

Sexuality During Pregnancy and the Year Postpartum

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BACKGROUND. There have been a few studies conducted on couples' sexual behavior during pregnancy and the year postpartum, but those studies contain sampling bias resulting from recruiting volunteers for sex research. The sample for the current research was recruited for a far less sensitive study, and includes data from both mothers and fathers.

METHODS. A total of 570 pregnant women and 550 of their husbands or partners were recruited and were interviewed on four occasions: (1) at the fifth month of pregnancy (T1); (2) at 1 month postpartum (T2); (3) at 4 months postpartum (T3); and (4) at 12 months postpartum (T4).

RESULTS. Although approximately 90% of couples engaged in sexual intercourse at T1, T3, and T4, only approximately 19% did at T2. On average, couples resumed intercourse at 7 weeks postpartum. At T2 and T3, women who were breastfeeding showed significantly less sexual activity and less sexual satisfaction than women who were not. There were few differences between women who gave birth vaginally and those who were delivered by cesarean section, except that the latter resumed intercourse somewhat earlier.

CONCLUSIONS. Practitioners providing family-centered maternity care need to counsel couples about typical patterns of sexuality during pregnancy and postpartum, and about usual patterns during breastfeeding. Accurate information can help couples feel more comfortable during the transition periods before and after childbirth. A discussion of expected changes in sexuality should be routinely introduced by the physician during prenatal care.

KEY WORDS. Sex counseling; postnatal care; libido; psychosexual development; pregnancy trimester, second. (*J Fam Pract* 1998; 47:305-308)

Pregnancy, childbirth, and the postpartum period represent a major life transition that usually has a substantial impact on the sexual adjustment of both mothers and fathers. Yet there are remarkably little empirical data on these issues. We report data on the largest sample of couples that has been studied on this important topic.

Researchers have reported a decrease in sexual desire and coital frequency from the first to the third trimester.^{1,2} A variety of reasons have been suggested for this decrease. Early in pregnancy some women report fears that intercourse will cause miscarriage; during the third trimester, both mothers and fathers report fears that intercourse or orgasm may harm the fetus.³ However, there is currently no strong research evidence of increased risk of infection from sex during pregnancy.⁴ Other reasons for decreased coital frequency include physical discomfort associated with intercourse, particularly in the man-on-top position, and loss of interest in sex.

There is little agreement in the findings of research on the resumption of sexual activity following childbirth.⁵ One study⁶ found that, at 5 to 7 weeks postpartum, only 50% of women had resumed intercourse.

Numerous reasons have been suggested for the delay in resumption of vaginal intercourse after childbirth.⁵ The principal ones are: pain related to an episiotomy; vaginal bleeding or discharge; fatigue; and discomfort related to inadequate lubrication of the vagina due to low levels of estrogen in the postpartum period. Yet, according to one authoritative text, "Following an uncomplicated delivery, a 6-week abstinence from intercourse makes little sense. It can be safely resumed in as little as 3 weeks or when comfort can be maintained."⁷

Studies are also inconsistent regarding the effects of breastfeeding and bottlefeeding on sexuality.^{1,8,9} Masters and Johnson¹⁰ reported that the 24 nursing mothers in their sample reported a higher level of sexual interest in the 3 months following delivery, compared with non-nursing mothers. Because of the dominance of Masters and Johnson in the field, the results have been accepted by many practitioners, despite their discordance with other research.

Most studies of the interrelations of pregnancy, childbirth, and sexuality suffer from methodological problems. The studies are based on small, nonrandom samples of persons who agree to participate in sex research and focus on a limited set of outcome measures, usually sexual intercourse. Our study is based on longitudinal data from mothers and fathers not recruited for a sex survey. Questions on

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TABLE 1

Sexual Behaviors Reported by Mothers and Fathers During Pregnancy and the Year Postpartum

Behavior	During Pregnancy		Postpartum	
	2nd Trimester		1 mo.	4 mos. 12 mos.
Intercourse, %				
Mothers	89	17	89	92
Fathers	84	14	86	91
Intercourse, mean frequency per month				
Mothers	4.97	.42	5.27	5.12
Fathers	4.12	.35	4.43	4.31
Masturbation, %				
Mothers	25	13	20	23
Fathers	43	44	44	44
Fellatio, %				
Mothers	43	34	48	47
Fathers	39	32	42	44
Cunnilingus, %				
Mothers	30	8	44	49
Fathers	29	6	42	46
Satisfaction with sexual relationship*				
Mothers	3.76	3.31	3.36	3.53
Fathers	3.38	3.10	3.32	3.47
Decreased sexual desire†				
Mothers	1.71	1.65	1.19	.83

*Sexual satisfaction was rated on a scale from 1 (very dissatisfied) to 5 (very satisfied).

†Decreased sexual desire was rated on a scale from 0 (never) to 4 (almost always).

sexual behaviors other than intercourse, (eg, masturbation, fellatio, and cunnilingus) were included.

METHODS

The study sample consisted of 570 pregnant women and 550 husbands or partners who were recruited for participation in the Wisconsin Maternity Leave and Health (WMLH) Project.¹¹ Mothers were interviewed in their homes by a female interviewer on each of four occasions: (1) during the second trimester of pregnancy (T1); (2) 1 month after the birth (T2); (3) 4 months after the birth (T3); and (4) 12 months after the birth (T4). Fathers were interviewed by telephone on each of the same four occasions. Additional details of the interview procedures are published elsewhere.¹²

At each interview, a one-page questionnaire was administered to mothers and fathers that included questions about frequency of intercourse and whether the respondent had engaged in fellatio, cunnilingus, or masturbation during the past month. Respondents also rated satisfaction with the sexual relationship on a scale from 1 (very dissatisfied) to 5 (very satisfied). Mothers were given an extensive series of questions about health problems in the past week. Each item was rated on a 4-point scale from "never" to "almost always." One of the items was decreased sexual desire. At T4, mothers were asked how long after the

birth they had resumed sexual intercourse.

Couples also completed the Partner Role Quality Scale,¹³ which measures both positive and negative aspects of the relationship. Two items are of interest here: "When you think about your relationship right now, how rewarding is it because of the physical affection?" and "When you think about your relationship right now, how rewarding is it because of your sexual relationship?" Respondents rated each item on a 4-point scale from "not at all" to "extremely."

RESULTS

SEXUAL BEHAVIORS, PREGNANCY TO 12 MONTHS POSTPARTUM

Descriptive data on sexual behaviors in the last month, as reported at T1, T2, T3, and T4, are shown in Table 1. The percentage of couples who engaged in intercourse in any given month was approximately 90%, except at 1 month postpartum, when the majority had not yet resumed intercourse. Although there was a slight dip in satisfaction with the sexual relationship at 1 month postpartum, both men and women were moderately satisfied with their sexual relationship at all intervals, on average. Women experienced decreased sexual desire fairly

frequently both during the middle trimester of pregnancy and at 1 month postpartum.

Women reported that they resumed intercourse 7.3 weeks postpartum, on average, but there was wide variability: 19% of the couples had resumed intercourse within the first month after birth, and 19% did not resume until 4 months after the birth or later.

BREASTFEEDING AND SEXUAL PATTERNS

At 1 month after birth, a comparison of the 68% of women who were currently breastfeeding with those who were not revealed that nonbreastfeeding women were significantly more likely to have resumed intercourse (28.7% vs 14.9%). Breastfeeding women reported more frequent lack of sexual desire.

For the measures of sexual satisfaction, three rated by mothers and three rated by fathers, there were significant differences between the breastfeeding and nonbreastfeeding groups for four of the six variables (Table 2). For example, there were no significant differences in sexual satisfaction between the two groups of women, but husbands of nonbreastfeeding women were significantly more satisfied than husbands of breastfeeding women.

At T3, 4 months postpartum, breastfeeding women reported more frequent lack of sexual desire than nonbreastfeeding women. For subjective ratings of satisfaction, the results paralleled those for T2: both nonbreast-

TABLE 2

Comparison of Sexuality of Breastfeeding Couples with Nonbreastfeeding Couples

	Women			Men		
	BF	NBF	P	Partner BF	Partner NBF	P
1 Month Postpartum						
Sexual satisfaction, mean (SD)	3.29 (1.08)	3.36 (1.25)	ns	2.95 (1.27)	3.46 (1.22)	.0001
Physical affection, mean (SD)	2.69 (0.89)	2.86 (0.87)	ns	2.57 (0.81)	2.78 (0.76)	.01
Sexual relationship, mean (SD)	2.09 (0.88)	2.38 (0.95)	.001	2.16 (0.83)	2.46 (0.96)	.001
4 Months Postpartum						
Sexual satisfaction, mean (SD)	3.37 (1.19)	3.45 (1.32)	ns	3.14 (1.34)	3.59 (1.29)	.0001
Physical affection, mean (SD)	2.64 (0.84)	2.89 (0.80)	.001	2.64 (0.83)	2.84 (0.75)	.01
Sexual relationship, mean (SD)	2.35 (0.86)	2.63 (0.84)	.001	2.37 (0.79)	2.67 (0.79)	.0001

BF denotes breastfeeding; NBF, nonbreastfeeding.

feeding women and their partners gave more positive ratings. Women who were not breastfeeding at T3 resumed intercourse 6.9 weeks postpartum on average, compared with 7.8 weeks for breastfeeding women.

By T4, only 12% of women were still breastfeeding, making comparisons of the two groups less meaningful.

DELIVERY AND SEXUAL PATTERNS

Women who had a vaginal delivery (83% of sample) were compared with women who had a cesarean delivery. One month after delivery, women with cesareans were significantly more likely to have resumed intercourse (27% vs 18%). For all other variables (behaviors and satisfaction), however, there were no significant differences between the two groups.

DISCUSSION

Our results indicate that sexual patterns were remarkably constant at the fifth month of pregnancy, 4 months postpartum, and 12 months postpartum, but that sexual expression was considerably reduced at 1 month postpartum. On average, couples resumed intercourse at approximately 7 weeks postpartum.

At 1 month postpartum, the sexual relationship was more positive for nonbreastfeeding couples than for breastfeeding couples, although fathers seemed to be more sensitive to the differences than mothers. This contradicts the assertions of Masters and Johnson,¹⁴ who reported that sexual responsiveness returns sooner after childbirth among women who breastfeed than among those who do not, on the basis of a highly selective sample.

Three factors appear to contribute to the decreased

sexual activity and sexual satisfaction among breastfeeding couples. The first is biological. Estrogen production is suppressed during the period of lactation.¹⁵ Because estrogen functions to maintain the lining of the vagina, decreased levels of estrogen result in decreased vaginal lubrication, making intercourse uncomfortable. In addition, prolactin levels are substantially and chronically elevated by breastfeeding.¹⁶ High prolactin levels are associated with decreased sexual interest.^{17,18} Moreover, testosterone levels are significantly lower in breastfeeding women.¹⁹ The evidence indicates that androgens are related to sexual desire in women.^{20,21} Therefore, either elevated levels of prolactin, decreased levels of testosterone, or both factors, contribute to reduced sexual desire among breastfeeding women.

The second factor involves psychological processes. Masters and Johnson reported that breastfeeding stimulates some women to orgasm. Some mothers derive erotic satisfaction, or at least have their needs for intimate touching met, by breastfeeding, and therefore show less interest in sexual expression with their partners. Men, in contrast, do not receive this satisfaction from the baby and continue to seek sexual intimacy with their less interested wives, leading partners of breastfeeding women to report less sexual satisfaction than partners of nonbreastfeeding women.

A third factor is that breastfeeding women are more fatigued because they must do all the feeding.

LIMITATIONS

Two limitations to the current study result from the nature of the sample. It did not include teenaged mothers or women not cohabiting with the baby's father; the results,

therefore, may not generalize to women in these situations. The sample was predominantly white and the number of ethnic minority participants was too small to make comparisons among ethnic groups possible; the patterns found with this sample might not generalize to couples of other races or ethnicities.

CLINICAL UTILITY

In their role as providers of health education and preventive care, family physicians have many opportunities during prenatal care to give accurate information and dispel myths. Many patients may be reticent but would welcome a discussion of sexual matters if it is approached sensitively by the practitioner.^{22,23} Counseling can relieve a couple's anxiety and enhance adjustment to their changing relationship, which may help prevent the development of longer-term conflict. Data from this study should be shared with patients.

Couples should be advised that they may experience a decline in sexual satisfaction following childbirth, but that they may expect a gradual recovery during the following year. They should also be told that cesarean birth does not generally create adverse sexual consequences compared with vaginal birth.

Because breastfeeding offers many advantages for the infant but significantly affects sexual expression, anticipatory guidance regarding expected changes is particularly important. The knowledge that they may resume intercourse a bit later than nonbreastfeeding couples and may experience reduced sexual satisfaction up to 4 months postpartum may help couples continue the nursing process despite sexual problems. Specifically, we believe they will benefit from understanding the hormonal effects of breastfeeding and therefore not conclude that there is a problem in their relationship. Practical advice might include instruction in the use of a water-soluble lubricant and pads if let-down response occurs with arousal or orgasm, and reassurance that orgasm from breastfeeding is a normal response for some women.

Accurate information about sexuality can help dispel myths as a couple go through the important transition of pregnancy and childbirth. Since many patients will be hesitant to broach the subject, discussion of expected changes should be routinely introduced during prenatal care. Most patients will welcome the freedom to discuss this topic if approached sensitively, and the physician will benefit by a better understanding of the couple's relationship as they form a new family.

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