## **Research article**

### Obsessive-compulsive symptoms in pregnancy: Their relationship with obsessive beliefs and obsessive-compulsive personality traits

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#### ABSTRACT

Literature findings are limited and inconsistent on the relationship between obsessive beliefs and obsessive-compulsive symptoms (OCS) and to our knowledge no data are available in pregnant population. Additionally, an interesting field that has not been adequately studied is the relationship between obsessive-compulsive personality traits and OCS while there are no corresponding studies in perinatal period. The aims of the study were to examine the relationship between OCS presented in pregnancy and obsessive beliefs considered to underlie them as well as their association with obsessive-compulsive personality traits. 30 pregnant women with OCS, regardless of their underlying diagnosis, were recruited from a University Psychiatric Hospital and privately. They completed the Mini International Neuropsychiatric Interview (MINI), the Yale-Brown Obsessive- Compulsive Scale (Y-BOCS), the Obsessional Beliefs Questionnaire-44 (OBQ-44), the Leyton Trait Scale and the Hospital Anxiety and Depression Scale (HADS). The main symptoms were aggression (73.3%), contamination (53.3%) obsessions and cleansing/washing (50%), checking (43.3%) compulsions. Pregnant women with obsessive-compulsive personality traits displayed symmetry/exactness obsessions (p=0.020) and cleansing/washing (p=0.011) compulsions as predominant types of OCS and greater severity of compulsions (p=0.049). The results of the logistic regression model suggest that obsessive beliefs of importance/control of thoughts and of responsibility/threat estimation predicted OCS while the belief of perfectionism/certainty did not predict any dimension of OCS. It is noteworthy that most observed relationships between obsessive beliefs and OCS remained even after controlling for variables of anxiety and depression, suggesting that obsessive beliefs have a specific relationship with OCS which is independent of other forms of psychopathology. Depressive symptoms comorbidity increased OCS severity, while in comorbidity with anxiety symptoms no difference in severity of OCS was found. Further research is needed to test our findings in larger and more diverse samples.

**KEYWORDS:** Obsessive-compulsive symptoms, pregnancy, perinatal, obsessive-compulsive personality traits, obsessive beliefs, anxiety, depression.

#### Introduction

Given the heterogeneous nature of obsessive-compulsive disorder (OCD),<sup>1</sup> research has focused on identification of homogenous subtypes. During perinatal period women are at an increased risk for the onset/exacerbation of OCD and many experience perinatal-specific obsessive-compulsive symptoms.<sup>2,3</sup> Prevalence rates of OCD during perinatal period were higher (2.3% in pregnancy, 1.7% postpartum and 2.2% overall)<sup>2,4</sup> than the lifetime prevalence rates in women in the general pop-

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ulation, which were 1.5%.<sup>2,5</sup> Studies revealed that the most common obsessions in pregnancy were aggressive, symmetry/exactness and contamination, whereas the most common compulsions were checking and cleaning/washing.<sup>6-11</sup>

OCD has a complex biopsychosocial causal origin, which no single theoretical model can interpret fully.<sup>12</sup> In addition to biological theoretical models, non-biological have also been developed, emphasizing the importance of obsessive beliefs for OCD's development and maintenance.<sup>13</sup> Cognitive theories of OCD posit that obsessive beliefs underlie the intrusive thoughts and compulsive behaviors noted in this disorder. Extending the theoretical work of Rachman,<sup>14</sup> Salkovskis<sup>15</sup> and others, the Obsessive Compulsive Cognitions Working Group<sup>16-19</sup> empirically derived the following three domains of obsessive beliefs considered to underlie obsessive-compulsive symptoms (OCS):

- 1. Overestimation of threat/Inflated Responsibility. Individuals with OCD evidence exaggerated estimates of the probability and costs of negative events and believe themselves to be personally responsible for causing or preventing any disastrous consequences associated with obsessional thoughts.
- Beliefs about the importance of, and need to control, intrusive thoughts. Individuals with OCD believe that the mere presence of intrusive thoughts indicates that such thoughts are very meaningful. They also believe that complete control over such intrusions is both necessary and possible.
- 3. Perfectionism and tolerance of uncertainty. Individuals with OCD show inability to tolerate mistakes or imperfection, as well as the strong need for a guarantee of safety. To date, several investigations using clinical and nonclinical samples have examined relationships between obsessive beliefs and OCS;<sup>20-22</sup> however their findings have been inconsistent. It is not clear which of the obsessive beliefs are more influential and whether all or some of them have specific relationships with symptom subtypes. Few findings exist about obsessive beliefs in perinatal period and the available studies are about postpartum.<sup>23,24</sup>

There is also some evidence that symptom subtypes may have specific relationships with comorbid disorders. However, few studies have systematically examined the relationship between specific symptom subtypes and clinical characteristics. Thus, while some studies have shown that patients with forbidden thoughts (aggressive, sexual, religious), somatic obsessions, control and ordering/arranging compulsions are more likely to have depression and/or anxiety,<sup>25,26</sup> in other studies relationship between comorbid disorders and OCS subtypes was not found<sup>27</sup> and no such study has been done in perinatal period. The role of obsessive beliefs may be one possible factor contributing to the association between OCS and depressive or anxiety symptoms.<sup>28</sup>

An interesting field that has not been adequately studied is the relationship between obsessive-compulsive personality traits and OCS. The term personality refers to constant patterns of perception, relationship and thinking about the environment and self, which are manifested in a wide range of social and personal contexts.<sup>1</sup> Obsessive-Compulsive Personality (OCP) is a multidimensional concept that appears to be composed of six features: obstinacy, orderliness, parsimony, perseverance, rigidity and superego.<sup>29</sup> Many researchers hypothesize that OCD and obsessive-compulsive personality disorder (OCPD) are strongly related to each other or even overlap conceptually and share many common features.<sup>30</sup> Some researchers even suggest that there might be a distinct subtype of individuals with OCD who also suffer from OCPD<sup>31,32</sup> or that the comorbidity of OCPD and OCD indicates a marker of severity of OCD.33 The only relevant studies with obsessive-compulsive personality traits are those investigating the dimensional model of personality,<sup>34,35</sup> according to Temperament and Character Inventory (TCI), developed by Cloninger et al,<sup>36</sup> while there are no corresponding studies in perinatal period.

To the best of our knowledge this is the first study investigating the association between obsessive beliefs as well as obsessive compulsive personality traits and OCS types and severity in pregnancy in a sample of Greek population. The impact of anxiety or depression comorbidity was also examined.

#### **Materials and Method**

#### Procedures

The study was conducted at the Women's Mental Health Clinic, at the 1st Psychiatric Department of Eginition University Hospital in Athens, Greece. The criteria for admission to study were pregnant women with OCS (confirmed by psychometric tools and psychiatric assessment) regardless of underlying diagnosis, who received services from the Women's Mental Health Clinic and private psychiatrists, speaking the Greek language adequately, above 18 years old, willing to participate in the study after being informed about the procedure and its benefits, as well as signing written informed consent. Exclusion criteria were mental retardation and other neuro-developmental disorders, psychotic disorder, current substance use disorder and absence of consent to participate. The study was approved by the Ethics Committee of Eginition University Hospital.

#### Study sample and data collection

Fifty pregnant women were identified as potential participants and were invited to participate in the initial screen. Thirty four pregnant women with OCS (23 from the Women's Mental Health Clinic and 11 from private offices of gynecologists and psychologists) were approached. From them 2 did not meet the inclusion criteria and other 2 did not agree to participate. Finally, 30 pregnant women were recruited, 20 women from Women's Mental Health Clinic and 10 women from private offices. In order to identify pregnant women with OCS, Mini International Neuropsychiatry Interview (MINI)<sup>37</sup> was conducted. All the participants gave written informed consent. This study was carried out from December 2017 until July 2018.

#### Measures

The following socio-demographic characteristics were accessed: (a) general demographic background (b) personal psychiatric history c) socio-professional status and (d) data relating to the course of pregnancy (gestational weeks, gestational complications, history of abortion).

The Mini International Neuropsychiatric Interview (MINI) (M.I.N.I 5.0.0)<sup>37</sup> Greek version<sup>38</sup> was used to assess the presence of mental disorders based on Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) and International Classification of Diseases, 10th Revision (ICD-10). The six questions of item H for OCD were used in order to identify the presence of OCS.

The Obsessional Beliefs Questionnaire-44 (OBQ-44),19 a shortened version of the original 87-item OBQ,17 is a self-assessment tool for the evaluation of beliefs associated with OCS. Forty-four obsessional beliefs are rated on a 7-point scale from 1 (disagree very much) to 7 (agree very much). It consists of three empirically derived factors: responsibility/threat estimation (16 items, score range 16–112); perfectionism/certainty (16 items, score range 16-112); and importance/control of thoughts (12 items, score range 12–84). Higher scores represent greater strength of beliefs. The instrument possesses good validity, interval consistency and test-retest reliability and has been widely studied in clinical and nonclinical samples.<sup>17–19</sup> Due to the lack of a Greek validation of the instrument, the questionnaire was used after following the guidelines of WHO on translation (available at: https://www.who.int/tools/whogol/whogol-bref/docs/ default-source/publishing-policies/whoqol-100-guidelines/translation-methodology.0). Emphasis was given on conceptual and not linguistic equivalence. A pre-test procedure of the instrument was held to identify possibly unclear expressions. Participants of this procedure were demographically representative of the population under examination. Interval consistency of the OBQ-44 subscales was high ( $\alpha$  range=0.87–0.95) in the present sample.

The Leyton Trait Scale<sup>39</sup> was used to assess obsessive-compulsive personality traits and behaviour with 23 self-administered items, which is part of Leyton Obsessional Inventory (69 items in total; 46 symptom questions and 23 trait questions). Participants had to choose between dichotomous answers Yes/No (cutoff 11 $\pm$ 3.2). Therefore, scores of  $\geq$ 12 are suggestive of obsessive-compulsive personality/behaviour. This psychometric tool is particularly sensitive to detecting obsessions in women as it has been originally developed to evaluate housewives and is predominantly sensitive to subclinical symptoms. The instrument possesses good reliability in repetitive measurements and can distinguish between OCD patients, OCPD and normal subjects.<sup>39–41</sup> The scale has not been formally validated in the Greek language; however, it has been previously used in studies involving Greek populations, and it has demonstrated sufficient psychometric properties.<sup>42,43</sup> Interval consistency of Leyton Trait Scale was high ( $\alpha$ =0.80).

The Hospital Anxiety and Depression Scale (HADS)<sup>44</sup> Greek version<sup>45</sup> is a self-report rating scale comprising 14 items, designed to measure anxiety and depression, the most likely factors to cause psychological distress (7 items for each subscale). Responses to items are placed on a four-point Likert Scale of 0 to 3 (score range 0–21, for each subscale) and high scores indicate more symptoms. For both scores, the following categorization has been proposed: score 0–7 indicate no anxiety or depression, score 8–10 indicate moderate levels of anxiety or depression and score greater than 11 indicate high levels of anxiety or depression.

The Yale-Brown Obsessive-Compulsive Scale (Y-BOCS),<sup>46,47</sup> a semi-structured clinical interview that includes a symptom checklist and 10-item semi-idiografic severity scale was used to assess OCD symptoms severity. The scale includes two subscales (53 obsessions and compulsions) that are scored separately and then a total score of subscales is obtained. Women were asked to endorse which specific OCS applied to them, currently and/or in the past. The severity scale assesses the main obsessions and compulsions on the following five parameters: (a) time, (b) interference, (c) distress, (d) resistance and (e) degree of control. The clinician rates each item from 0 (no symptoms) to 4 (extreme) based on the past week. Symptom severity is grouped as follows: 0-7 sub-clinical, 8-15 mild, 16-23 moderate, 24-31 severe and 32-40 extreme. The Y-BOCS has not been validated during pregnancy or postpartum period but has been used in multiple studies of perinatal population.<sup>7,10,48</sup>

#### Statistical analysis

Statistical analysis was conducted using the Statistical Package for Social Sciences for Windows with SPSS, version 25.0 (Armonk, NY: IBM Corp). Assessment of the differences between groups was performed using Student's t test/Mann-Whitney U for quantitative variables and the chi-squared test/Fisher exact test for categorical variables depending on whether the variables were normally distributed or not. A logistic regression model was used to assess possible predictors of obsessive beliefs, including effect of anxiety or/and depression. The statistical significance level was accepted as p < 0.05.

#### Results

#### Sample characteristic

The demographic data of the sample are presented in table 1. Only 5 pregnant women had a primary diagnosis of OCD. The scores of OBQ-44 and Y-BOCS are summarised in table 2.

#### The main types of OCS in pregnancy

The severity of OCS was mild (53.3%). The most common OCS were aggressive (73.3%), contamination (53.3%), symmetry/exactness (33.3%) obsessions and checking (43.3%), washing/cleansing (50%) and ordering/arranging (20%) compulsions. In majority (73.3%) the OCS were associated with the fetus/infant (accidental harm, contamination, ritualized hand washing, showering, cleaning, excessive checking for fetal movements and mother's repeated requests for ultrasounds).

#### OCS and obsessive-compulsive personality traits

The analysis of OCS type in pregnant women with or without obsessive-compulsive personality traits is presented in table 3.

#### Obsessive beliefs

In our analysis, no relationship was found between obsessional beliefs and severity of OCS, despite the one found between obsessional beliefs and depression (p=0.024) and particularly between responsibility/threat estimation and depression (p=0.006). A logistic regression model was used to assess obsessional beliefs as possible predictors for OCS, including the effect of anxiety or/and depression as assessed by HADS. It was found that aggressive obsessions are predicted by subscale of importance/control of thoughts, even after controlling for anxiety or/and depression (p=0.039). Contamination obsessions are predicted by subscale of responsibility/ threat estimation when anxiety and/or depression were not present, assessed by HADS score 0–7 (p=0.036).

<b>Table 1.</b> Socio-demographic and clinical characteristics of preg-
nant women with OCS (N=30)

nant women with OCS (N=30)	
Study sample characteristics	n (Percent) or mean±SD
Age, mean±SD	31.9±5.1
Gestational week, mean±SD	22.5±9.3
Marital status, n (%)	
Married	18 (60)
Unmarried	10 (33.4)
Divorced	2 (6.7)
Children, n (%)	
No	13 (43.3)
Yes	17 (56.7)
Education, n (%)	
Secondary school	12 (40)
University	16 (53.3)
Postgraduate	2 (6.7)
Professional status, n (%)	
Employed	18 (60)
Unemployed	12 (40)
Gestational complications, n (%)	
No	20 (66.7)
Yes	10 (33.3)
History of abortion, n (%)	
No	20 (66.7)
Yes	10 (33.3)
History of miscarriage, n (%)	
No	24 (80)
Yes	6 (20)
Positive psychiatry family history, n (%)	
No	13 (43.3)
Yes	17 (56.7)
OCS in past, n (%)	
No	11 (36.7)
Yes	19 (63.3)
Diagnosis according to MINI, n (%)*	
Major depressive disorder	11 (36.6)
OCD	5 (16.6)
Panic disorder	5 (16.6)
Agoraphobia	3 (10)
Social anxiety disorder	4 (13.3)
General anxiety disorder	8 (26.6)
Bulimia	1 (3.3)
Dysthymic disorder	1 (3.3)

\*Numbers of participants may not match the category totals, as some patients had more than one type of diagnosis Abbreviations: PCS, Obsessive- Compulsive Symptoms

Table 2	. Scores	of OBQ-44	and Y-BOCS.
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Measures	Mean	SD	Range (Min-Max)
OBQ-44 Subscales			
Responsibility/ threat estimation	70.3	21.0	87.0 (16.0–103.0)
Perfectionism/certainty	64.2	22.8	79.0 (19.0–98.0)
Importance/ control of thoughts Y-BOCS	48.3	14.9	57.0 (18.0–75.0)
Severity of the disorder	14.2	9.1	31.0 (2.0–33.0)
Severity of obsessions	8.3	3.9	18.0 (0.0–18.0)
Severity of compulsions	5.9	6.4	30.0 (0.0–30.0)

Cleansing/washing compulsions are predicted by responsibility/threat estimation, when anxiety or/and depression were not present (p=0.040), and when they were (HADS score≥8), depression represents a predictive factor (p=0.042). When there is no effect of anxiety or/and depression, ordering/arranging compulsions are predicted by responsibility/threat estimation (p=0.040). Contamination obsessions, cleansing/washing and ordering/arranging compulsions are all predicted by subscale of responsibility/threat estimation even after controlling for anxiety and/or depression. Depression predicts checking compulsions (p=0.027) whereas in the absence of anxiety and/or depression they are not predicted by any of the obsessional beliefs. Religious, somatic, symmetry/exactness obsessions and counting compulsions cannot be predicted either by obsessional beliefs or by anxiety or/and depression.

#### OCS and comorbid disorders

Eighteen (60%) pregnant women had high levels of anxiety and 16 (53.3%) had high levels of depression according to HADS. Analysis of OCS type when there is anxiety comorbidity revealed that 72.2% of pregnant women with contamination obsessions (p=0.011) and 66.7% with cleansing/washing compulsions (p=0.025) had moderate or high levels of anxiety. No women with religious obsessions (p=0.018, FET) and a minority (20%) of women with ordering/arranging compulsions presented anxiety (p= 0.026, FET). There was no difference between pregnant women with and without anxiety comorbidity in severity of OCS.

Moreover, pregnant women with moderate or high levels of anxiety scored higher in Dysfunctional Beliefs Questionnaire compared to those who did not have anxiety (p= 0.013). A similar pattern was observed in responsibility/threat estimation (p= 0.010) and in perfectionism/certainty subscales (p= 0.049).

Women with religious obsessions and specifically with references to sins did not have depression comorbidity (p=0.037). 68.8% of pregnant women with cleansing/ washing compulsions (p=0.028) and 62.5% women

Table 3. Investigation of OCS type in pregnant women with or without obsessive compulsive personality traits.

No OCP	Total n (%)	р
n=15		
n (%)		
1 (73.3%)	22 (73.3%)	0.999
7 (46.7%)	16 (53.3%)	0.464
1 (6.7%)	4 (13.3%)	0.598
2 (13.3%)	10 (33.3%)	0.020*
1 (6.7%)	2 (6.7%)	0.999
4 (26.7%)	15 (50%)	0.011*
8 (53.3%)	13 (43.3%)	0.269
2 (13.3%)	4 (13.3%)	0.999
3 (20%)	6 (20%)	0.999
_	3 (20%)	3 (20%) 6 (20%)

<sup>a</sup>Numbers of participants may not match the category totals, as some patients had more than one type of OCS \*Statistically significant (p<0.5).

Values based on  $x^2$  test or Fisher exact test § where appropriate.

Abbreviations: OCS, Obsessive-Compulsive Symptoms; OCP, Obsessive-Compulsive Personality

with checking compulsions (p=0.024) had moderate or high levels of depression. Pregnant women with moderate or high levels of depression had higher severity of OCS compared to those who did not have depression (p=0.004).

#### Discussion

In our study the main OCS presented in pregnancy were aggression and contamination obsessions, and control and cleansing/washing compulsions, as in previous studies.<sup>6–11</sup> Symptoms were primarily related to the fetus/infant, a finding consistent with international literature.<sup>6,7</sup> However, in the present study, the most common OCS in pregnancy was the fear of harming the fetus/infant, while the literature so far mainly refers to fears of fetal contamination.<sup>7,10</sup> One possible explanation for this finding is that the majority of the participants in this study were women who visited a special outpatient clinic of a psychiatric hospital and probably had more severe symptomatology as opposed to the majority of previous studies which were conducted predominantly in obstetric outpatient clinics.<sup>7,8</sup>

Obsessive beliefs predicted some dimensions of OCS in consistency with cognitive behavioral models. The obsessive belief of importance/control of thoughts predicted aggression obsessions, a finding consistent with literature.<sup>22,49,50</sup> The obsessive belief of responsibility/ threat estimation predicted three types of OCS, contamination obsessions and cleaning/washing compulsions, as shown the findings of other studies,<sup>20,22,49</sup> as well as ordering/arranging compulsions, as opposed to literature, which shows that ordering/arranging compulsions are associated with the belief of perfectionism/certainty.<sup>22,49,50</sup> However, in the present study the latter did not predict any certain dimension of OCS. It is noteworthy that most observed relationships between obsessive beliefs and OCS remained even after controlling for variables of anxiety and depression, suggesting that obsessive beliefs have a specific relationship with OCS which is independent of other forms of psychopathology, a finding consistent with literature.<sup>51,52</sup> In contrast to what was expected, this study found no relationship between obsessive beliefs and severity of OCS, a finding consistent with literature data.<sup>20</sup>

Our results indicate that pregnant women with OCS and obsessive-compulsive personality traits have experienced symmetry/exactness obsessions and cleansing/washing compulsions as dominant OCS types, probably because these symptoms are more self-conscious and more difficult to change.<sup>41</sup> With regard to the severity of symptoms, it was found that pregnant women with obsessive-compulsive personality traits had statistically significant greater severity of compulsions compared to those without an obsessive-compulsive personality traits.

According to the literature, checking compulsions and aggressive, sexual, religious, somatic and hoarding obsessions seem to predominate in people with OCD and comorbid anxiety<sup>25,53</sup> whilst in our study contamination obsessions and cleaning/washing compulsions were the prevailing symptoms in pregnant women with OCS and anxiety. This difference could be attributed to the urge of pregnant women to control the safety of the environment and prepare it for the newborn. The severity of OCS was not different between pregnant women with and without anxiety, as in another study;<sup>53</sup> however, there are also studies which showed that comorbid anxiety increases the severity of OCS.<sup>49</sup>

According to OCCWG<sup>19</sup> OCD and anxiety subjects differed on two scales of the OBQ-44 (Responsibility/ Threat estimation and Importance/Control of thoughts) but not on Perfectionism/Certainty. In our study, pregnant women with high levels of anxiety showed higher ratings on obsessive beliefs and more specifically on responsibility/threat estimation, as well as on perfectionism/certainty. This finding could be attributed to the fact that our study was carried out in a perinatal population in which there is high sense of responsibility for causing harm or failure to prevent it.<sup>54</sup> However, there are also studies, which show that there is no difference in obsessive beliefs between people with OCD with or without comorbid anxiety.<sup>55</sup>

Previous studies comparing patients with OCS with or without depression revealed differences in clinical severity and type of OCS. Our results are in part consistent with the international literature, as similarly to other studies we found that people with depression were more likely to present aggressive obsessions and checking compulsions.<sup>25,26</sup> but not religious, somatic and sexual obsessions.<sup>25,53</sup> However, there are also studies that have not found any relationship between any OCS type and comorbid depression.<sup>27</sup> The contradictory finding in this study about religious obsessions could be attributed to the small sample size, while only 3 (10%) pregnant women had experienced this type of symptom and therefore the results are of limited power. However, other studies have shown that contrary to aggressive, contamination, symmetry/exactness obsessions and corresponding compulsions, the religious obsessions have a neutral or positive effect and probably that is why pregnant women with such obsessions did not show depression symptoms.<sup>56</sup> In literature there are some findings that patients with OCD and depression comorbidity exhibit greater severity in OCS than non-depressive OCD patients,<sup>26,27,53</sup> as in the present study.

Additionally, depression and obsessive beliefs, and more specifically of responsibility/threat estimation, were positively correlated, a finding similar to previous studies.<sup>57,58</sup> One possible explanation for the finding above is that the sudden increase in sense of responsibility for causing or not preventing damage and the overestimation of the probability and severity of threat due to the arrival of the new family member in conjunction with presence of OCS leads to feelings of guilt for these symptoms resulting in the development of depressive symptoms.<sup>26,53</sup>

No statistical differences were found in symptom profile, dysfunctional beliefs and comorbidity between pregnant women with previous history of OCS and those with OCS onset in their current pregnancy, a finding which could be attributed to the small sample size. The perinatal period is a high-risk time for the onset or exacerbation of OCD and many experience perinatal-specific OCS.<sup>2,3</sup> More specifically, according to a review, 10% to 25% of pregnant women experience OCS.<sup>8</sup> It is also noteworthy that according to a recent meta-analysis between 13% and 39% of pregnant OCD women had the onset of OCD during pregnancy and this occurred mainly in the 2nd trimester, a finding suggesting that that pregnancy may be a specific risk factor for the occurrence and/or exacerbation of OCD.<sup>2</sup> In our study, no statistical differences were found in symptom profile, dysfunctional beliefs and comorbidity between pregnant women with previous history of OCS and those with OCS onset in their current pregnancy, a finding which could be attributed to the small sample size. Further studies are needed to understand the factors associated with the onset of OCD during pregnancy. To our knowledge, no prospective studies

of antenatal OCD features either in women who suffered from the disorder before pregnancy or who developed it during the perinatal period have been published.<sup>59</sup>

Our study has some limitations. First, the sample size was small (N=30), heterogeneous in stage of pregnancy and in time of OCS occurrence. Secondly, due to its cross-sectional design, possible changes in the type of OCS over time, such as variation and/or emergence were not assessed. Thirdly, it was not possible to find the direction of the relationship between depressive, anxiety symptoms and OCS, since cross-sectional and correlative data do not indicate causality.

Future studies will need to be designed with larger, heterogeneous and more representative sample from gynecological and psychiatric clinics, both public and private. Prospective cross-sectional and longitudinal studies in each trimester of pregnancy and postnatally are needed. Further research is needed to elucidate the relationship between obsessive beliefs and OCS, as it is not yet clear in literature which beliefs are more influential or whether certain areas of beliefs relate to specific symptom subtypes.<sup>20</sup> It would also be interesting, when studying OCS in pregnancy, to examine the idiosyncratic interpretations and the contribution of other beliefs, such as metacognitive beliefs, which have been found to be stronger predictors of OCS than others.<sup>60</sup> Finally, prevention and educational programs that aim to women at risk of developing OCS and assessing their effectiveness could significantly contribute to enriching available literature on OCS in the sensitive phase of perinatal period.

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# Ερευνητική εργασία

## Ιδεοψυχαναγκαστικά συμπτώματα στην κύηση: Η σχέση τους με ιδεοληπτικές πεποιθήσεις και χαρακτηριστικά ιδεοψυχαναγκαστικής προσωπικότητας

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#### ΠΕΡΙΛΗΨΗ

Περιορισμένα και ασυνεπή είναι τα ευρήματα στη βιβλιογραφία όσον αφορά στη σχέση μεταξύ των ιδεοληπτικών πεποιθήσεων και των ιδεοψυχαναγκαστικών συμπτωμάτων και από όσο γνωρίζουμε δεν υπάρχουν διαθέσιμα δεδομένα σε εγκυμονούσες γυναίκες. Ένα ακόμη ενδιαφέρον ερευνητικό πεδίο που δεν έχει μελετηθεί επαρκώς είναι η σχέση μεταξύ των χαρακτηριστικών της ιδεοψυχαναγκαστικής προσωπικότητας και των ιδεοψυχαναγκαστικών συμπτωμάτων καθώς δεν υπάρχουν αντίστοιχες μελέτες στην περιγεννητική περίοδο. Οι στόχοι της έρευνας ήταν η διερεύνηση της σχέσης μεταξύ των ιδεοψυχαναγκαστικών συμπτωμάτων που εμφανίζονται στην κύηση με τις ιδεοληπτικές πεποιθήσεις και τα χαρακτηριστικά της ιδεοψυχαναγκαστικής προσωπικότητας. Συμμετείχαν 30 εγκυμονούσες με ιδεοψυχαναγκαστικά συμπτώματα, ανεξαρτήτως της διάγνωσής τους, που παρακολουθούνταν από ψυχιατρικό νοσοκομείο αλλά και ιδιωτικά. Τους χορηγήθηκε η Σύντομη Διεθνής Νευροψυχιατρική Συνέντευξη (MINI), η Κλίμακα Ιδεοψυχαναγκαστικής Συμπτωματολογίας (Y-BOCS), το Ερωτηματολόγιο Ιδεοληπτικών Πεποιθήσεων (OBQ-44), το Ερωτηματολόγιο Ιδεοληπτικών Στοιχείων Προσωπικότητας (Leyton trait Scale) και η Νοσοκομειακή Κλίμακα Μέτρησης Άγχους και Κατάθλιψης (HADS). Τα κυρίαρχα συμπτώματα ήταν οι ιδεοληψίες επιθετικότητας (73,3%), οι ιδεοληψίες μόλυνσης (53,3%), οι καταναγκασμοί καθαρισμού/πλυσίματος (50%) και οι καταναγκασμοί ελέγχου (43,3%). Οι εγκυμονούσες με χαρακτηριστικά ιδεοψυχαναγκαστικής προσωπικότητας εμφάνισαν ιδεοληψίες συμμετρίας/ ακρίβειας (p=0,020) και καταναγκασμούς καθαρίσματος/πλυσίματος (p=0,011) ως κυρίαρχα είδη ιδεοψυχαναγκαστικών συμπτωμάτων και μεγαλύτερη βαρύτητα καταναγκασμών (p=0,049). Τα αποτελέσματα της λογιστικής παλινδρόμησης δείχνουν ότι οι ιδεοληπτικές πεποιθήσεις της σπουδαιότητας/ανάγκης ελέγχου των σκέψεων και της υπευθυνότητας/υπερεκτίμησης της απειλής προέβλεψαν τα ιδεοψυχαναγκαστικά συμπτώματα, ενώ η πεποίθηση της τελειοθηρίας/βεβαιότητας δεν προέβλεψε κάποια διάσταση των ιδεοψυχαναγκαστικών συμπτωμάτων. Αξιοσημείωτο είναι ότι οι περισσότερες παρατηρούμενες σχέσεις μεταξύ των ιδεοληπτικών πεποιθήσεων και των ιδεοψυχαναγκαστικών συμπτωμάτων παρέμειναν ακόμη και μετά τον έλεγχο των μεταβλητών άγχους και κατάθλιψης, προτείνοντας ότι οι ιδεοληπτικές πεποιθήσεις έχουν μια συγκεκριμένη σχέση με τα ιδεοψυχαναγκαστικά συμπτώματα η οποία είναι ανεξάρτητη από άλλες μορφές ψυχοπαθολογίας. Η συννόσηση καταθλιπτικών συμπτωμάτων αύξησε τη βαρύτητα των ιδεοψυχαναγκαστικών συμπτωμάτων, ενώ η συννόσηση με αγχώδη συμπτώματα δεν επηρέασε τη βαρύτητα των ιδεοψυχαναγκαστικών συμπτωμάτων. Χρειάζονται περισσότερες μελέτες σε μεγαλύτερα και πιο ετερογενή δείγματα.

**ΛΕΞΕΙΣ ΕΥΡΕΤΗΡΙΟΥ:** Ιδεοψυχαναγκαστικά συμπτώματα, εγκυμοσύνη, περιγεννητική περίοδος, χαρακτηριστικά ιδεοψυχαναγκαστικής προσωπικότητας, δυσλειτουργικές πεποιθήσεις, άγχος, κατάθλιψη.

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