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Postpartum obsessive-compulsive disorder: sociodemographic and clinical characteristics

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Background: Pregnancy, childbirth and parenthood are major life events that have been associated with increased vulnerability for the development of obsessive-compulsive disorder (OCD).

Objectives: To explore the sociodemographic and clinical factors found in postpartum mothers with OCD.

Methods: One hundred and twenty-six mothers presenting with OCD in postpartum period, attending the EPI clinic of Bangabandhu Sheikh Mujib Medical University, Dhaka were conveniently enrolled for the study. OCD was diagnosed by using Mini International Neuropsychiatric Interview (MINI) Scale-7. Sociodemographic and relevant clinical data were collected by a semi-structured questionnaire.

Results: Majority of the participants belonged to the age group 21-30 years. One-fifth had family history of mental illness; almost half of the participants had past history of OCD. A significant number of participants had medical co-morbidity and majority of the participants had depressive symptoms.

Conclusions: Past history of OCD are associated with OCD symptomatology in postpartum mothers. Majority of the mothers also had depressive symptoms.

Declaration of interest: None

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Keywords: Postpartum OCD; comorbidity; cross-sectional study.

Introduction

Obsessive-compulsive disorder (OCD) is a common psychiatric disorder and a burden for the society due to associated disability of daily activities. The symptoms of prenatal and postnatal OCD vary widely from individual to individual. Epidemiological studies conducted in several countries reported a current OCD prevalence of 1% and lifetime prevalence between 2-3%.^{1,2} Several epidemiological studies suggested that OCD is more prevalent in females compared to males.³⁻⁶ Similarly, contamination obsession and cleaning compulsions are

observed more frequently in females compared to males.⁷ The presentation of symptoms are different between the genders, epidemiology and symptomatology of OCD show several variations during the life time of women such as postpartum onset of OCD seems to be more frequently associated with aggressive obsessions compared to non-postpartum onset of OCD.^{8,9} This study was aimed at finding the sociodemographic and relevant clinical factors associated with postpartum OCD.

Methods

It was a hospital-based cross-sectional study. This study was conducted during the period of September 2018 to February 2019 in the EPI and OCD clinics of Psychiatry Department of Bangabandhu Sheikh Mujib Medical University, Bangladesh. Study participants were the mothers presenting with OCD in postpartum period. By convenient sampling technique, 126 mothers were enrolled for the study. OCD was diagnosed by using Mini International Neuropsychiatric Interview (MINI) Scale-7. Sociodemographic and relevant clinical data were collected by a semi-structured questionnaire.

Results

Majority of the participants (67.5%) belonged to the age group 21-30 years and were graduates (30.2%), housewives (54.8%) and lived with their husband (83.3%). Most of them came from urban areas (74.6%) and 88.1% were Muslims. Mean (\pm SD) age of the study participants was 27.5 ± 4.9 with a range of 18-41 years. Among them, 34.1% had medical co-morbidity. The characteristics of the study participants are presented below (Table 1).

Table 1: Sociodemographic characteristics of postpartum OCD mothers (N=126)

Characteristic	Frequency (n)	Percentage (%)
Age group		
<20	9	7.1
20-30	85	67.5
31-40	31	24.6
>40	1	0.8
Religion		
Islam	111	88.1
Hinduism	13	10.3
Buddhism	2	1.6
Relationship status		
Single mother	5	4
Divorced	3	2.4
Widowed	1	0.8
Husband living abroad	12	9.5
Living with the husband	105	83.3

Among them, 34.1% had medical co-morbidity. Hypertension was the most common medical co-morbidity present in 13.5% participants. Psychiatric co-morbidity was present in 59.5% cases and 38.1% had depressive disorders. The clinical characteristics of the participants are given below (Table 2).

Table 2: Clinical characteristics of postpartum OCD mothers (N=126)

Characteristic	Frequency (n)	Percentage (%)
Family history of mental illness		
Present	29	23
Absent	97	77
Past of history of OCD		
Present	57	45.2
Absent	69	54.8
Co-morbid medical illness		
Present	43	34.1
Absent	83	65.9
Type of co-morbid medical illness		
Hypertension	17	13.5
Diabetes mellitus	4	3.2
Hypothyroidism	7	5.6
Hyperthyroidism	2	1.6
Skin disorders	6	4.8
Bronchial asthma	4	3.2
Breast tuberculosis	1	0.8
Type of co-morbid psychiatric illness		
Depressive disorder	48	38.1
Generalized anxiety disorder	24	19.0
Panic disorder	2	1.6
Conversion disorder	1	0.8

Discussion

The mean age found was 27.5 ± 4.9 years which was similar to Zambaldi et al.'s findings of 27 ± 6.05^{10} in Brazil and a Pakistani cohort study finding of 26.2 ± 3.2 years.¹¹ In this study it was observed that 23% patients had family history of mental illness, 45.2% had past history of OCD. In a study by Arnold in Ohio, a history of psychiatric disorders was found in 30% first-degree relatives.¹² Another retrospective study done in USA of a group of outpatient women with OCD, reported that 29% of women with a past history of OCD had postpartum exacerbation of OCD and 37% had postpartum depression.¹³

Regarding co-morbid medical illness in this study, it was observed that 34.1% patients had medical co-morbidity and 59.5% had psychiatric co-morbidity. A study of an Illinois cohort found approximately 27.5% of women have an anxiety disorder and 70.6% of women have comorbid depressive disorder.¹⁴ Early postpartum period is reported to be a time of increased vulnerability to panic disorder, with figures ranging from 0.5 to 1.5% at 6 week postpartum.¹⁵ Overbeek et al. found that comorbidity with depression is associated with chronicity and a poor prognosis of the disorder.¹⁶ An Ohio study found approximately 20% of women had comorbid diagnosis of bipolar disorder.¹² Panic disorder can present for the first time in the early postpartum period.¹⁶ Panic disorder affects approximately 10% of postpartum women.¹⁷

Conclusions

Women have increased risk of OCD or obsessive-compulsive symptoms in the postpartum period. Women, particularly those with previous psychiatric history, positive family history, medical and psychiatric co-morbidity or with complications during pregnancy or following delivery, should be carefully screened out and managed for mental disorders.

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