Sexual Function during the Postpartum Period

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Objective: *To study the characteristics of sexual function during the postpartum period.*
Study design: *Cross-sectional descriptive study.*
Material and Method: *From May 2006 to July 2006. Eighty women, who attended the family planning clinic at King Chulalongkorn Memorial Hospital, were enrolled in the present study. All subjects were interviewed by the investigators with a questionnaire about general characteristic and Female Sexual Function Index questionnaire (FSFI) to determine their sexual function.*
Results: *Twenty-eight (35%) women had sexual intercourse within the six weeks postpartum period before they attended the family planning clinic. In this group, 18 women (35%) had vaginal deliveries and 10 women (34.5%) had cesarean deliveries. No statistically significant difference was demonstrated in terms of route of delivery (X^2 = 0.005, p-value = 0.57). Women without episiotomy resumed sexual intercourse more than women with episiotomy (66.7% and 25.6%, X^2 = 6.76, p-value = 0.015). There was no association between route of delivery and sexual function including sexual desire, sexual arousal, sexual lubrication, sexual orgasm, satisfaction, pain, and FSFI score.*
Conclusion: *Resumption of sexual intercourse in the postpartum period was quite high. However, route of delivery was not associated with resumption of sexual intercourse and female sexual function in postpartum period. More women without episiotomy had resumption of sexual intercourse than the others. Sexual demand of the partner is the influencing factor to resumption of sexual intercourse during the post partum period. Counseling about sexuality and contraception after birth should be a regular practice in the hospital.*

Keywords: *Postpartum, Sexual function, Sexual intercourse*

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There are about one million births in Thailand each year[1]. At King Chulalongkorn Memorial Hospital, there are about 10,000 deliveries per year[2]. In 2001-2005, 53% of live births were by spontaneous vaginal delivery, 36% by cesarean delivery, 7.5% by forceps extraction, and 3% by vacuum extraction[2]. Postpartum sexual relations before postpartum visit can cause unplanned pregnancy and genital tract infection[3]. However, a few studies have addressed this issue[3-5]. Moreover, the studies in Thailand were limited due to culture and tradition. Previous studies of sexual function after childbirth report significant increase perineal pain, dyspareunia, and sexual problems associated with assisted vaginal delivery[3,5,6-9]. Some studies show no difference in sexual function between women with cesarean delivery and spontaneous vaginal delivery[4,9]. However, most studies had limitations in the method of measuring female sexual function. The Female Sexual Function Index (FSFI) was developed to evaluate female sexual function[10,11]. The FSFI is a 19-item questionnaire and is used as a brief, multidimensional self-report instrument for assessing the key dimensions of sexual function in women. The questionnaire was designed and validated for assessment of female sexual function and quality of life in most clinical trials or epidemiological studies.

The objective of the present study was to evaluate sexual behavior in the postpartum period.

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Postpartum sexuality such as resumption of sexual intercourse, sexual function score by using FSFI questionnaire and factors associated with sexual intercourse were investigated.

Material and Method

The present study was a cross-sectional descriptive study. Women were recruited from the Family Planning Clinic King Chulalongkorn Memorial Hospital from May 2006 to July 2006. Participants were selected randomly from scheduled postpartum visits. The proposal and questionnaires were reviewed and approved by the ethical committee of the faculty of medicine, Chulalongkorn University. Sample size was calculated after pilot study was done with this formula:

$N = Z^2P (1-P) / D^2$

N= 62

Add 20% for loss follow up = 80samples

Healthy postpartum women between the ages of 18 and 45 years old were eligible to participate. Postpartum period was defined as time during after birth to six weeks postpartum. Exclusion criteria were sexual dysfunction prior pregnancy, medical illness or disease, and patient refusal to participate. Enrolled women completed the questionnaires by themselves regarding demographic data, delivery data, and sexual function in the postpartum period.

Statistical analysis

All data were analyzed by using statistical package, SPSS version 13.0. The general characteristics were demonstrated by mean, standard deviation, and percentage. Chi-square test was used to compare route of delivery to outcomes. Unpaired t-test for comparing FSFI score between vaginal delivery and Cesarean section was also used. Statistical significance was attained with a p-value < 0.05 and 95% confidence interval (CI) that did not include 1.

Results

Eighty women, who attended postpartum check up at the family planning clinic King Chulalongkorn Memorial Hospital, were recruited between May 2006 and July 2006. All were asked to complete the questionnaires by themselves after an explanation by the investigators. The demographic characteristics of the women are shown in Table 1. The mean age was 27.87 $\pm$ 5.64 years. Most women (43.8%) finished secondary school, 45% of women were housewives and their income was 10,000-20,000 baht per month (36.3%). Fifty-one cases (63.8%) were delivered by vaginal delivery, 41 (51.3%) terminated by spontaneous delivery, seven (8.8%) with forceps extraction, three (3.8%) with vacuum extraction, and 29 (36.3%) were delivered by cesarean delivery. The women, who had vaginal delivery, got an episiotomy in 39 cases (76.5%). Twenty-eight cases (35%) of mothers had sexual intercourse during the postpartum period.

Table 1. Demographic characteristics of postpartum mothers

Variables	Postpartum women (n = 80)
Age (years)	27.87 $\pm$ 5.64
Education	
Primary school	19 (23.8%)
Secondary school	35 (43.8%)
Diploma	10 (12.5%)
Bachelor's degree	16 (20%)
Occupation	
Government	1 (1.3%)
Employee	2 (2.5%)
Housewife	36 (45%)
Other	41 (51.3%)
Income (Baht/month)	
< 10,000	17 (21.3%)
10,000-20,000	29 (36.3%)
20,000-30,000	18 (22.5%)
> 30,000	16 (20%)
Route of delivery	
Vaginal delivery	51 (63.8%)
Spontaneous delivery	41 (51.3%)
Forceps extraction	7 (8.8%)
Vacuum extraction	3 (3.8%)
Cesarean delivery	29 (36.3%)
Resumption of sexual intercourse	
No	52 (65%)
Yes	28 (35%)
Episiotomy in vaginal delivery (n = 51)	
No	12 (23.5%)
Yes	39 (76.5%)

Table 2 summarizes the association between route of delivery and resumption of sexual intercourse. No statistically significant difference between route of delivery and resumption sexual intercourse was founded (X^2 = 0.005 p-value = 0.57, 95%CI = -0.2, 0.2), but there was a statistically significant difference between episiotomy and resumption of sexual intercourse (X^2 = 6.76 p-value = 0.015, 95% CI = 0.1, 0.7) as shown in Table 3. Women who did not have an episiotomy at vaginal delivery had resumed their sexual intercourse more than women who did have an episiotomy.

Table 2. Association between route of delivery and resumption of sexual intercourse

	Resumption sexual intercourse		Total
	No	Yes	
Vaginal delivery	33	18	51
Cesarean delivery	19	10	29
Total	52	28	80

$X^2 = 0.005$, p-value = 0.57, 95% confidence interval = -0.2, 0.2

Table 3. Association between Episiotomy and resumption of sexual intercourse

	Resumption sexual intercourse		Total
	No	Yes	
Episiotomy			
No	4	8	12
Yes	29	10	39
Total	33	18	51

$X^2 = 6.76$, p value = 0.015, 95% confidence interval = 0.1, 0.7

The present study showed that 28 women (35%) had sexual intercourse during the postpartum period (18 women of whom had a vaginal delivery and 10 women of whom had a cesarean delivery). There was no statistically significant difference of female sexual responses including sexual desire, sexual arousal, sexual lubrication, sexual orgasm, satisfaction, pain, total FSFI score between vaginal birth and cesarean section. The details are demonstrated in Table 4.

Discussion

In human beings, various factors including physical, biological, psychological, and social factors as well as pregnancy may influence sexual desire and libido[10]. However, in the postpartum period, mothers are recommended to avoid sexual intercourse. Nevertheless, some women do not follow this advice. In the present study, 35% of postpartum women had resumption of sexual intercourse. The results of previous studies are similar to the present study[12]. The high frequency of sexual intercourse may be associated with the changes of attitude, beliefs, failure to follow medical advice, and sexual demand of the partner. Thus healthcare providers should be aware and stress the importance in their counseling and medical advice from the antepartum to postpartum period.

The data on route of delivery and postpartum sexuality were inconsistent. AM Connolly et al reported no statistically significant difference between route of delivery and resumption of sexual intercourse[12]. Lydon-Rochelle et al and Tala L et al also reported no significant difference of sexual intercourse between spontaneous vaginal delivery and cesarean delivery[4,9]. In the present study, no statistically significant difference was found between vaginal delivery and cesarean section in resumption of sexual intercourse ($X^2 = 0.005$, p-value = 0.57, 95% CI = -0.2, 0.2). However, the present study demonstrated the effect of episiotomy on postpartum sexuality. It was shown that mothers without episiotomy had more sexual intercourse than mothers with episiotomy ($X^2 = 6.76$, p-value = 0.015, 95% CI = 0.1, 0.7).

There are many studies about the association between sexual function in the postpartum period and route of delivery[3,5,6-9]. All studies reported a difference in sexual function including dyspareunia, sexual problem, and perineal pain when they compared spontaneous vaginal delivery, Cesarean delivery and assisted vaginal delivery. However, the method of measurement

Table 4. Comparison of FSFI score between vaginal delivery and cesarean section

Sexual function	Vaginal delivery (n = 18)	Cesarean section (n = 10)	p-value	95% CI
Desire	3.50 $\pm$ 1.07	3.18 $\pm$ 0.98	0.70	-0.50, 1.17
Arousal	4.08 $\pm$ 1.07	4.23 $\pm$ 1.14	0.83	-1.04, 0.75
Lubrication	3.28 $\pm$ 0.52	3.18 $\pm$ 0.41	0.98	-0.29, 0.49
Orgasm	3.84 $\pm$ 0.46	3.72 $\pm$ 0.12	0.44	-0.25, 0.49
Satisfaction	4.91 $\pm$ 0.90	4.56 $\pm$ 0.35	0.16	-0.47, 1.17
Pain	4.73 $\pm$ 1.02	4.12 $\pm$ 1.45	0.22	-0.35, 1.57
FSFI*	24.36 $\pm$ 3.70	22.99 $\pm$ 4.70	0.36	-1.96, 4.69

* FSFI = female sexual function index

did not completely evaluate all dimensions of sexual function. The present study was designed using FSFI score for the assessment of multidimensional female sexual function[10,11]. This method of sexual function evaluation is more accurate and practical in sexual health research. The result of the present study shows that vaginal delivery and Cesarean section are not different in terms of sexual desire, sexual arousal, sexual lubrication, sexual orgasm, satisfaction, pain, and FSFI score. However, the present study included assisted vaginal delivery in the vaginal delivery group due to small numbers of assisted vaginal birth. The present study does not elaborate on the effects of assisted vaginal delivery on sexual function. Further studies should recruit more cases of assisted vaginal delivery in order to evaluate its effect on sexual function.

In conclusion, the resumption of sexual intercourse in postpartum period was quite high. However, route of delivery was not associated with resumption of sexual intercourse and female sexual function score. The women without episiotomy resumed sexual intercourse sooner than the women with episiotomy. Sexual demand of the partner is the influential factor to resumption of sexual intercourse during the post partum period. It is recommended that counseling about sexuality and contraception after birth should be regular practice in the hospital before discharging mothers. This crucial practice should help to reduce the problems of mothers in the postpartum period such as unplanned pregnancy, and genital tract infection.

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References

1. Prasartkul P. Population projection for development planning of the Thai children. Family Planning and Population 1998; 2:1-2.
2. Limpongsanurak S, Chaitongwongwatana S, Sirisup N, Tathsongchan R. Statistical report 2001-2002. Department of Obstetrics and Gynecology, Faculty of Medicine, King Chulalongkorn Memorial Hospital, Chulalongkorn University, The Thai Red Cross Society, Bangkok, Thailand.
3. Signorello LB, Harlow BL, Chekos AK, Repke JT. Postpartum sexual functioning and its relationship to perineal trauma: a retrospective cohort study of primiparous women. Am J Obstet Gynecol 2001; 184: 881-8.
4. Lydon-Rochelle MT, Holt VL, Martin DP. Delivery method and self-reported postpartum general health status among primiparous women. Paediatr Perinat Epidemiol 2001; 15: 232-40.
5. Barrett G, Pendry E, Peacock J, Victor C, Thakar R, Manyonda I. Women's sexual health after childbirth. BJOG 2000; 107: 186-95.
6. Thompson JF, Roberts CL, Currie M, Ellwood DA. Prevalence and persistence of health problems after childbirth: associations with parity and method of birth. Birth 2002; 29: 83-94.
7. Brown S, Lumley J. Maternal health after childbirth: results of an Australian population based survey. Br J Obstet Gynaecol 1998; 105: 156-61.
8. Glazener CM. Sexual function after childbirth: women's experiences, persistent morbidity and lack of professional recognition. Br J Obstet Gynaecol 1997; 104: 330-5.
9. Hicks TL, Goodall SF, Quattrone EM, Lydon-Rochelle MT. Postpartum sexual functioning and method of delivery: summary of the evidence. J Midwifery Womens Health 2004; 49: 430-6.
10. Oranratanaphan S, Taneepanichskul S. A double blind randomized control trial, comparing effect of drospirenone and gestodene to sexual desire and libido. J Med Assoc Thai 2006; 89(Suppl 4): S17-22.
11. Rosen R, Brown C, Heiman J, Leiblum S, Meston C, Shabsigh R, et al. The Female Sexual Function Index (FSFI): a multidimensional self-report instrument for the assessment of female sexual function. J Sex Marital Ther 2000; 26: 191-208.
12. Connolly A, Thorp J, Pahel L. Effects of pregnancy and childbirth on postpartum sexual function: a longitudinal prospective study. Int Urogynecol J Pelvic Floor Dysfunct 2005; 16: 263-7.

พฤติกรรมทางเพศของหญิง "ในระยะหลังคลอด"

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***วัตถุประสงค์**: เพื่อศึกษาพฤติกรรมทางเพศของหญิงในระยะหลังคลอด*
***รูปแบบการวิจัย**: การศึกษาเชิงพรรณนาแบบตัดขวาง*
***วัสดุและวิธีการ**: ได้ทำการศึกษาหญิงในระยะหลังคลอด 80 ราย ที่มารับบริการ ณ คลินิกวางแผนครอบครัว โรงพยาบาลจุฬาลงกรณ์ ระหว่างเดือนพฤษภาคม พ.ศ. 2549 ถึง กรกฎาคม พ.ศ. 2549 โดยได้เก็บรวบรวมข้อมูลพื้นฐาน และข้อมูลทางพฤติกรรมทางเพศ เพื่อนำมาวิเคราะห์ผล*
***ผลการศึกษา**: หญิง 28 ราย มีเพศสัมพันธ์ในระยะหกสัปดาห์หลังคลอด โดย 18 ราย ได้รับการคลอดทางช่องคลอด และ 10 ราย ได้รับการผ่าตัดคลอดทางหน้าท้อง ไม่พบความสัมพันธ์ระหว่างวิธีการคลอด และ การมีเพศสัมพันธ์ (ร้อยละ 35.3 และร้อยละ 34.5 ตามลำดับ, p-value = 0.57). ผู้ที่ไม่ได้รับการตัดฝีเย็บจะมีเพศสัมพันธ์ในระยะหกสัปดาห์หลังคลอดมากกว่าผู้ที่ได้รับการตัดฝีเย็บ (ร้อยละ 66.7 และร้อยละ 25 ตามลำดับ, p-value = 0.015) ไม่พบความสัมพันธ์ระหว่างวิธีการคลอดและพฤติกรรมการตอบสนองทางเพศ*
***สรุป**: พบเพศสัมพันธ์ในระยะหกสัปดาห์หลังคลอดจำนวนมากโดยวิธีการคลอดไม่มีความสัมพันธ์กับการมีเพศสัมพันธ์และพฤติกรรมการตอบสนองทางเพศในระยะหลังคลอด แต่ผู้ที่ไม่ได้รับการตัดฝีเย็บจะมีเพศสัมพันธ์ในระยะหกสัปดาห์หลังคลอดมากกว่าผู้ที่ได้รับการตัดฝีเย็บ ความต้องการทางเพศของสามีเป็นอีกปัจจัยที่มีผลต่อการมีเพศสัมพันธ์ในระยะหกสัปดาห์หลังคลอด ดังนั้นการให้คำแนะนำในเรื่องเพศศึกษา และการคุมกำเนิดหลังคลอดเป็นสิ่งสำคัญที่ควรปฏิบัติให้เป็นประจำก่อนที่จะจำหน่ายผู้คลอดออกจากโรงพยาบาล*