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Sexual Function in Breastfeeding Women in Family Health Centers of Tabriz, Iran, 2012

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ABSTRACT

Introduction: There are conflicting evidences about the effects of breastfeeding on postpartum maternal sexual functioning. With regard to the methodological weaknesses of previous studies and cultural differences affecting their issue, the present study aims to evaluate sexual functions of lactating women and its components. ***Methods:*** This is a descriptive study in which 200 eligible postpartum women were selected from eight health centers of Tabriz (25 from each center). The eligible women were called and invited to attend the health center. The evaluation was performed using the Persian version of normalized questionnaire of the Female Sexual Function Index (FSFI). The participants' sexual function scores above 28 were considered desirable (regarding the cut-off point mentioned in the Persian version of the questionnaire). ***Results:*** Almost all of the lactating women suffered from sexual dysfunctions. Regarding the sexual performance's components the lowest scores were for libido and sexual arousal. ***Conclusion:*** According to the findings of the studies, in order to prevent the effects of sexual dysfunction on lactating women and their family members it is necessary to develop sexual health programs in health centers.

Introduction

Sexual intercourse is an important factor in strengthening families.[1] In fact there is a positive relationship between sexual and marital satisfaction.[2] Sexual dysfunction has many negative consequences especially in family and social problems including the relationship between husband and wife, sex crimes and assaults, mental diseases, divorce, and so on.[3] While the importance of sexuality varies with each woman, sexuality is an important and large part of a woman's identity and health team clinicians must take proactive steps to create dialogue on the issue before and after birth. Unfortunately, sexuality is also a topic that is not often addressed by practitioners.

There are several bio-psychosocial factors expected to affect sexual behaviors. Pregnancy and postpartum period (6 months after delivery) have adverse effects on women's and their husbands' sex life.[4] On the other hand most of the postpartum women choose breastfeeding and it will interfere with the couples' sex. The physical, hormonal, and psychological alterations in the body from conception to postpartum and breastfeeding create a great potential for change in a woman's sexuality. It has been proven that sexual dysfunction occurs for first child births.[5] Low estrogen levels cancause decreased vaginal lubrication and atrophy of the vaginal epithelium, which, in turn, make physical arousal difficult and intercourse painful.[6] Dyspareunia, or pain

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with intercourse, is a common complaint of breastfeeding women.[7,8] The other hormone that plays a major role in lactation is oxytocin that is at a high level in breastfeeding women. It is also responsible for the contractions of the uterus during orgasm and labor.[9] Oxytocin provides the happy, contented feeling after breastfeeding, a reduction in stress, and the overall relaxation that breastfeeding conveys, and improves sexual function.[10]

A number of studies have shown conflicting evidence on the effect of breastfeeding on sexuality. Breastfeeding women believed that increase libido might be due to larger breast size, direct physical stimulation and increased sensitivity.[2,5,11,12] Breastfeeding, however, has been associated with dyspareunia.[13] Some of the studies indicated its negative effect on sexual activity.[6,13-22] It causes primiparous women to experience an increase in sexual desire and coital frequency after weaning.[16] In a research performed by Kenny three quarter of the women stated that lactation had little impact on their sexual life.[22] Similarly, in a study by Avery et al. 74.6% of participating primiparous women said that they had no problem in sexual intercourse during breastfeeding, although 45.3% of them stated, after weaning, that it had interfered with their sex life.[23]

Critiqued studies that conducted in Iran indicate that some of the surveys were not scored according to the manufacturers' instructions which showed the weakness of these groups of articles.[1] Racial and cultural differences, social and economical variables, and health are considered as the most important factors in making distinction between the results.[24,25] Very few studies have targeted the effects of breast feeding on maternal sex performance. Therefore, further studies are required to gather more information on sexual functions of women living in Tabriz, Iran, to be the basis for understanding sexual dysfunctions of postpartum women, planning for effective interventions, and preventing them.

Materials and methods

The purpose of this descriptive study was to determine the sexual function of lactating women 3 to 6 months after childbirth. The research population consisted of lactating women of Tabriz public health centers. Sample size was determined to be at 95% confidence interval and Mean (SD) of 22.9 (4.65) for the female sexual function in a pilot study. Using this assumption, a sample size of 200 was required. Therefore, 200 eligible women were randomly selected from 8 family health centers (25 participants from each center).

The inclusion criteria were, (1) literacy to complete the questionnaire, married and living with spouse, being in lactation period (3-6 months after childbirth), (2) absence of underlying diseases, (3) not using drugs that affect sexual behaviors (antihypertensive drugs, thiazide diuretics, antidepressants, antihistamines, barbiturates, amphetamines, diazepine, and cocaine) and (4) absence of stressors in the recent 6 months (parental separation, death of first-degree relatives, and etc.). Recruitment was done in 8 out of 46 public health centers located in Tabriz. The public health centers were randomly selected. Then the researchers obtained research permission from the office of the Vice-Chancellor for Research, Tabriz University of Medical Sciences. The list of eligible women (those in 3-6 months after childbirth) was extracted from the registries of these centers (25 from each center) then they were called and asked to participate in a briefing on the study. 16 participants refused to complete the questionnaire due to some problems such as spousal inhabitation, difficulty to commute, and having another child.

Data collection tools consisted of questions about demographical and obstetrics history, and the Female Sexual Function Index (FSFI). The FSFI is a validated and reliable questionnaire for evaluating the sexual

function of women. This questionnaire consists of 19 questions covering the six different domains of the sexual functions; desire, arousal, lubrication, orgasm, satisfaction, and pain.

The participants answered each question according to their experiences. The questions 3 to 14 and also 17 to 19 were scored 0-5, and the items 1, 2, 15, and 16 were scored 1-5. The scores of each domain are calculated through adding the scores of the individual items that comprise the domain, and multiplying the sum by the domain factor (sexual desire 0.6, sexual arousal and lubrication 0.3, orgasm, satisfaction and pain 0.4). The overall score range of maternal sexual performance was 2 to 36. The higher scores indicated better sexual performance.

The Persian version of this inventory was used in the present study. Validity and reliability of the tool were confirmed by Mohammadi et al. (2008). The cut-off point of maternal sexual dysfunction was considered less than 28.[26] Content validity was used in order to determine scientific validity by 10 obstetrics and psychology academic members. We used test-retest to determine the reliability of this scale and 10 eligible lactating women completed the questionnaire twice at 10 day intervals. The results were compared using Pearson correlation test (r = 0.92).

Data were analyzed by using SPSS for Windows (version 13; SPSS Inc., Chicago, IL., USA) and descriptive statistics including frequency, percentage, standard deviation, and 95% confidence interval for mean.

Written informed consents were obtained from all the potential participants. In order to conduct this study a license was obtained from the ethics committee of Tabriz University of Medical Sciences.

Results

Obstetric and demographic characteristics

The study sample consisted of 200 lactating women (3-6 months after child birth). Most of them were housewife and had a high school diploma. Their age ranged from 17 to 39 years. Most of them stated that their incomes were sufficient for their lifestyle. Condom use and then contraceptive pills were the most preferred strategy for family planning. The participants' characteristics are given in Table 1.

Table 1. The obstetric and demographic characteristics of the participants

Characteristics	n = 200	Characteristics	n = 200
Age *	27.5 (5.2)	**Duration of Marriage***	6.31 (4.1)
Husband's age *	32 (5.3)	**Type of delivery**	
Employment status		Vaginal delivery	72 (36)
Housewife	177 (88.3)	Cesarean section	128 (64)
working at home	6 (3)	**Contraceptive method**	
working outside the home	17 (8.7)	No method	5 (2.5)
Women's education		Withdrawal	26 (13)
Elementary	21 (10.5)	Injection method	1 (0.5)
Middle school	46 (23.5)	IUD	19 (9.5)
High school	97 (48)	Condom	52 (26)
College	36 (18)	Pills	94 (47)
Household income		Tubal ligation	3 (1.5)
Insufficient	17 (8.5)	**Sexual satisfaction****	
Partly sufficient	129 (64.5)	Before pregnancy	4.11,4.33
Sufficient	53 (26.5)	During pregnancy	3.27,3.59
High	1 (0.5)	After child birth	2.93,3.29

The data are given as n (%) unless otherwise is specified.
*Values are expressed as mean (SD). **(95% confidence interval)

Table 2. Various dimensions of maternal sexual functions (3-6 months postpartum)

Sexual item	Scale scores range	Mean (SD)	CI 95%
Desire	1.2-6	3.18 (5.3)	3.04, 32.3
Arousal	0-6	3.66 (1.08)	3.51, 81.3
Vaginal lubrication	0-6	4.02 (1.36)	3.83, 21.4
Orgasm	0-6	3.9 (1.25)	3.75, 4.1
Satisfaction	0-6	4.02 (1.36)	3.84, 21.4
pain*	0-6	4.03 (1.32)	3.87, 19.4
Total score	2-36	23.09 (5.31)	22.35, 23.8

*High scores indicated less pain

Moreover, the study findings showed that the mean score of sexual function of lactating women (3-6 months postpartum), 23.9 (5.31), was undesirable (based on the cut-off point (25) obtained from the study by Mohammadi et al. (Table 2).[26]

Reviewing 95% confidence interval for the mean of sexual function indicated that women's sexual function in the domains of desire and arousal had the lowest scores, respectively, and was significantly different from the other four domains.

Discussion

The study findings showed an undesirable level of sexuality in this group of women (Table 1). This was in accordance with the findings of several studies.[6,13-22] A study conducted in Mazandaran estimated the sexual function score of breastfeeding women 4-6 months after childbirth to be 22.84 (5.46).[13] A study in Tehran with 19.38 (7.68), and another study in Cairo with 24.2 (6.9) sexual function score for breastfeeding women, confirm our study.[16,17] On the other hand, our findings were inconsistent with those of the previous report by Aliakbari Dehkordi which reported a sexual function mean (SD) of 29.24.[2]

Results of the research by Nasiri et al., Abdool et al., and Brtnickaet al. showed a significant sexual dysfunction level in breastfeeding women comparing to pre-pregnancy level.[1,12,15] In a survey by Nikpour et al., post- pregnancy sexual dysfunctions including pain during intercourse, dyspareunia, vaginal dryness, low libido or anal sex were more significant comparing to pre-pregnancy periods and led to loss of sexual arousal.[20]

In another study, sexual function mean was reported to be 40.68. The existing contradictions of our study with the results of this study could be due to the uncertainty in estimating coefficient values; because the coefficient proposed in the original inventory was not calculated.[1]

These findings showed that the rate of decline was greatest in libido and arousal (Table 1). This was in accordance with the researches by Nasiri et al. and Shirvani et al. in which libido and then sexual arousal had the lowest scores.[1,13] Other studies revealed low desire and sexual satisfaction in this group of women.[15,19]

Estrogen loss affects breastfeeding women and results in loss of libido, arousal, and orgasm that leads to vaginal dryness. It also relates to risky sexual behaviors lowering sexual function scores. Some of the factors that affect an individual's sexuality include estrogen and androgen reduction, vaginal dryness, painful intercourse, and the lack of time and energy due to child care difficulties, fatigue, stress, and worrying about another pregnancy.[13,21,27,28]

According to some of the researches, breastfeeding mothers experience increase in sexual arousal that is in agreement with our findings.[11] This group of researchers believe that breastfeeding stimulates sexuality and these mothers experience the highest level of libido; this is consistent with our study.[2,5.10,11] According to Basson, pleasurable sexual stimulation will lead to female arousal and then she will be ready for sexual activity.[29]

One of the limitations of the present study is that it deals with only sexual function of breastfeeding women and it was impossible to compare this group with non-lactating women. Performing more researches on comparing these two groups can certainly help to identify influential factors, and also improve training and consulting supports.

Ethical issues

None to be declared.

Conflict of interest

The authors declare no conflict of interest in this study.

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