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Obsessive - compulsive disorder - course during pregnancy, exacerbation factors - literature review

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ABSTRACT

Introduction and purpose of the work:

The period of pregnancy and puerperium is the time of increased vulnerability for mother's mental deterioration. While disorders such as perinatal depression have been detailed, an impact of pregnancy on the course of other mental disorders such as OCD is less investigated. The purpose of this work was to draw attention to the factors that may influence exacerbation of obsessions and compulsions in pregnancy and during the postpartum period. The most common obsessions and compulsions of pregnant women and the influence of mother's OCD on the newborn have also been described in this research.

State of knowledge:

Factors such as mother's age, duration of pregnancy, method of delivery may be predictors of aggravation of obsessions and compulsions. Gestational diabetes, thyroid hormones levels, personality disorders of the mother, stress, cultural beliefs also have an impact on mother's OCD. Infant being infected or hurt are the most common obsession subjects while cleaning and checking the baby happen to be the most frequent compulsions.

Summary:

It is important to disseminate knowledge about the course of OCD during pregnancy and postpartum period and pay attention to the inflammatory factors for earlier diagnosis and treatment. More research about factors worsening OCD through pregnancy are needed to be conducted.

Key words: obsessive-compulsive disorder, pregnancy, OCD, puerperium

INTRODUCTION

Obsessive-compulsive disorder (OCD) is a mental disorder which belongs to the wider group of anxiety disorders [1]. It can be characterised by recurrent, unwanted, intrusive thoughts, ideas, perceptions or impulses defined as obsessions. The patient recognizes obsessions as his own thoughts which are incompatible with his value system [2]. Repeatedly appearing intrusive thoughts cause an increase of tension and anxiety which can be reduced after performing some stereotypical actions or rituals called compulsions [1,2].

Untreated OCD is usually a chronic condition [3,4], worsening over time [1] and the etiology of exacerbations is unspecified. However, there is no doubt that premature discontinuation of treatment, stressful life events, streptococcal infections, hormonal fluctuations, stress,menstruation, pregnancy and the postpartum period influence the increase in symptom severity [3,4].

There are various factors that may contribute to OCD. These may include genetic factors, anatomical abnormalities, functional abnormalities and inflammatory processes of the central nervous system, dysfunction of the serotonergic system and learning theory [1].

STATE OF KNOWLEDGE

It is estimated that between 2-3% of the general population suffers from OCD [1] and this disorder occurs with greater frequency in women than in men [2,5].

The prevalence of OCD in pregnancy, according to various studies, ranges from 0.2% - 3.5% while in the postpartum period it can reach 2.7% - 9% [2]. Other articles estimate the percentage of clinically significant obsessive-compulsive symptoms at 2-3% [6,7].

Pregnant women are up to twice as likely to experience obsessions and compulsions compared to women in the general population [4,8]. Therefore, it can be said that the pregnancy and postpartum period is a time of increased vulnerability to OCD symptoms for women [8].

ETIOLOGY OF OCD IN PREGNANCY

Information on the effect of pregnancy on the course of OCD is not consistent. According to some authors, the severity of OCD does not worsen [9] during pregnancy in up to 69% of the patients [10] while other sources indicate that in women, previously diagnosed with OCD, pregnancy may exacerbate obsessive-compulsive symptoms in about one-third of cases [3,9].

Pregnancy and puerperium are naturally associated with an increase in stress in both parents, so this period of time is a stage when an intensification of the course or recurrence of OCD symptoms may occur [3,10].

Moreover, anxiety and anankastic personality disorder may indicate the onset of OCD during pregnancy and postpartum period [3,10,11]. All factors like hormonal changes, dysregulation of the immune system, pre-existing mother's personality and mood disorders and socially imposed pressure on the parents of the newborn play a role in the pathogenesis of this disorder [3].

It has been observed that women who experience an aggravation of OCD symptoms during the premenstrual period have a higher probability of experiencing an exacerbation of these symptoms during pregnancy and the postpartum period [3].

According to some researchers, pregnancy in women with OCD does not significantly influence the exacerbation of obsessions and compulsions; however, vigilance should be exercised in the case of pregnancies of young women and the postpartum period in caesarean section patients [10]. The age of the mother at the time of delivery is inversely related to the severity of the occurrence of obsessions and compulsions - younger women have more acute symptoms [6,10]. It is possible that this is influenced by the length of the disease, longer duration of drug treatment and greater awareness of the impact of stress on the severity of symptoms.

The type of delivery is also an important issue - women who had cesarean deliveries were more prone to exacerbation of obsessions and compulsions compared to mothers who had

vaginal deliveries. One may try to explain this by the occurrence of higher levels of anxiety associated with cesarean birth and longer recovery compared to natural delivery [10].

The level of thyroid hormones is another observed important factor that influences an aggravation of obsessive compulsive symptoms during pregnancy. It has been proven that there is an association between low levels of ft3 and ft4 (which are in the lower limit of normal reference range) on exacerbation of anxiety symptoms and as a result also OCD in pregnant women especially in the 2nd and 3rd trimester of pregnancy [4].

This can be explained by the fact that thyroid hormones directly affect the serotonergic system - a decrease in thyroid hormones reduces central 5ht activity in the body [4]. OCD, on the other hand, is strictly related to abnormalities in serotonergic metabolism [4,12].

Another factor that seems to have an association with OCD and pregnancy is hyperglycemia. Women with gestational diabetes, are more likely to experience exacerbations of obsessive-compulsive symptoms compared to women with normal blood glucose level during pregnancy [3], which may be explained by the fact that at the immunological level, gestational diabetes is associated with the presence of inflammation, affecting the development of OCD [3,13,14].

Stress is a factor that worsens obsessive-compulsive symptoms. COVID-19 pandemic, which can be certainly considered as an unpredictable and stressful situation, affected the exacerbation of OCD in the general population, including pregnant women [6,15]. During the pandemic period, young women without a partner and with unstable financial situations were more likely to develop symptoms [6]. In the first months of the pandemic, detection of OCD symptoms in pregnant women doubled (7.12%) compared to periods prior to April 2020 (2-3%) [6,7]. It can be explained by the fact that a lack of a sense of self-agency and control over one's own life can contribute to the onset or exacerbation of obsessive-compulsive symptoms, due to the vulnerability to OCD of people with anankastic personality [6,16].

OBSESSIONS AND COMPULSIONS OF PREGNANT WOMEN

Most researchers describing pregnant women's obsessions come to similar conclusions. Obsessions in pregnancy and puerperium focus mainly on the fear of microbial infection and intentional or accidental harm to the baby [6,17]. Common feeling is a belief in the existence of a danger to the child and it tends to be exaggerated, the mother feels responsible for the potential harm. There is an intolerance of uncertainty and constant reassurance seeking is characteristic [6]. These can consequently lead to avoidance of the newborn and fear of harming it [18] or constant checking of the infant well-being [11]. However intrusive ideas

and thoughts about hurting the baby do not correlate with the actual possibility of the mother hurting the newborn [18,19].

For individuals prone to OCD, standard recommendations for pregnant women such as watching for the occurrence of fetal kicks, the need to take nutritional supplements (e.g. folic acid), and avoiding infections can cause uncertainty and eventually lead to obsessions and compulsions [6].

Mothers' compulsions increase with advancing gestational age and involve cleaning, collecting items related to caring for the newborn and decluttering surfaces [6]. A higher frequency of compulsions is also observed in women who are pregnant for the first time [6,11].

Obsessive-compulsive disorder is a mental disorder with a wide spectrum. Owing to the appearance of fears and obsessions about specific topics, OCD is divided into many subtypes [2,20].

Due to the presence of a characteristic clinical manifestation and specified obsessive thoughts during pregnancy and the postpartum period, an attempt has been made to classify OCD occurring in the postpartum period as a separate subtype-ppOCD. It would be characterized by eg. the first occurrence or intensification of already existing OCD symptoms during pregnancy and the puerperium,having obsessions about infection, illness or harm to the child and avoidance of the newborn as a result of those obsessions. Also overt (actions) or covert (mental rituals) compulsions would be typical [2].

Compulsions such as ritualistic behoviours tend to be time consuming and preclude taking care of the infant. It can manifest as being avoidant or overprotective [8].

Case reports of Dutch women with OCD during pregnancy confirm the occurrence of intrusive thoughts relating to the baby's well-being. Information about possible dangers to the baby (such as bacterial infection) acquired by the mother or thinking about possible circumstances leading to physical harm of the newborn can be triggering and lead to anxiety, mental recalling of possible scenarios, and compulsions such as hand washing leading to eczema [18].

RISKS TO THE BABY AND MOTHER

OCD during pregnancy, according to some authors, is associated with negative outcomes for both mother and child. As for the child, these include a low birth age and lower body weight [6,21].

However in the other research no important relationship was found between OCD and birth weight, preterm delivery, special nursery admission of the newborn [10]. On the maternal

side, these include a poorer quality of life, a lack of a sense of connection with the newborn - less frequent breastfeeding, a slower acquired ability to understand the needs of the newborn [22], anxiety about childcare and doubt in one's own parenting skills [6].

CONCLUSION

The researchers' findings about the course of obsessive-compulsive disorder are not consistent. Most of the available studies are retrospective, which are not that accurate compared to prospective ones.

Nevertheless many referenced articles underline that symptoms of obsessive-compulsive disorder can worsen during pregnancy and the postpartum period due to the hormonal, immunological, cultural and even living and world situation issues. It is crucial to monitor pregnant women, especially those with a history of obsessive-compulsive disorder. Physicians should be particularly alert to symptoms which can start or worsen patients' obsessions and compulsions during pregnancy.

International, collaborative and prospective studies are needed to provide clarification on this topic.

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