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## Causes of anxiety during pregnancy

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### Abstract

Pregnancy is one of the most important periods in a woman's life, as it brings along numerous changes, not only in the physical aspects, but also socially and psychologically. There are plenty of researches done around the world about anxiety during pregnancy. Purpose of study is to examine anxiety during pregnancy and its causes. Two research tools were used: Questionnaire to ascertain reasons of anxiety and State – Trait Anxiety Inventory (STAI). The participants were 150 pregnant women. Most of the pregnant woman feels anxious firstly about factors connected with newborn: “possible neonatal development disorder”, “possible birth trauma to newborn” and “newborn's ability to effectively initiate breathing”. Followed by anxiety causes connected to pregnant woman herself.

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### 1. Introduction

Women are more exposed to anxiety due to a lot more changes in life – first menstruation, pregnancy then menopause (Hoffman, et al., 2012). Pregnancy is one of the most important periods in a woman's life, as it brings along numerous changes, not only in the physical aspects, but also socially and psychologically. Fear of unknown, stress, rootless feeling and daily problems connected with physical and hormonal changes can frequently lead to anxiety. Anxiety is a normal response to threat or danger and part of the usual human experience, but it can become a mental health problem if the response is exaggerated, lasts more than three weeks and interferes with daily life (Mental Health Foundation, 2007). State anxiety describes the experience of unpleasant feelings when confronted with specific situations, demands or a particular object or event. State anxiety arises when the person makes a mental assessment of some type of threat. When the object or situation that is perceived as threatening goes away,

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the person no longer experiences anxiety. Trait anxiety also arises in response to a perceived threat, but it differs in its intensity, duration and the range of situations in which it occurs. Trait anxiety refers to the differences between people in terms of their tendency to experience state anxiety in response to the anticipation of a threat. Trait anxiety describes a personality characteristic rather than a temporary feeling. In simple words state anxiety is anxiety about an event and trait anxiety is a personal characteristic.

Pregnancy is a time when women are more likely to face an increased level of anxiety. Anxiety during pregnancy is a focus of research because it may affect developmental outcomes in the child (Heron et al., 2004). Pregnant women with high levels of stress, depression and/or anxiety are at increased risk of adverse perinatal outcomes (Yuksel et al. 2013). Anxiety during pregnancy is associated with prematurity, low birth weight and fetal growth restriction which in turn, are risk factors for impaired cognitive and social developmental outcomes (Talge et al., 2007; Qiao, et al., 2012; Fishell, 2010). It also associated with increased nausea and vomiting; prolonged sick leave during pregnancy; planned caesarean delivery and use of epidural analgesia (Qiao, et al., 2012). There is a growing empirical base supporting the hypothesis that prenatal stress and anxiety is associated with several different kinds of immune system alterations in the offspring/child (Andrea Horvath Marques et al., 2013). Depressive and anxiety symptoms in women have shown adverse impact on the woman's relationship with the fetus, the newborn baby and, later, with the child (Fishell, 2010; Edhborg, et al., 2011). Some women have prolonged problems in developing a loving relationship to their infants and expressed absence of affection, rejection, neglect and impulses to harm the infants (Edhborg et al., 2011).

## 2. Method

In order to achieve the aim of the study, quantitative research methods were used applying several research instruments: Questionnaire to ascertain reasons of anxiety and State – Trait Anxiety Inventory (STAI). Questionnaire consists of 28 questions of which first 4 are demographic, next 5 were included to find out whether the various pregnancy-related factors influence the causes of anxiety during pregnancy, next ones were included the question was included to ascertain the reasons for the anxiety during pregnancy. STAI is a psychological inventory based on a 4-point Likert scale and consists of 40 questions on a self-report basis to measure level of state and trait anxiety. Each type of anxiety has its own scale of 20 different questions that are scored. Scores range from 20 to 80, with higher scores correlating with greater anxiety. The data obtained were evaluated via SPSS 21.0 software. The data analysis was carried out using Pearson's chi-square test.

## 3. Results

The study initially included 150 adult women. According to STAI, 104 respondents out of 150 had state and/or trait anxiety. These women were further analyzed.

72,1% of pregnant woman showed moderate form of trait anxiety, 23,1% severe form of trait anxiety. Moderate form of state anxiety was in 67,3% of pregnant woman, severe form of state anxiety in 29,8%.

After appraising the sample (pregnant woman with state anxiety) most of the respondents were woman in age range 18-25 (45,2%), with higher education (36,5%), employed (66,3%), unmarried but in a relationship (46,2). For most of the respondents this is first pregnancy (52,9%), planned (59,6%) within the second trimester (38,5%) and pregnancy is completely physiological (78,8%) .62,5% of respondents are supported enough by relatives and husband/ boyfriend.

Table 1. Causes of anxiety during pregnancy and its indicators

Cause of anxiety	not at all	somewhat,	Moderately so	very much so
Possible neonatal development disorder	2,9%	10,6%	59,6%	26,9%
Possible birth trauma to newborn	8,7%	20,2%	50%	20,2%
Newborn's ability to effectively initiate breathing	8,7%	28,8%	49%	13,5%
Vaginal and perineal trauma	9,6%	28,8%	39,4%	22,1%

Complications diagnosed during pregnancy	11,6%	29%	36,2%	23,2%
Will it be able to be a good mother	20,2%	23,1%	42,3%	14,4%
Successful breastfeeding initiation	16,3%	29,8%	45,2%	8,7%
Obstetricians attitude	24%	25%	39,4%	11,5%
Body changes during pregnancy	33,7%	25%	32,7%	8,7%
Possible birth stimulation	26,9%	37,5%	26,9%	8,7%

The study findings about causes of anxiety (Tab.1) indicates that anxiety during pregnancy most often is connected with 10 factors shown in Table 1, (summed up answers “moderately so”, “very much so”) which are sorted by priority. Most of the pregnant woman feels anxious firstly about factors connected with newborn: “possible neonatal development disorder”, “possible birth trauma to newborn” and “newborn's ability to effectively initiate breathing”. Followed by anxiety causes connected to pregnant woman herself.

Pearson's chi square test was used to identify whether there are statistically significant differences between anxiety during pregnancy and age, educational level, marital status, pregnancy planning, number and support of relatives. The results show a number of statistically significant differences. There are statistically significant differences comparing state anxiety depending on educational level (Chi-square=10,04, df=4, p=0.04) – severe anxiety is more characteristic for pregnant women with basic educational level (Chi - square = 10,04, df=4, p=0.04) - high level of anxiety is more characteristic for pregnant woman with basic education; based on marital status (Chi square = 26,26, df=4, p<0.001) - high level of anxiety is typical for pregnant women who are lonely; based on the fact that there is sufficient support from the side of the extended family and husband/partner (Chi square = 12.71, df=4, p=0.01) - high level of anxiety is typical for women who do not have a husband/partner.

There are statistically important situation anxiety differences when comparing worries about changes in body during pregnancy: when it depends on the age (Chi square = 27.85, df=6, p<0.001) - results show that women in the age group 18-25 worry about changes in their body during the pregnancy most; depending on the level of education (Chi square = 22.287, df=6, p<0.01) - women with the primary and secondary education worry most; depending on the family situation (Chi square = 24.11, df=6, p<0.001) - lonely women worry more than those who are married; depending on if the pregnancy was planned/unplanned (Chi square = 16.07, df=3, p<0.01) - women who worried most about the changes in their body had an unplanned pregnancy; depending on whether this is their first pregnancy (Chi square = 14.98, df=3, p=0.02) - women with repeated pregnancy worried about their body less than women with their first pregnancy.

Statistically significant differences were found when comparing anxiety about what the attitude of obstetricians will be towards the respondent: depending on their level of education (Chi square = 16,66, df=6, p=0.01) - data suggests that women who have the higher education worry about it more; depending on if the particular pregnancy is the first one ( Chi square = 8.43, df=3, p=0.03) - women with first pregnancy are more concerned.

When comparing the anxiety about the possibility of induced labor, depending on the level of education the data shows that women with higher education worry about it more (Chi square=17.01, df=6, p<0.01). There are statistically significant differences when comparing the anxiety about vaginal and perineal tears, depending on whether the pregnancy was planned or unplanned (Chi square=9.98, df=3, p=0.01). Women who have an unplanned pregnancy worry about ruptures more.

#### 4. Discussion

The study data shows that anxiety is more characteristic for younger pregnant women, because majority of the prenatal study group consists of pregnant women in the age group of 18-25 (45.2%). Similar data was obtained from the study “Anxiety in early pregnancy: prevalence and contributing factors”, which was carried out in Sweden by Rubertson and colleagues. In this article it was discovered that women under the age of 25 are more exposed to development of anxiety. Pregnant women from this age group experience greater anxiety about the changes in their body during the pregnancy, and this decreases with age.

Statistically important differences were discovered when comparing levels of state anxiety in accordance to the

level of education. Respondents with the primary education have not only got a relatively high mid level anxiety indicator (44.4%), but the level of state anxiety is relatively high too (50%). Respondents with secondary and higher education have very high mid level anxiety readings (80.5% and 75.6%). A study conducted by Chantal Quispel et al., in Netherlands (2014), “The role of depressive symptoms in the pathway of demographic and psychosocial risks to preterm birth and small for gestational age”, discovered that low level of education reinforces the symptoms of anxiety during the pregnancy, which coincides with the results of this study: as well as the anxiety over the changes in ones body during the pregnancy is more characteristic to women with higher education and first time pregnancies.

While analyzing the levels of situational anxiety, depending on whether there is enough support from the husband/partner and extended family, it was discovered that the higher level of anxiety occurs amongst respondents that do not have a husband/partner support. These results coincide with the research carried out in Greece by Gourounti, “Poor marital support associate with anxiety and worries during pregnancy in Greek pregnant women”, which discovered that women who lack the support from the family and husband/partner are more vulnerable to the development of anxiety during pregnancy.

Overall assessment analysis of the prenatal anxiety reasons show that main reason for anxiety is not the pregnant woman herself but the state of the newborn. The leading causes of anxiety amongst pregnant women is the possible neonatal development disorders (which causes anxiety amongst 86.5%), possible birth traumas (70.2%) and the newborn ability to initiate breathing (62.5%).

## 5. Conclusion

The results show that the anxiety during pregnancy are more common among younger pregnant women, those whose education is lower, living alone and feeling a lack of support. This is category of pregnant women which need to receive more attention from midwives and health care professionals, which could make better dynamic of pregnancy and birth outcomes.

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