

Sexuality and Sexual Activity in Pregnancy

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Objectives : To evaluate women's sexual activities and to describe their attitudes and information sources regarding sexual activity during pregnancy.

Method : Pregnant women were interviewed with a structured questionnaire for three time periods. Main outcome measures were frequency of coitus, desire, arousal, orgasm and sexual satisfaction. Comparisons were made between the trimesters of pregnancy.

Results : All main outcome measures significantly decreased throughout pregnancy ($p < 0.001$). Sexual position changed significantly with decrease in the use of the "man on top" position. Concerns regarding sexual activity leading to abortion decreased as the pregnancy progressed. Only 22% of pregnant women received information about sexual activity in pregnancy from their doctors.

Conclusion : Sexuality and sexual activity were reduced significantly throughout pregnancy. Giving information on this issue from doctors to pregnant women was still low. Educational and counseling program on sexual activity during pregnancy should be disseminated both to women and doctors.

Keywords: Sexuality, Sexual activity, Pregnancy

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Pregnancy is a time of obviously physical and psychological change affecting sexuality and sexual activity⁽¹⁾. Physical changes such as morning sickness, bulkiness, awkwardness or changing in body image may inhibit sexual desire. Many studies referred to the study of Masters and Johnson about sexuality during pregnancy period. They found the increase in sexual desire and enjoyment during second trimester resulting from the congestion of pelvic vasculature^(2,3). Reamy⁽⁴⁾ studied 52 pregnant women through questionnaires during each trimester and discovered a decrease in sexual enjoyment, coital frequency and orgasm as pregnancy progressed. The sexual desire increased in second trimester and progressively decreased in third trimester, which paralleled to Masters and Johnson's study. Many studies evaluating sexual activity during pregnancy were performed more than two decades ago and most of them were from Western countries. Due to the

cultural and religious strictness, made Asian pregnant women feel uncomfortable in bringing up or discuss this topic with their doctors. Bartellas⁽¹⁾ evaluated 141 pregnant women through hospital interviews. That research found that their pregnancies were characterized by a progressive decline in sexual activity and most of women worried that sexual intercourse may harm the pregnancy and felt that they should discuss about sexual activity in pregnancy with their doctors. The aims of this study were to evaluate women's sexual experiences in pregnancy throughout all three trimesters, and to describe their attitudes and sources of information regarding sexual activity in pregnancy.

Material and Method

This cohort study was carried out between June 2003 and May 2004 with women recruited from the antenatal clinic of Songklanagarind Hospital. Inclusion criteria were pregnant women within their first trimester of gestation (before 14 weeks gestational age) and living with their husbands. Exclusion criteria included any woman who was advised by her attending

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physicians not to have sexual intercourse for medical reasons (e.g. history of preterm labor, twins pregnancy, antepartum bleeding or other medical diseases). Once the participants signed the informed consent, they were interviewed with a structured questionnaire for three time periods: mid-first trimester, mid-second trimester and mid-third trimester. These questionnaires were included the questions about sociodemographic data, gravidity, parity and sexual behaviors during pregnancy compared with pre-pregnancy and also included the questions about concerns and information sources regarding sexual activity during pregnancy.

Main outcome measures were frequency of vaginal intercourse, sexual desire, arousal, orgasm and sexual satisfaction using visual analog scale or the percentage. Categorical data were expressed by percentage and comparison was made by the chi-square test. Continuous variables were expressed as mean and standard deviation if normally distributed and compared by analysis of variance. Non-normal distributed continuous data were expressed as median and comparison was made by Kruskal-Wallis test.

Results

Of 300 women who participated in this study, one hundred and thirty-eight women lost follow up, twelve women aborted and one woman had antepartum bleeding due to placenta previa. Only 149 women completed this study. The demographic data were shown in Table 1. The reduced sample did not statistically differ from the overall group on demographic data. The results are based on the responses from 149 women who completed the questionnaires from June 2003-May 2004. Results were obtained through the investigation of the frequency of vaginal intercourse, sexual desire, arousal, orgasm and sexual satisfaction. The overall following indices were summarized as significantly decrease throughout pregnancy ($p = 0.0001$ all by Kruskal-Wallis test), as shown in Fig. 1, 2 and 3.

Frequency of vaginal intercourse (Fig. 1)

The frequency of vaginal intercourse decreased as the pregnancy progressed, with the marked decreases from pre-pregnancy to first trimester ($p < 0.001$). The sexual intercourse in the second trimester was as frequent as in the first trimester. Less coital took place for this sample of pregnant women as their pregnancies advanced, with the most decreases or abstinence coitus during the late third trimester ($p < 0.001$).

Sexual desire, arousal and sexual satisfaction (Fig. 2)

All three indices dramatically decreased throughout pregnancy ($p < 0.001$). Among the pregnant women who reported abstinence or decrease in sexual activities, they usually had less sexual enjoyment. The declination of orgasmic pattern was as same as the pattern of other sexual activities ($p < 0.001$).

Sexual positions (Fig. 3)

In this study, the sexual positions were classified in three groups. First group, the male superior or "man on top" position, that's mean man's weight pressing downward to the woman when they have sexual intercourse. Second group is the female superior or "woman on top" position. The last group, the non weight bearing position, or the position that neither man nor woman took the weight pressing on together such as side-by-side, rear entry and kneeling on all-fours position. The positions for vaginal intercourse changed throughout three trimesters of pregnancy significantly. The "man on top" position was the most frequently used before pregnancy, but after pregnancy this position decreased. The couples slightly increased in use of the "woman on top" and markedly increased in use of the non weight bearing positions. The side-by-side and rear entry coital positions were selected as the most frequently used positions by an increasing number of subjects as pregnancy progressed.

Table 1. Demographic data of the 149 pregnant women

Characteristic of women		Value
Age (yr)	- Mean	29.2
	- Range	14-41
Obstetric data (%)	- Nulliparas	53
	- Multiparas	47
	- History of abortion	25.5
Religion (%)	- Buddhist	88.6
	- Islamism	11.4
Education (%)	- ≤ high school	65.8
	- university level	32.9
	- > university level	1.3
Occupation (%)	- Full-timed employees	28.9
	- Government officers	22.8
	- Housewife	16.8
	- Merchants	14
	- Agriculturists	13
Family's income (%)	- ≤ 5,000 baht	9.4
	- 5,001-10,000 baht	40.9
	- 10,001-20,000 baht	35.6
	- > 20,001 baht	14.1

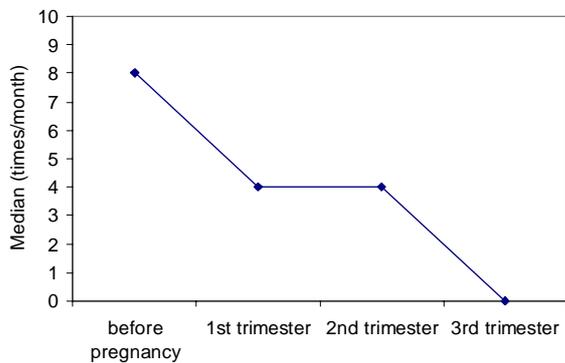


Fig. 1 Frequency of vaginal intercourse before and during pregnancy

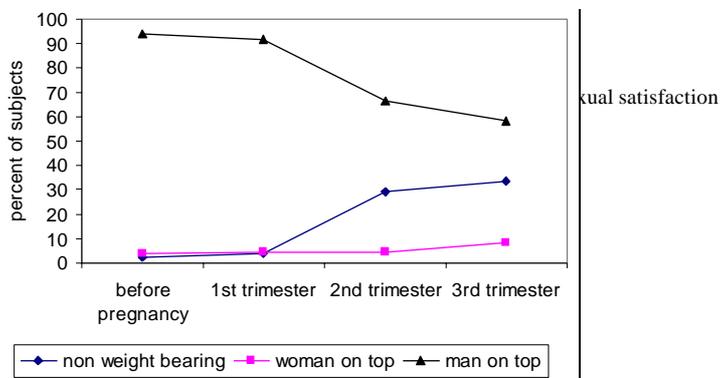


Fig. 3 Percentages of subjects reporting positions most frequent used for vaginal intercourse before and during pregnancy

Attitudes and knowledge resources

The concerns regarding sexual activity leading to abortion and harm to fetus were the most frequent in first trimester and decreased in each

progressive trimester. The concern regarding premature ruptured of membranes was the most frequent in second trimester, whereas concern about preterm labor was frequent in third trimester. Women received information from reading books about 45%, from their friends 25% and only 22% received from their physicians.

Discussion

During the pregnancy period, the women usually adapted for many things that changed such as physiologic change, body image or life style. That may affect the sexuality and sexual activities. According to the statistical results in this study, the pre-pregnancy period was accompanied by marked changes in sexual activities in pregnant women. There were significant decreases in frequency of vaginal intercourse, sexual desire, arousal, orgasm and sexual satisfaction during pregnancy as compared with pre-pregnancy period. A decrease in sexual desire from pre-pregnancy throughout three trimesters of pregnancy was similar with the results reported by Bartellas⁽¹⁾, Solberg⁽²⁾, Ryding⁽³⁾ and Robson⁽⁵⁾. But this pattern was different from the findings of Reamy⁽⁴⁾ that noted the increase in sexual desire from the first to second trimester. The decrease in sexual desire during the first trimester was likely attributed to physiologic change, such as nausea, vomiting as well as fears of abortion or harm to the fetus^(1, 2, 5, 6). The effects of pelvic vasculature congestion and improvement of hyperemesis gravidarum in second trimester may be the leading factors that made the pregnant women still have sexual coitus. But the concern about pregnancy complications may interfere with the sexuality. Frequency of vaginal intercourse decreased as the pregnancy progressed, with markedly decreased from pre-pregnancy period to first trimester and dramatically decreased or abstinence as term approached. This finding is similar to those of Ryding⁽³⁾, Reamy⁽⁴⁾ and Robson⁽⁵⁾. Many pregnant women stopped coitus activities during her pregnancy, so the other indices have been affected with this phenomenon. In the literature-reviewed, there was no study about arousal during pregnancy. This study shows the reduction in arousal sensibility throughout all trimesters. The linear decrease in orgasm and sexual satisfaction were noted in this study, corresponding to the findings of Solberg⁽²⁾ and Reamy⁽⁴⁾. Bartellas¹ noted the decrease in orgasmic frequency during pregnancy, but didn't evaluate changes in trimesters. Many studies noted no

association between coitus, orgasm and preterm labor⁽⁷⁻⁹⁾. In this study, we did not observe the complication of pregnancy, such as bleeding, preterm labor or premature ruptured of membranes.

Positions used for sexual intercourse significantly changed throughout pregnancy. The male superior position was the primary position used before pregnancy but after the pregnancy progressed, the female on top and non weight bearing positions were chosen by the couples, especially the side-by-side position. There is good agreement between changing sexual position in the present study and others^(2,4). The changes in position for sexual intercourse can be suggested in pregnant women and their partners. The main reason of changing the sexual position was depend on the body change of the pregnancy. The larger the abdomen was, the more difficult to intercourse in male superior position.

The large number of participated women concern that sexual activity may harm the fetus. This is important for doctors and health care workers to correct the misunderstandings and reassure about sexual intercourse during pregnancy in non-contraindicated couples^(8,9).

Finally, the information sources regarding sexual activity in pregnancy derived from health professionals just a few. Less than one-fourth of the women received this information from their physicians, whereas almost half of women obtained it from the books. The findings are similar to the result of Bartellas⁽¹⁾. The cultural and strictly religious may make Thai women feel uncomfortable to raise this topic with their doctors. So, it should be the doctors' role to bring up the topic first.

This study is the prospective research, all results obtained from the same women over time. But still have some limitations, firstly, the initial data been, of necessity, retrospective. This may cause recall bias and affect the analyzed results. Secondly, one-fourth (25%) of the participants had history of previous abortions, this also may influence the results. However, the results of this study will be the basic knowledge

based on Thai pregnant women, especially in the Southern region. The sexuality and sexual activities of the other parts should be evaluated.

Conclusion

Sexuality and sexual activities were reduced significantly throughout pregnancy. Giving information on this issue from the physicians to pregnant women was still low. Educational and counseling program on sexual activity during pregnancy should be disseminated both to women and doctors.

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ความรู้สึทางเพศและการมีเพศสัมพันธ์ในสตรีตั้งครรภ์

วาสนี ยูวภูษิตานนท์, ธนพันธ์ ชูบุญ.

วัตถุประสงค์ : เพื่อศึกษาประสบการณ์ทางเพศของสตรีตั้งครรภ์ในช่วงการตั้งครรภ์ทั้งสามไตรมาส และเพื่อทราบถึงทัศนคติและแหล่งข้อมูลเรื่องเพศของสตรีตั้งครรภ์

การดำเนินการวิจัย : ติดตามสัมภาษณ์สตรีตั้งครรภ์ในเรื่องประสบการณ์ทางเพศตลอดการตั้งครรภ์ โดยข้อมูลที่ได้จะนำมาวิเคราะห์หาความสัมพันธ์เปรียบเทียบกับระหว่างแต่ละช่วงไตรมาสของการตั้งครรภ์

ผลการวิจัย : ความถี่ในการมีเพศสัมพันธ์ ความต้องการทางเพศ ความเสียว การถึงจุดสุดยอด และความพึงพอใจในการมีเพศสัมพันธ์ ลดลงอย่างมีนัยสำคัญตลอดการตั้งครรภ์ มีการรวมเพศโดยใช้ท่าที่ผู้ชายอยู่ด้านบนน้อยลง สตรีตั้งครรภ์ส่วนใหญ่มีความกังวลว่า การมีเพศสัมพันธ์จะนำไปสู่การแท้งบุตรและคลอดก่อนกำหนด มีสตรีตั้งครรภ์เพียงร้อยละ 22 เท่านั้นที่ได้รับข้อมูลเรื่องเพศระหว่างตั้งครรภ์จากแพทย์

สรุปผลการวิจัย : ประสบการณ์ทางเพศของสตรีตั้งครรภ์ลดลงอย่างมีนัยสำคัญตลอดการตั้งครรภ์ แพทย์ยังมีการให้คำแนะนำเรื่องการมีเพศสัมพันธ์ระหว่างตั้งครรภ์แก่สตรีตั้งครรภ์น้อยเกินไป ควรจะมีการจัดตั้งหลักสูตรอบรมหรือให้คำแนะนำเรื่องเพศและการมีเพศสัมพันธ์ระหว่างตั้งครรภ์ทั้งในแพทย์และสตรีตั้งครรภ์ทั่วไป
