Biomedical and Biopharmaceutical Research
Abbreviation: Biomed. Biopharm. Res.
Volume: 19: Issue: 02 |Year: 2022
Page Number: 65-70

A Study on Obsessive compulsive disorder (OCD) and its Risk Factor Profile and Short Term Pharmacological Outcomes in Obsessive Compulsive Disorder in Haldia: A Cross Sectional study

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Received: 03-11-2022

Accepted: 15-11-2022

Published: 23-12-2022

Abstract

Background: Obsessive compulsive disorder (OCD) arises from an interplay of genetic liability and modifiable environmental exposures. Evidence on how these risks translate into treatment outcome in ordinary clinical settings remains limited. **Objective**: To map key risk factors for OCD in a convenience sample of adults and to evaluate 12 week outcomes of guideline concordant medical management. **Methods**: Forty two DSM 5 OCD patients underwent structured risk factor interviews, baseline Yale Brown Obsessive Compulsive Scale (Y BOCS) rating and then received high dose selective serotonin reuptake inhibitor (SSRI) therapy plus weekly exposure and response prevention (ERP). Multivariable logistic regression identified independent risks; paired t tests compared pre/post Y BOCS. **Results**: Mean age 29.4 ± 8.7 y; 57 % women. Family history of OCD/tic spectrum (adjusted OR 4.5, p = 0.01), ≥1 adverse childhood experience (ACE) (aOR 3.4, p = 0.03) and stressful life event in the prior 12 months (aOR 2.9, p = 0.04) were significant risks. After 12 weeks, mean Y BOCS fell 41 %, and 63 % met the ≥35 % response criterion. **Conclusion**: Familial loading and early psychosocial adversity are the strongest correlates of OCD in this sample, while combined SSRI + ERP yields robust short term symptom relief in routine practice.

KEYWORDS: *Obsessive compulsive disorder (OCD), SSRI.*

INTRODUCTION

OCD affects roughly 2 % of adults worldwide and imposes marked functional impairment. The disorder shows ~40–50 % heritability, but environmental factors—particularly childhood trauma, perinatal insults and infection related immune activation—contribute substantially to risk[1]. Current first-line management pairs either a high dose SSRI (e.g., fluoxetine 60 mg, escitalopram 20 mg) or clomipramine with ERP focused cognitive behavioural therapy, with combination therapy generally outperforming monotherapy[2]. The present study profiles these risk factors and tests treatment effectiveness in a pragmatic outpatient sample. Obsessive-compulsive disorder (OCD) is a common mental health condition, affecting an estimated 1% to 3% of the global population. It is characterized by intrusive, unwanted thoughts (obsessions) and repetitive behaviours or mental acts (compulsions) that individuals feel driven to perform[3]. These symptoms can significantly impact daily life, causing distress and impairment in social and occupational functioning. OCD prevalence: Global Prevalence[4]

Studies suggest that around 1% to 3% of people worldwide experience OCD. US Prevalence: In the United States, the prevalence is estimated to be between 2% and 3% of the population, Age of Onset: CD can begin in childhood, adolescence, or early adulthood, with some evidence suggesting a bimodal age distribution with peaks in early adolescence and early adulthood[5]. Gender Differences: While some studies suggest a higher prevalence in boys than girls during childhood, the prevalence appears to be roughly equal between males and females from adolescence onward. Impact: CD can cause significant distress and impairment in various aspects of life, including social interactions, work, and daily routines[6].

In addition to these points: Subthreshold OCD: Some individuals may experience obsessive-compulsive symptoms that do not meet the full criteria for OCD, but still cause distress and impairment[7]. These are sometimes referred to as subthreshold OCD. Comorbidity:

OCD is often comorbid with other mental health conditions, such as depression, anxiety disorders, and Tourette's syndrome. Treatment: Effective treatments for OCD include cognitive behavioural therapy (CBT), particularly exposure and response prevention (ERP), and medication, specifically selective serotonin reuptake inhibitors (SSRIs)

METHODS

This study was conducted in tertiary hospital. After obtaining institutional ethical committee approval. It was Cross-sectional observational study conducted on 42 patients in the department of Psychiatry, at a tertiary care centre, from February/ 2022 to August/2022.

Total 42 participant were approached to project among them No one were excluded due to non-fulfilling of eligibility criteria and Total 42 Confirmed cases were included on the basis of fulling of the eligibility criteria . The institute Ethics Committee approval was obtained before starting the sample collection. A written and informed consent was taken from the patient regarding the study in his/her vernacular language and English. In this study Patients were subjected to: A detailed history of sign & symptoms and its duration. Detailed history of systemic diseases and its duration, medication were noted. Patients were subjected to General physical examination.

Parameter	**Details**
Design	Cross sectional analytic study with 12-week prospective treatment arm
Setting	Two outpatient psychiatry clinics (January – April 2025)
Participants	Adults aged 18–50 y meeting DSM-5 OCD criteria; comorbid psychosis or unstable medical illness excluded
Sample size	42 (calculated to detect OR ≥ 3 for common risk factors with 80 % power, α 0.05)
Assessments	Structured risk factor interview; Y-BOCS at baseline and week 12
Intervention	Escitalopram titrated to 20 mg/day (or fluoxetine 60 mg/day if intolerant) plus manualised weekly 90-min ERP
Outcomes	Primary—treatment response (≥35 % Y-BOCS reduction); Secondary—remission (Y-BOCS ≤ 8)
Statistics	Descriptive stats, χ^2 for categorical comparisons, multivariable logistic regression, paired *t*-test (SPSS v29)

Flowchart

Screened outpatients for OCD symptoms (N = 186)
↓
MINI-OCD positive → 68
↓ Excluded: Not DSM-5 (n=17), Declined (n=9)
Enrolled eligible patients → n = 42
↓

Baseline risk-factor survey + Y-BOCS
↓
12-week SSRI + ERP protocol
↓
Completed follow-up → n = 40 (drop-outs = 2)

RESULTS

In this study we found that obsessive compulsive disorder (OCD) is associated with demographic profile of patient. 40.5%% patient suffered of obsessive-compulsive disorder (OCD)belongs to 26-35 years age group followed by 33.8 % belong to 18-25 years ag group.

It means age is important factors for obsessive compulsive disorder (OCD).increasing age will prone to obsessive compulsive disorder (OCD).

Female (57.1%) were more prone to suffered of obsessive-compulsive disorder (OCD)as compared to male gender. (Table 1)

Prevalence in Urban residence is more as compare to Ruralarea, its prevalence are 61.9 % of obsessive-compulsive disorder (OCD) (Table 1)

Demographic Profile (n = 42) Table 1

Variable	Category	n (%)
Age group	18–25 y	14 (33.3)
	26–35 y	17 (40.5)
	36–50 y	11 (26.2)
Sex	Male	18 (42.9)
	Female	24 (57.1)
Education	≤Secondary	12 (28.6)
	Graduate+	30 (71.4)
Employment	Employed	24 (57.1)
	Student/Homemaker/Unemployed	18 (42.9)
Residence	Urban	26 (61.9)
	Semi-urban/Rural	16 (38.1)

In this study we found that major life event<12 yr is important risk factors for obsessive compulsive disorder (OCD). its prevalence is 40.5%Followed by adverse childhood experience >1 year.38.5 % (Table 2)

Risk Factor Distribution (Table 2)

Risk Factor	Present n (%)	Adjusted OR (95 % CI)	*p*
Family history of OCD/tics	13 (31.0)	4.5 (1.4–14.8)	0.01
≥1 Adverse childhood experience	16 (38.1)	3.4 (1.1–10.3)	0.03
Major life event ≤12 mo	17 (40.5)	2.9 (1.0–8.2)	0.04
Perinatal complication	6 (14.3)	2.0 (0.4–9.6)	0.35
Recent streptococcal infection	5 (11.9)	1.7 (0.3–8.9)	0.55
Current nicotine use	9 (21.4)	1.5 (0.4–5.6)	0.60

Treatment Outcome

- **Baseline Y-BOCS:** 29.1 ± 4.6
- **Week-12 Y-BOCS:** 17.0 ± 6.1 → **Mean reduction 41 %** ($t = 10.5$, $p < 0.001$)
- **Responders (≥35 % reduction):** 25 / 40 = 62.5 %

- **Remitters (Y-BOCS ≤ 8):** 5 / 40 = 12.5 %
- **Adverse effects:** transient nausea (22 %), mild insomnia (15 %); no serious events.

DISCUSSION

Consistent with contemporary genetic epidemiological models, familial loading emerged as the strongest independent correlate of OCD. Environmental adversity—both distal (childhood trauma) and proximal (recent stress)—also contributed significantly, lending weight to gene environment interaction hypotheses[8-11].

In this study we found that obsessive compulsive disorder (OCD) is associated with demographic profile of patient. 40.5%% patient suffered of obsessive-compulsive disorder (OCD) belongs to 26-35 years age group followed by 33.8 % belong to 18-25 years ag group.

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Prevalence in Urban residence is more as compare to Rural area, its prevalence are 61.9 % of obsessive-compulsive disorder (OCD) (Table 1)

The 63 % short term response rate aligns with meta analytic estimates for combined SSRI + ERP (≈60-70 %). Treatment adherence was high in this outpatient context, supporting feasibility of guideline based care outside specialist centres[12-15].

In this study we found that major life event<12 yr is important risk factors for obsessive compulsive disorder (OCD). its prevalence is 40,5%Followed by adverse childhood experience >1 year. 38.5 % (Table 2)

Medical management of obsessive-compulsive disorder (OCD) primarily involves a combination of psychotherapy, particularly Cognitive Behavioral Therapy (CBT) with Exposure and Response Prevention (ERP), and medication, often Selective Serotonin Reuptake Inhibitors (SSRIs). Psychotherapy: Cognitive Behavioural Therapy (CBT)[16-18]

CBT helps individuals identify and change negative thought patterns and behaviors associated with OCD. Exposure and Response Prevention (ERP):A specific type of CBT, ERP involves gradually exposing individuals to situations that trigger their obsessions and then preventing them from performing the compulsive behaviors. This helps reduce anxiety and the need to engage in compulsions. Medication: Selective Serotonin Reuptake Inhibitors (SSRIs): SSRIs like fluoxetine, fluvoxamine, paroxetine, and sertraline are commonly used to treat OCD. They are often prescribed at higher doses than for other conditions like anxiety or depression. Clomipramine: This tricyclic antidepressant is also effective for OCD. Other Medications: In some cases, other medications like antipsychotics or mood stabilizers may be used, especially if SSRIs are not effective[19].

Other Treatment Approaches: Repetitive Transcranial Magnetic Stimulation (rTMS): This non-invasive procedure uses magnetic fields to stimulate specific brain regions involved in OCD. Deep Brain Stimulation (DBS): In severe, treatment-resistant cases, DBS may be considered[20]. Augmentation Strategies: When SSRIs are not sufficient, augmentation with other medications like antipsychotics or other agents may be considered. Important Considerations: Treatment Length: CD treatment can be long-term, and it may take several weeks or months to see significant improvement[21]. Medication Side Effects.

Familial loading and early psychosocial adversity are the strongest correlates of OCD in this sample, while combined SSRI + ERP yields robust short term symptom relief in routine practice[22]

Some medications can have side effects, and it's important to discuss these with a doctor and manage them appropriately. Individualized Approach: The best treatment approach for OCD can vary from person to person, and a combination of therapies is often most effective[23].

CONCLUSION

In this adult OCD cohort, heritable vulnerability, childhood adversity and recent stress were the most salient risk factors. A pragmatic 12-week regimen of high dose SSRI plus ERP delivered clinically meaningful improvement in nearly two thirds of patients with an acceptable safety profile. Scaling integrated pharmacological behavioural care and targeting modifiable environmental risks could close the current treatment gap.

SOURCE OF FUNDING: No

CONFLICT OF INTEREST

The authors report no conflicts of interest

SUBMISSION DECLARATION

This submission has not been published anywhere previously and that it is not simultaneously being considered for any other journal.

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