

Sexual activity of women in different trimesters of pregnancy

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**European Journal
of Medical Technologies**
2015; 2(7): 1-9

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www.medical-technologies.eu
Published online 13.11.2015

Abstract

Introduction. Sexual activity in pregnant women is often taboo. It is important to maintain intimate contacts, deepening ties with a partner. Pregnancy is a time of numerous changes in the female body, and the specific changes occur in the various trimesters of pregnancy with the development of the child. Plays an important role as a partner approach to pregnancy and its interest in the personal problems of a pregnant woman, because the mutual understanding between partners means that pregnancy is an incentive for them to seek new ways of sexual satisfaction.

Aim: Characterization of form and frequency of sexual activity of women in different trimesters of pregnancy.

Material and methods. The study was conducted in the years 2010 - 2011 and it included 200 women residing in the obstetric ward - newborn in the Provincial Specialist Hospital of University in Lublin. Diagnostic survey method was used, the survey technique, the instrument was a questionnaire survey of his own design. The collected data were statistically analyzed. Before testing, the project received a positive opinion of the Bioethics Committee at the Medical University of Lublin.

Results. The most common form of sexual activity in pregnant women were kissing, vaginal, petting and foreplay. Most women in different trimesters of pregnancy was sexually active once a week, while experiencing the feelings of pleasure. In most cases, pregnant women were not at risk, and sexual activity during pregnancy has decreased over time compared to pre-pregnancy.

Conclusion. Sexual activity of women in different trimesters of pregnancy remains an embarrassing subject for women. Despite the absence of contraindications to sexual activity during pregnancy, women abandoned their many forms of sexual activity. Women were most active sexually in the first trimester of pregnancy, and are reluctant to enjoy the sexual satisfaction in the third trimester.

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Key words:

pregnancy, health, trimester

Introduction

Sexuality in pregnancy is a field of knowledge methodologically difficult to study because of its specificity and common conviction that life is a shameful sphere and a kind of taboo.

Meeting sexual needs of pregnant women is neglected and undervalued by many gynecologists. The doctors and patients still have some unbroken qualms about discussing this issue. Only some doctors take this problem seriously. This question is underestimated by those who perceive having sex during pregnancy only as a sexual intercourse. However, since the time when sexual intercourse is treated as just one of many forms of sexual approximation, views on sexuality during pregnancy has underwent a considerable transformation [1,2].

According to Lamont, dealing with the analysis of sexuality of pregnant women must not only focus on the issue of sexual relations. To his opinion this approach is not sufficient either in terms of psychophysiology, either in terms of women's sexual interest. This view is also shared Sydow, who believes that the ability to make sexual intercourse is not the best measure of women's sexuality, because very often they decide to have intercourse in pregnancy only for the sake of their partners [2].

It has been pointed out that an important role is played by a partner's approach to pregnancy and his interest in the personal problems of a pregnant woman, because the mutual understanding between partners means that pregnancy is an incentive for them to seek new ways of sexual satisfaction. The position of the body of the pregnant woman during the intercourse is very so that the partner does not press the woman's belly or her breasts.

Masters and Johnson in 1966 found that in the first trimester of pregnancy immediately after the sexual climax the painful cramps in the abdomen and pain in the cross occasionally occur in pregnant women. They have observed an increased excitability of the uterus while the effective sexual stimulation. Masters and Johnson found out that sexual interests in women in the first trimester of pregnancy is significantly lower, and thereby the amount and frequency of their sexual intercourses

is reduced. This fact is affected above all by problems inherent in the first trimester, such as drowsiness, breast pain, nausea, vomiting, mood disorder and the fear of damage to the embryo or the occurrence of miscarriage as a result of sexual contact. This typically occurs in nulliparous women, while in multiparous women usually are not observed any changes in sexual activity compared with the period before pregnancy [3,4,5,6].

In the second trimester of pregnancy in the vast majority of women there is a significant increase in the number of sexual contacts, experiences of sexual fantasies and dreams about sexual matters are enriched, regardless of the number of previous births. This is related to physiological and hormonal changes occurring during this period, such as genital congestion and more intensive and faster wetting of the walls of the vagina. During this period is also noted the increase of achieving a sexual satisfaction [4,5,6]

In the third trimester of pregnancy a woman should not lie on her back (the inferior vena cava syndrome), in this case there are recommended positions to the side or with the woman at the top. A 6 weeks before the expected date of childbirth a sexual abstinence should be retained because of increased risk of infection. Quite often in this period a woman experiences breast tenderness and pain during intercourse [7,8,9].

Intercourse just before the due date may lead to the start of the birth - prostaglandins contained in the semen of male during this period may accelerate maturation of the cervix. It is also believed that sex in the last weeks of pregnancy may cause the birth if a woman has an orgasm, because during orgasm the oxytocin is released, which stimulates uterine contractions. Dangerous infections can also more often occur [7, 8, 9, 10].

The aim of the study and assumptions

The aim of this study is to characterize the forms and frequency of sexual activity of women in different trimesters of pregnancy.

Specific issues:

1. What is the sexual activity of respondents in different trimesters of pregnancy?
2. What forms of sexual behavior during pregnancy do the tested women pursue?
3. What kinds of feelings were the women accompanied by during sexual intercourse in certain trimesters of pregnancy?
4. How has the sexual activity during pregnancy changed in comparison to time up to 3 months before the pregnancy?

In connection with the above mentioned problems, the following hypothesis have been formulated:

1. Sexual activity varies in different trimesters of pregnancy.
2. During pregnancy, various forms of sexual activity were implemented.
3. The most common type of sensation during sexual intercourse in all trimesters of pregnancy was satisfaction.
4. Sexual activity during pregnancy has decreased in comparison to time up to 3 months before the pregnancy.

Material and methods

Surveyed included 200 women residing in the obstetric and newborn ward in the Provincial Specialist Hospital under the name of Cardinal Stefan Wyszyński in Lublin. They were conducted during the period from 26th October 2010 to 16th February 2011.

In this work the method of diagnostic survey was applied. For the chosen method the survey technique was implemented. In the study an author's questionnaire instrument was used. The questionnaire survey contained 61 questions. The questions were closed.

Before the study began, each woman was informed about their purpose, which was defined as understanding the relationship between sexual activity during pregnancy and the newborn state. Participation in the study was completely anonymous and voluntary and the selection of people was random. Before testing, the project received a positive opinion of the Bioethics Committee at the Medical University of Lublin.

The obtained results were statistically analyzed. For the measurable characteristics the normal distribution of the analyzed parameters was assessed using the W. Shapiro-Wilk test. To compare two independent groups the U Mann-Whitney test was used. For more than two groups the Kruskal-Wallis test was used. For unrelated quality characteristics to detect the existence of differences between compared groups the Ch2 homogeneity test was used. To investigate the existence of the relationship between the investigated features the Ch2 independence test was used.

The level of significance $p < 0.05$ indicating the existence of statistically significant differences or relationships was implemented. Database and statistical tests were carried out based on the software STATISTICA 9.0 (StatSoft, Poland).

Results

In most the surveyed women did not have restrictions on intercourse during pregnancy ($n = 170$; 85.00%), while 13.50% ($n = 27$) of respondents had recommendations issued by the doctor and 1.50% ($n = 3$) by the midwife (Fig. 1).

The conducted study shows that on a scale of 1 to 5 (1-lowest rating, 5-highest) it was pointed out that during pregnancy the most common were kissing, caressing and foreplay, vaginal intercourse, and less common mutual masturbation, oral sex, and very rarely masturbation and anal intercourse (Fig. 2).

The conducted study showed that 3 months before pregnancy the respondents usually had intercourse 3-4 times a week (50.00%), while in the first trimester of pregnancy once a week (35.50%), similarly in the second trimester (29.00%) and in third trimester (26.50%). In the third trimester 20.50% of respondents said they never had intercourse (Table 1, Fig. 3). For further statistical analysis of the frequency of intercourse in the first, second and third trimester of pregnancy was rated, (every day – 5; 3-4 times a week – 4; once a week – 3; 2-3 times a month – 2; once a month – 1 and never – 0). As a result of statistical analysis it was found out that the frequency of intercourse was highest in the first trimester of pregnancy, and the lowest in the third trimester. Statistical analysis showed significant

Fig. 1.

Recommendation to limit intercourse during pregnancy

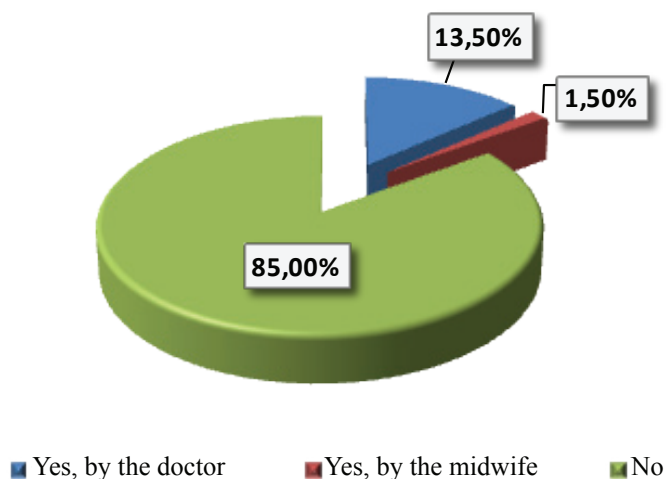


Fig. 2.

Intensity of occurrence of forms of sexual activity in pregnancy

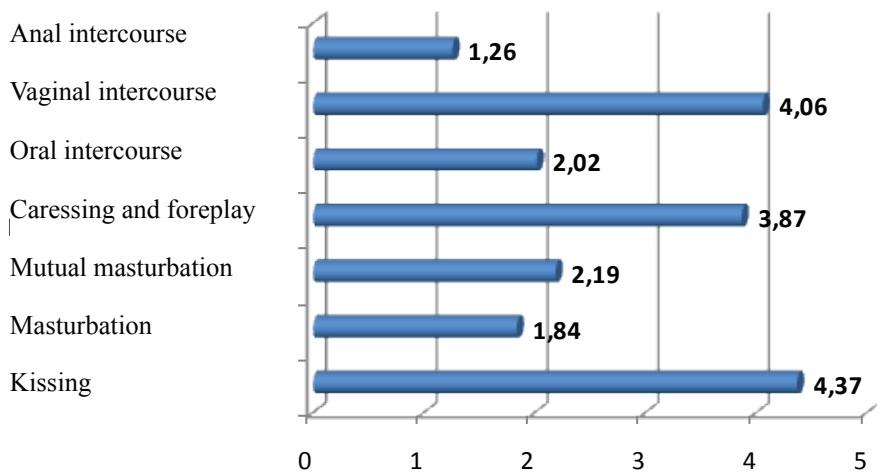
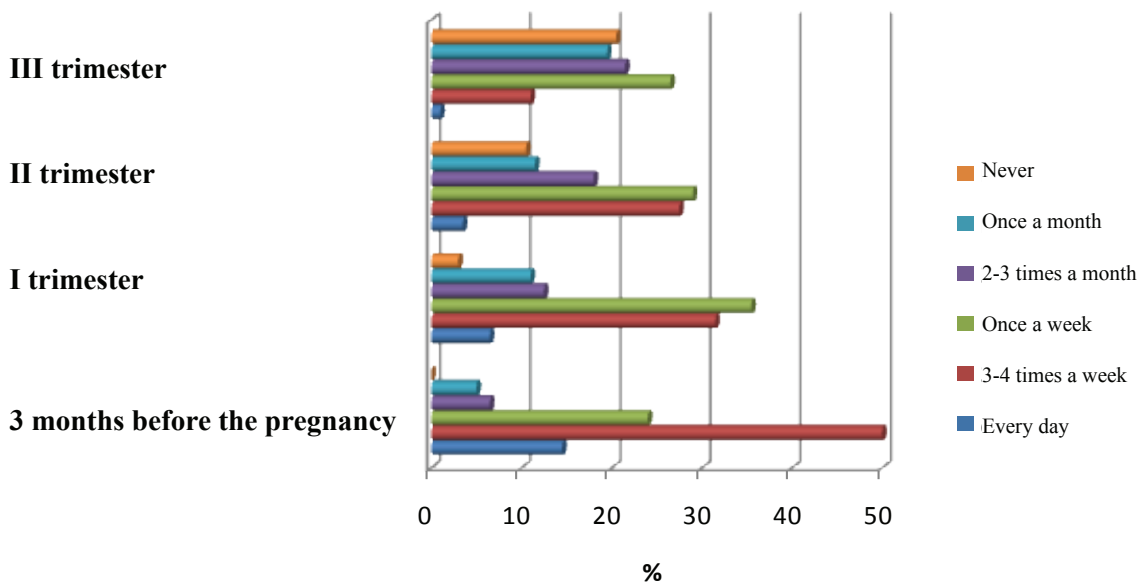


Fig. 3.

The evaluation of the frequency of intercourse in various stages of pregnancy and before pregnancy



differences in frequency of intercourse in various stages of pregnancy ($p < 0.000001$) (table 2, fig. 4). Research results show that most respondents in I, II and III trimester of pregnancy during sexual intercourse felt pleasure, and less aversion, fear, indifference, or other sensations. Figure 5 shows the obtained results.

Taking into account only the feeling of pleasure in the various trimesters of pregnancy was found out that 45.50% ($n = 91$) of respondents felt pleasure in

the three stages of pregnancy, while 22.50% ($n = 45$) of surveyed in two trimesters, 18.00% ($n = 36$) in one and 14.00% ($n = 28$) of the women felt no pleasure during sexual intercourse during pregnancy.

The conducted study shows that in the first trimester of pregnancy, most surveyed claimed that their sexual activity has not changed, (43.50%) but decreased in the second trimester (44.50%), similarly in the third trimester (71, 50%). The obtained results are shown in the table 3.

Table 1.

The frequency of intercourse in pregnancy

Evaluation of the frequency	3 months before the pregnancy		I trimester		II trimester		III trimester	
	n	%	n	%	n	%	n	%
Every day	29	14,50	13	6,50	7	3,50	2	1,00
3-4 times a week	100	50,00	63	31,50	55	27,50	22	11,00
Once a week	48	24,00	71	35,50	58	29,00	53	26,50
2-3 times a month	13	6,50	25	12,50	36	18,00	43	21,50
Once a month	10	5,00	22	11,00	23	11,50	39	19,50
Never	0	0,00	6	3,00	21	10,50	41	20,50

Table 2.

The evaluation of the frequency of intercourse in different trimesters of pregnancy

Trimester	Average	Median	Standard deviation
I	3,01	3,00	1,19
II	2,62	3,00	1,37
III	1,91	2,00	1,35

Statistical analysis: Chi²ANOVA=124;14; $p < 0,0001^*$

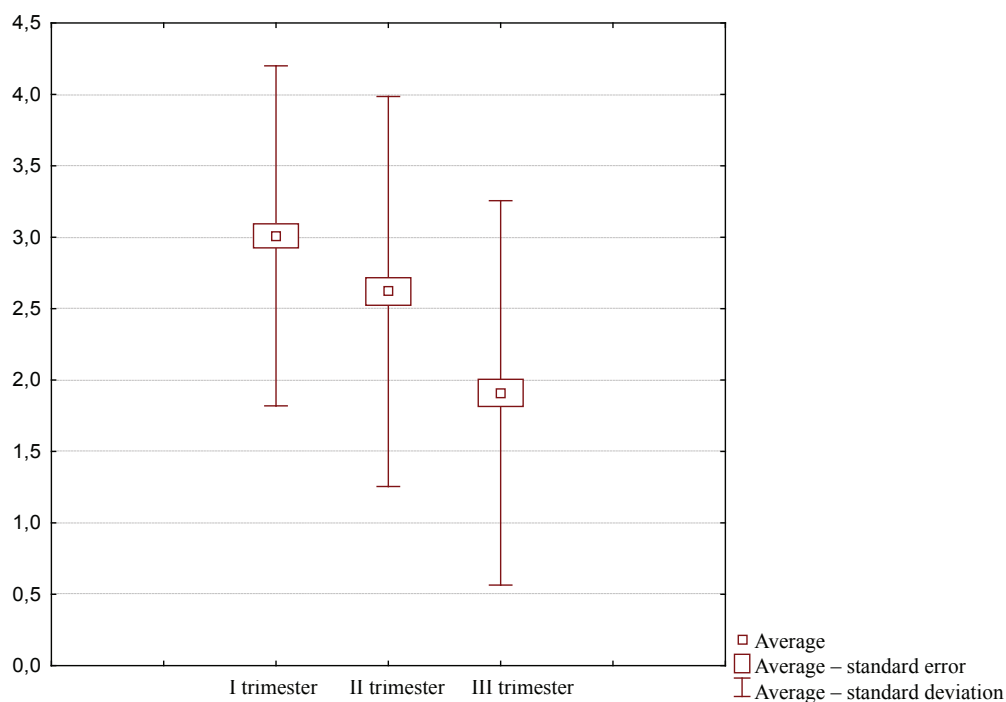
Table 3.

Sexual activity in the different trimesters of pregnancy

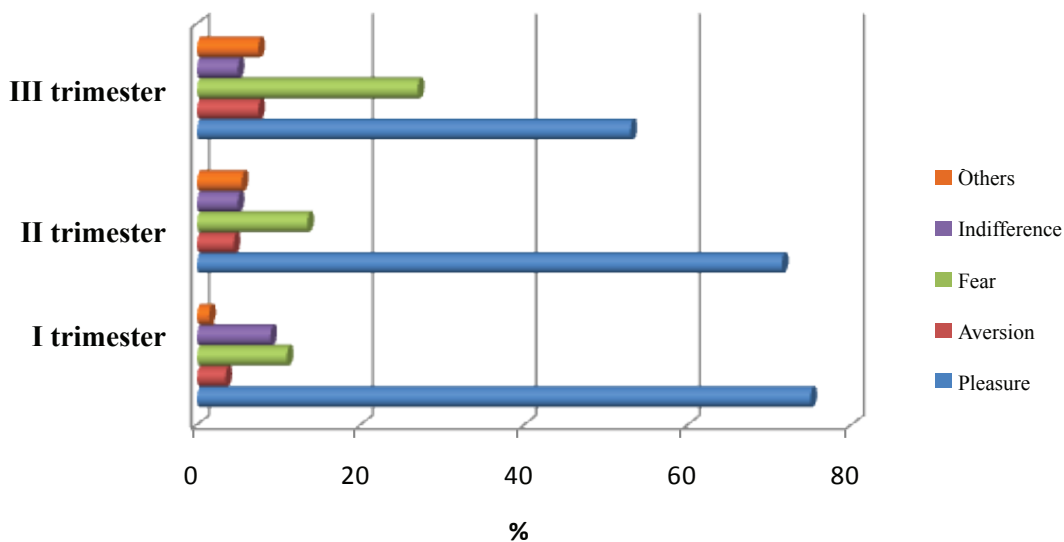
Evaluation of the frequency	I trimester		II trimester		III trimester	
	n	%	n	%	N	%
Increased	38	19.00	45	22.50	16	8.00
Decreased	75	37.50	89	44.50	143	71.50
Has not changed	87	43.50	66	33.00	41	20.50

Fig. 4.

The evaluation of the frequency of intercourse during the particular trimesters of the pregnancy.

**Fig 5.**

The percentage of respondents in consideration of the feelings felt during sexual intercourse in specific trimesters of pregnancy



Discussion

Sexuality of women in pregnancy is very individual and depends on many biological, psychological and sociological factors. For many couples it can bring more pleasure than ever before for others it may

cease to exist. To this day, disputes about the impact of pregnancy on female sexuality and sexual intercourse on pregnancy are ongoing.

Groups of surveyed women were diverse in age, education, marital status and place of residence. Among the respondents 37.00% (n = 74) of women were aged

26-30 years, 36.00% (n = 72) aged 21-25 years, and 19.00%, (n = 38) aged 31-35 years, 5.00% (n = 10) aged 36 years and 3.00% (n = 6) below the age of 20 years. Among the respondents 84.00% (n = 168) were married, while 11.50% (n = 23) of respondents were unmarried and 4.50% (n = 9) were divorced.

Most surveyed had a university degree (n = 113; 56.50%), while 19.50% (n = 39) of respondents had post-secondary education, (incomplete higher), 13.50% (n = 27) medium and 10.50% (n = 21) primary or basic vocational education.

The respondents in 46.00% (n = 92) worked intellectually, while 27.00% (n = 54) of respondents worked physically, 16.00% (n = 32) of women did not work and 11.00%, (n = 22) were learning.

As many as 95.50% (n = 191) of respondents were Catholic, while 2.50% (n = 5) of respondents were atheists, 1.00% (n = 2) Jehovah's Witnesses, and 1.00% of another religion (Muslim, Orthodox).

Surveyed in 47.00% (n = 94) lived in a provincial town, while 20.00% (n = 40) of respondents lived in another city, and 33.00% (n = 66) of respondents lived in rural areas.

Most respondents had good housing conditions (n = 107; 53.50%), while 35.00% (n = 70) of respondents had very good conditions and 11.50%, (n = 23) average ones.

In most cases, the family financial situation was good, (n = 129; 64.50%), while 21.50% (n = 43) of respondents had a very good situation, and 14.00%, (n = 28) average one.

The authors of the first publications about sexual behavior during pregnancy were Master and Johnson, who reported decrease in the frequency of intercourse and sexual satisfaction in the first and third trimester of pregnancy and their increase and intensity in the second trimester [5].

K. Imieliński believes that sexual reactivity decreases in the first trimester in nulliparous women, but not altered in multiparous women. In the second trimester the increased sexual activity is observed in most women, while in the third trimester – its decrease. He believes that the course of sexual intercourses, especially changes in women's sexual feelings arise mainly from emotional relationships

between partners, and do not arise under the influence of changes of pregnancy [5].

The results of own research on this issue coincide with the research carried out by Wagner, Krajewski-Siuda and Wit et al, who found out that as the pregnancy progresses, the sexual activity decreases [11, 12].

The study shows that in the first trimester of pregnancy, most surveyed claimed that their sexual activity has not changed, (43.50%) but decreased in the second trimester (44.50%), similarly in the third trimester (71.50%).

The conducted study showed that 3 months before pregnancy the respondents usually had intercourse 3-4 times a week (50.00%), while in the first trimester of pregnancy once a week (35.50%), similarly in the second trimester (29, 00%) and third trimester (26.50%). In the third trimester 20.50% of respondents said they never had intercourse. For further statistical analysis the frequency of intercourse in the first, second and third trimester of pregnancy was rated, (every day – 5; 3-4 times a week – 4; once a week – 3; 2-3 times a month – 2; once a month – 1 and never – 0). As a result of statistical analysis it was found out that the frequency of intercourse was highest in the first trimester of pregnancy, and the lowest in the third trimester. Statistical analysis showed significant differences in frequency of intercourse in various stages of pregnancy ($p < 0.000001$).

Studies have shown that respondents had intercourse on average till 32.07 ± 7.92 week of pregnancy (4-41 weeks).

It is commonly believed that a pregnant woman's sexual activity depends on the cultural traditions of society. In some cultures around the world the spouses are encouraged to had intercourse, in others, however, it is advisable to limit or even prohibit it. Margareth Mead describes the ethnic groups in which sexual intercourse with a pregnant woman is prohibited and the society in which sexual intercourses with the pregnant woman is considered necessary for "expansion" of the child [5, 12].

The sexuality of women is also affected by: psychosexual relationship from before the pregnancy, the emotional relationship between partners, communication

skills, understanding, sexual needs, health condition of the pregnant woman, pregnancy, self-esteem and attractiveness, the living conditions of the woman, fear of a child in both parents, and whether the pregnancy was planned or undesirable [13, 5, 9].

The conducted study shows that sexual activity in pregnant women varies in different trimesters. Frequency of intercourse was highest in the first trimester of pregnancy, and the lowest in the third trimester. Statistical analysis showed significant differences in frequency of intercourse in various stages of pregnancy ($p < 0.000001$). Most commonly implemented forms of sexual activity were kissing, caressing, foreplay and vaginal intercourse, and most preferred position was a classic and lateral position.

As a result of statistical analysis it was found out that respondents who gave birth at 37-40 weeks of pregnancy slightly more often had intercourse in the third trimester of pregnancy in comparison to those who gave birth at 36 weeks of pregnancy and at more than 41 weeks. These differences were close to statistical significance ($p = 0.06$).

There is no doubt that sexual activity in the developing properly pregnancy poses no risk to the fetus and its development. This awareness is generally higher in multiparous women because they feel less anxiety and fear of making sexual contact during pregnancy. Von Sydow believed that many pregnant women felt the greatest pleasure in sexual foreplay and caresses, and experiencing erotic fantasies and dreams. Moreover, women attach great importance to the sensitivity of the partner during all sexual activities [2]. The study shows that on a scale of 1 to 5 (1 – lowest rating, 5 – highest) was found out that during pregnancy the most common were kissing, caressing and foreplay, vaginal intercourse, and less common mutual masturbation, oral sex, and very rarely masturbation and anal intercourse. Our study showed that for 20.50% ($n = 41$) of respondents during sexual activity the most important was sexual intercourse, while for 24.50% ($n = 49$) caressing, kissing, for 0.50% ($n = 1$) erotic fantasies, for 9.50% ($n = 19$) orgasm, and for 45.00% ($n = 90$) of respondents all of the above mentioned activities were important.

Conclusions

1. Sexual activity during pregnancy in the first trimester has not changed, while in the second and third trimester decreased.
2. The difference has been pointed out in different trimesters of pregnancy depending on the frequency of intercourse. It was found out that the frequency of intercourse was highest in the first trimester of pregnancy, and lowest in the third trimester.
3. During pregnancy, most implemented forms of sexual activity were: kissing, caressing and foreplay, vaginal intercourse, and less common: mutual masturbation, oral sex, masturbation and very rarely masturbation and anal intercourse.
4. In all trimesters of pregnancy, during sexual intercourse the respondents felt mostly pleasure, while less often aversion, fear, indifference, or other sensations.
5. During the period of three months before the pregnancy the respondents usually had intercourse 3-4 times a week. Pregnant women often had intercourse once a week, in the first trimester of pregnancy. In the third trimester of pregnancy most women shun intercourse.

Acknowledgements

The authors of "Sexual activity of women in different trimesters of pregnancy," declare that the work has not been published or been submitted elsewhere.

This study was approved by all co-authors of the institutions in which it was performed, and the authors agree to automatic and free copyright transfer to the Publisher when accepted for publication.

The text of the paper disclosed all sources of funding, and the authors are familiar with the Editorial Policy and Information for authors published in the journal "Gynecology Poland" and will comply with them. The study was not funded with grants, but sponsored by the authors.

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