Background: Sexuality and its subsequent satisfaction play critical role in individuals' overall quality of life, especially in women. Moreover, Sexual unsatisfaction and unwanted pregnancy are important public health problems among pregnant women worldwide. The main objective of this study was to determine the relationship between unwanted pregnancy and sexual satisfaction during pregnancy.
Methods: In this study, we enrolled 120 women with unwanted pregnancy and 120 healthy controls. The Larson sexual satisfaction (ISS) questionnaire was used to evaluate sexual satisfaction scores in study participants. Demographic information was collected using a researcher-made questionnaire. Data analysis was performed by the program SPSS 18 and statistical differences were considered significant at P-values<0.05.
Results: The frequency of unsatisfaction (OR = 5.08; 95 % CI = 0.24–107.02; P = 0.497), low satisfaction (OR = 30.62; 95 % CI = 7.20–130.2; P <0.001), and moderate satisfaction (OR = 1.45; 95 % CI = 0.87–2.41; P =0.155), were higher in case group compared to controls, while frequency of the high satisfaction (OR = 0.11; 95 % CI = 0.06–0.22; P <0.001) was significantly higher in control groups. The total mean ISS scores for the women with wanted and unwanted pregnancies were 101.1 ±11.1 and 80.6 ±14.6, respectively (z= - 3.99, P < 0.001).
Conclusion: In conclusion, our findings demonstrated that unwanted pregnancy has negative effects on sexual satisfaction during the pregnancy. Further studies are needed to fully illustration of correlation between unwanted pregnancy and sexual dissatisfaction.

Introduction

Sexuality and its subsequent satisfaction play critical role in individuals' overall quality of life, especially in women.[1] According to definition by Lawrance and Byers, Sexual satisfaction is defined as "an affective response arising from one's subjective evaluation of the positive and negative dimensions associated with one's sexual relationship".[2] It is reported that high sexual satisfaction is associated with quality of life, overall well-being, better state of physical and psychological health, high relationship, satisfaction communication with one's partner and sexual assertiveness.[3] Deterioration in sexual health affects not only physical health but also psychological health, family health, and consequently, social health.[4]

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Sexual unsatisfaction can leads to mental and spiritual disorders, such as depression, disappointment, insecurity, and also spiritual and personality imbalance. These disorders could be cause of reduced capability, serious contradictions, an also negative emotion to each other, competition to suppress each other, jealousy and being ignored.[5, 6] Several studies have revealed that sexual dissatisfaction is responsible for nearly 80% of marital conflicts.[7, 8] It is demonstrated that several factors (e.g. education, chronic diseases, pregnancy and parity) could be effective on sexual dysfunction.[9, 10] Pregnancy is one of the leading factors to be effective in the sexual function and behavior of women.[11]

Pregnancy is an important period in a woman's life and causes significant changes in behavior, sexual function and sexual satisfaction of women. During this period sexual activities and martial relationships might be affected by several factors such as physical and psychological changes and social, cultural, religious factors.[12] It is well documented that sexual satisfaction is lower during pregnancy than before pregnancy.[12] Unwanted pregnancy is one of the main public health problems worldwide. It is reported that in 2012, 40 percent of all pregnancies were unwanted, and also 30.6% of all pregnancies in Iran are unwanted. [13, 14] Unwanted pregnancies can lead to a wide range of negative health, social, economic consequences and also psychological problems for both women and children.[13, 14] To our knowledge, no prior study was conducted to evaluate on the association of pregnancy intentions and sexual satisfaction. In addition, knowing if there is a correlation between pregnancy intention and sexual satisfaction is useful, particularly in the current social context in which about 40% of pregnancies are unwanted.[15] Therefore, the main aim of this study was to determine the relationship between unwanted pregnancy and sexual dissatisfaction among Iranian pregnant women.

Methods

Study design

A case-control study was undertaken in Shahid Beheshti University of Medical Science Tehran, Iran, between May 2014 and January 2015. Subjects for this study were married pregnant women who had referred to the health centers for receiving prenatal cares. In the present study, 120 cases (women with unwanted pregnancy), with a mean age of 28.3 ± 6.3 years and 120 controls (women with wanted pregnancy) with a mean age of 26.7 ± 5.5 years, were evaluated. The cases and controls were distinguished according to the women's expression. Based on physician examinations, medical records and interview, the age, residence region, socio-demographic, obstetric characteristics and trimesters of pregnancy in the control group were similar to the case group. The eligible subjects were selected by daily visiting of health centers.

Data collection

To measure sexual satisfaction, we used Iranian version of Larson sexual satisfaction (ISS) questionnaire.[16, 17] The ISS questionnaire was devised by Larson et al in 1998 to evaluate the effects of premarital communication, relationship stability, and self-esteem on sexual satisfaction in the first year of marriage [17], and has also been validated for use in women and men.[18] The standard ISS questionnaire has 32 items with sixteen positive and sixteen negative items. Iranian version of ISS with good validity and reliability consists of 25 items and includes a 5-option Likert scale as follows: never, rarely, sometimes, often, and always.[16] The content of ISS was evaluated and then confirmed by a number of midwifery and reproductive health faculty members in nursing and midwifery school of SBMU. Items have Likert scale response choices between 0 and 4 and higher scores indicate greater satisfaction.[16] Based on the ISS scores obtained, we regarded pregnant women with a score between101-128 as completely satisfied and those who had score between 76-100, 50-75 and <50 regarded as relatively satisfied, slightly satisfied and dissatisfied, respectively. Reliability of Larson sexual satisfaction for this study was evaluated using Chronbach's alpha coefficient (Alpha Chronbach) and Intraclass Correlation Coefficient (ICC). The result of the Chronbach's alpha coefficient was calculated as 0.9 whose reliability is good. Moreover, in this study the ICC of test-retest reliability ranged from 0.77 to 0.86.

Ethical statement

This study (No. 1393-1-86-13148) was approved by the Ethics Committee of Shahid Beheshti University of Medical Science Tehran, Iran. All enrolled participants were informed about the study and written informed consents were obtained from all of them before the beginning of the study objectives.

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Statistical analysis

Mean scores of sexual satisfaction were compared between the type of pregnancy (unwanted and wanted) and the gestational trimesters using the Mann-Whitney non-parametric test; also categorical data were compared by Chi-square or Monte Carlo simulation method (N=1,000,000 simulations). Odds ratios and their corresponding confidence intervals (95% CI) were calculated for each level of satisfaction. Data analysis was performed by the program SPSS 18 and statistical differences were considered significant at *P*-values<0.05.

Results

Table 1 summarized the demographic features of studied participants. Most of the subjects in both groups were housewives and had high school education. Further information is provided in our recently published article (14). There is no statistical significant in sexual satisfaction before the pregnancy, in both group (*P* =0.06).

As shown in Table 2, the frequency of unsatisfaction (OR = 5.08; 95 % CI = 0.24–107.02; *P* = 0.497), low satisfaction (OR = 30.62; 95 % CI = 7.20–130.2; *P* <0.001), and moderate satisfaction (OR = 1.45; 95 % CI = 0.87–2.41; *P* =0.155), were higher in case group compared with controls, while frequency of the high satisfaction (OR = 0.11; 95 % CI = 0.06–0.22; *P* <0.001) was significantly higher in control groups, suggesting the existence of positive correlation between unwanted pregnancies and meeting criteria for lower sexual satisfaction during pregnancy.

As shown in Table 3, the total mean ISS scores for the women with wanted and unwanted pregnancies were 101.1 ±11.1 and 80.6 ±14.6, respectively. Mann-Whitney U test of ISS scores showed a significant difference between case and control women (z= -3.99, *P* < 0.001). Moreover, the mean ISS scores for the women with unwanted pregnancy were significantly lower in all trimesters, compared to controls (*P* < 0.001) (Fig. 1).

Significant statistically differences were seen between case and control groups in the following items included in questionnaire: "I have an attractive and exciting sex life" (*P* =0.032), "sex with my spouse is a repetitive task." (*P* =0.01), "our sexual relationships have done hastily." (*P* =0.002), "My spouse is a good partner for our sexual activities" (*P* =0.016), "I feel that my spouse has excessive expectation in our sexual relationships." (*P* =0.039),

Table 1. Descriptive characteristics of women with unwanted pregnancy and women with wanted pregnancy.

Varables	Groups	
	Women with unwanted pregnancy (n =120) N (%)	Women with wanted pregnancy (n =120) N (%)
Age		
≤20	10 (8.3)	16 (13.4)
21-30	70 (58.3)	68 (56.6)
31-40	36 (30)	33 (27.5)
≥41	4 (3.4)	3 (2.5)
Duration of marriage		
≤10	96(80)	101 (84.1)
11-20	20 (16.6)	15 (12.5)
≥21	4 (3.4)	4 (3.4)
Occupation		
Employed	28 (23.3)	15 (12.5)
Housewife	92 (76.7)	105 (87.5)
Education level		
Illiterate	4 (3.4)	4 (3.4)
Primary school	28 (23.3)	16 (13.4)
Secondary school	26 (21.6)	19 (15.7)
High school	41 (34.1)	51 (42.5)
University	21 (17.5)	30 (25)
Education level of spouse		
Illiterate	5 (4.2)	1 (0.8)
Primary school	32 (26.6)	23 (19.1)
Secondary school	24 (20)	24 (20)
High school	34 (28.4)	41 (34.2)
University	25 (20.8)	31 (25.9)
Parity		
Nulliparous	37 (30.8)	47 (39.2)
1–2 deliveries	31 (25.8)	46 (38.3)
3–4 deliveries	34 (28.3)	12 (10)
5 and more deliveries	18 (15)	15 (12.5)
Sexual satisfaction before pregnancy		
Yes	100 (83.3)	94 (78.3)
No	20 (16.7)	26 (21.7)

"Sexual activity with my spouse results in at least one orgasm for me" (*P* =0.012), "I have not been interested in participating sexual activities with my spouse in the preceding months" (*P* =0.001), "My spouse cannot make me feel sexually fulfilled after sex" *P* =0.031), "My sex life is lacking in quality."

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Table 2: Status of sexual satisfaction between women with wanted and unwanted pregnancies

Characteristics	Wanted pregnancy N (%)	Unwanted pregnancy N (%)	Odds Ratio (CI 95%)	P value
Un-satisfaction	0 (0.0)	2 (1.7)	5.08 (0.24, 107.02)	0.497
Low Satisfaction	2 (1.7)	41 (34.1)	30.62 (7.20, 130.2)	<0.001
Moderate Satisfaction	51 (42.5)	62 (51.7)	1.45 (0.87,2.41)	0.155
High Satisfaction	67 (55.8)	15 (12.5)	0.11 (0.06, 0.22)	<0.001

Table 3: Mean scores of sexual satisfaction between women with wanted and unwanted pregnancies

Characteristics	Wanted pregnancy mean score (SD)	Unwanted pregnancy mean score (SD)	P value
First trimesters	102.9 (10.3)	78.9 (10.4)	<0.001
Second trimesters	99.4 (16.1)	84.7 (16.4)	<0.001
Third trimesters	99.9 (11.6)	79.7 (16.3)	<0.001
Total mean score	101.1 (11.1)	80.6 (14.6)	<0.001
Mean rank	163.9	77.1	<0.001

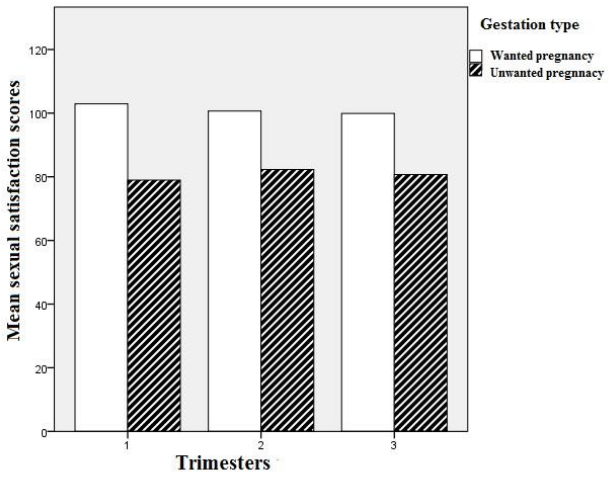


Figure 1: The mean ISS score differences between women with unwanted pregnancy and controls.

(p=0.042), “When I feel like to have sex with my spouse, he is not willing." (*P* =0.004), "My spouse is very sentimental about my sexual needs and inclinations" (*P* =0.025), "I feel that my spouse enjoys having sex with me” (*P* =0.01), "I am satisfied with my sex life" (*P* =0.023), "I feel my wife avoids sex with me." (*P* =0.000), "I feel that our sex life is boring." (*P* =0.019), "I believe that sex in married life is very important." (*P* =0.006).

Discussion

To our knowledge, this is the first study to assess the correlation between unwanted pregnancy and sexual satisfaction of using a validated and structured questionnaire. Our data demonstrated that unwanted pregnancy is negatively associated with sexual satisfaction during the pregnancy. There was no statistical significant difference in sexual satisfaction before the pregnancy in our case and control subjects. In contrast with our study, Gibbs et al. indicated that pregnancy intention status was not a predictor of sexual satisfaction for married women, however, cohabiting women trying to get pregnant report higher levels of sexual satisfaction compared to cohabiting women who are sterile or avoiding pregnancy.[19] However studies objective and participants are different in our study and study by Gibbs et al. The findings in Gibbs et al. study could be explained by this fact that in women who are trying not to conceive, anxiety about the risk of unplanned pregnancy could prevent sexual satisfaction, particularly for women who are not married.[19] While in our study, all women were married and pregnancy was occurred in them.

Previous research indicates that unwanted pregnancy is associated with a wide range of negative health, social, and economic consequences, as well as psychological problems for women.[13] It is well proven in several studies that unwanted pregnancy is one of the major predictors related with the development of depression and anxiety during pregnancy, and postpartum.[20,21] These psychological disorders are closely associated with sexual dysfunction in pregnant women, because most antidepressant drugs have adverse effects on sexual function.[22, 23] Moreover, these psychological problems are characterized by loss of interest, decrease in energy, dropped self-esteem and incapability to experience pleasure that these conditions could produce difficulties in sexual relationships, and sexual problems.[23] In addition, unwanted pregnancy is relevant with abortion, unhealthy behaviors, illicit

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drug use, do not initiate early prenatal care and many other complications.[14, 15] Previous studies have indicated that induced abortion have adverse effects on marital relationships or sexual function in up to 20% of women.[24, 25] It may be due to both the worry of another unwanted pregnancy and psychological trauma.[25] Our results indicated that in unwanted pregnant women group, the majority of subjects we categorized with moderate and low satisfaction, respectively. While in wanted pregnant women, the most of subjects had overall score of sexual satisfaction in moderate and high level (Table 2). Previous studies suggest several factors that are relevant with sexual satisfaction could also be associated with unwanted pregnancy, and therefore could explain the apparent direct associations.[19] Some of these factors are include relationship quality, longer relationships, level of well-being, number of parity, age, social status and work status and etc.[26-29] Our study showed that it is a significant predictor for sexual unsatisfaction in all trimesters during the pregnancy. The overall score of sexual satisfaction in unwanted pregnant women was significantly lower than controls in all trimesters. The difference was higher particularly in first trimesters, suggesting this period as a critical period for women with unwanted pregnancy, considering to then sexual satisfaction.

In conclusion, sexual satisfaction plays an important role in relationship outcomes and is sexual associated with higher wellbeing and higher relationship stability. Our study demonstrated that unwanted pregnancy has negative effects on sexual satisfaction during the pregnancy. Consulting and spouse behavior could be helpful. Further studies are needed to fully illustration of correlation between unwanted pregnancy and sexual dissatisfaction.

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Conflicts of Interest

None of the above authors have any conflict of interest.

Authors' Contribution:

Malihe Nourollahpour Shiadeh, Nourossadat Kariman, performed research, analyzed data, and collaborated in writing the manuscript; Saeed Mehravar performed the statistical analyses and interpretation of the data.

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