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Review Article

Expert opinion on challenges in the diagnosis and treatment of OCD in India

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ABSTRACT

Obsessive-compulsive disorder (OCD) is considered as a significant cause of disability worldwide, ranking among the top 10 causes. The diagnosis of OCD is often delayed due to the reluctance of patients to share their symptoms. OCD is also associated with the presence of other comorbid psychological conditions like anxiety, depression, and schizophrenia among others, which adds to the challenge of accurate diagnosis. Delayed diagnosis and the presence of comorbid conditions have a poor prognosis. Hence, an increased awareness about identifying symptoms of OCD among doctors and the general public is important. Even though clinical practice guidelines outline the management for OCD, challenges in appropriate management exist. This review elaborates the challenges associated with the diagnosis and management of OCD in India and presents insights from experts which can help doctors in early diagnosis and appropriate management of this debilitating condition.

Keywords: Obsessive-compulsive disorder, Selective serotonin reuptake inhibitor, Fluvoxamine

INTRODUCTION

Obsessive-compulsive disorder (OCD) is a group of related disorders characterized by the presence of intrusive and unwanted thoughts, images, impulses, or urges called obsessions, along with repetitive behaviors or mental acts known as compulsions.[1] This psychiatric Illness is considered as significant cause of disability worldwide, ranking among the top 10 causes.[2] The lifetime prevalence of OCD ranges between 2% and 3% in the general population and the rate of prevalence varies across regions.[3]

The average age of onset of illness is estimated to be around 19.5 years.[4] About 0.25-4% of patients have the onset of symptoms in childhood and adolescence.[5] It is unusual to have OCD present initially over the age of 30.4 The data about variations in prevalence between the sexes are not unanimous.[6] However, the age of onset differs significantly for males and females with nearly 25% of males having onset before the age of 10 and females having onset usually after 10 years of age, with the highest incidence during adolescence.[3] OCD is polygenic and heritable with a large additive genetic risk contributing to the disorder and associated comorbidities.[7] Neurobiology of OCD involves overactivity of structures such as the orbitofrontal cortex (OFC), along with alterations in the basal ganglia, especially the caudate nucleus.[8] Pathophysiological imbalance and dysregulation in the fronto-striatal functional circuitry that controls goal-directed versus habitual actions, has been hypothesized as a fundamental mechanism causing the compulsive behavior.[9]

OCD is considered as a debilitating neuropsychiatric disorder often co-occurring with other disorders and has a limited response to conventional treatments in about 50% of patients; nevertheless, significant improvement or

remission is possible with evidence-based treatment.[10] Therefore, early screening and assessment of OCD along with associated comorbidities is important to develop a tailored treatment plan for the patient.[11] However, the initial consultation and diagnosis are often delayed by a few years to several decades, which further complicate the condition.[2]

Sometimes the condition even remains underdiagnosed due to patients reluctancy in sharing their symptoms and lack of understanding by the family and prevailing social stigma in the family.[11] Another reason for the delayed diagnosis is “poor insight,” or the deficit of the capacity of judgment by the patient-4-36% of OCD patients have poor or no insight about their symptoms and their pathology.[12] Poor insight is also associated with longer duration of illness or longer time without seeking treatment.[12] The duration of untreated illness ranges between 7.0 and 20.9 years.[13]

A series of focused group meetings with psychiatrists across India were conducted with a main objective to understand the challenges faced in the diagnosis and treatment of OCD in India. This article discusses the recommendations for the diagnosis and treatment of OCD in the Indian clinical scenario from the various important inputs and insights collated from the series of meetings in light of the literature evidence.

PREVALENCE OF OBSESSIVE-COMPULSIVE DISORDER IN INDIA AND COMMON SYMPTOMS

Expert discussions

Of all the patients seeking psychiatric consultation with the experts in a typical week, 10% have OCD. This percentage has increased to 20 after the pandemic. Thus, a high suspicion of index should be maintained for OCD diagnosis. Experts across groups agreed that the highest number of cases (60%) of OCD are seen in those aged 20-40 years. About 30% of patients are aged above 40 years and 10% of patients are under 20 years of age. The first onset is usually around the age of 20 years. Thus, most of the patients with OCD are in the reproductive age.

There was no agreement among experts about higher prevalence in either sex; however, most mentioned that OCD is more common in females. Males generally present with treatment resistant cases. While all obsessions and compulsions are observed in patients of different ages and sex, some symptoms predominate in certain patient profiles (Table 1). Notably, most adult patients have a history of childhood symptoms. Among patients with OCD, 3-5% of them show purely obsessive OCD or OCD with mental compulsions only, i.e., no overt compulsions.

Published evidence

The National Mental Health Survey of India 2015-2016 reported the OCD prevalence in India as 0.76%.[14] However, the reason for the lower prevalence in India compared to the rest of the world could be the reluctance of patients to disclose their irrational fears and thoughts due to social stigma.[15] A retrospective chart review of 125 patients with OCD from a private psychiatric clinic in

India over several years showed that the gender distribution of the disease was almost equal (males 55%, females 45%) with an age of onset in the late 20s.[15] This study also stated that the highest reported compulsive symptoms were cleaning and checking, while the most frequent obsessional symptoms were "feeling that something bad will happen" and blasphemous thoughts.[15]

A cross-sectional study that evaluated 173 children and adolescents in an outpatient setting across six centers in India showed that the mean age of onset of OCD was 12.3±2.76 years, the most common obsessions were doubts about contamination and aggressive thoughts, and the most common compulsions were and washing, checking, and repeating.[16] In one of the largest epidemiological studies in the world, a study of OCD in adolescents reported from India, the prevalence of self-reported OCD symptoms was 0.8% (1.1% in boys and 0.5% in girls), it increased from 0.5% at 12-13 years to 1.1% at 16-18 years, and in 31% adolescents the duration of symptoms was >2 years.[17]

Common obsessions-compulsions and symptom dimensions in patients with OCD identified through various studies globally are shown in Table 2.[4]

COMORBIDITIES ASSOCIATED WITH OCD

Expert discussions

Around two thirds of the patients with OCD have other psychiatric comorbidities (Figure 1). Most of the patients with OCD also show depressive symptoms. Therefore, all patients with depression should be questioned for the presence of OCD symptoms. Other comorbidities include schizo-obsessive disorder and anxiety. The percentage of patients with bipolar disorder (BD) is 20% and psychotic features is 10%.

Around 5% of patients with OCD show symptoms of trichotillomania. Olanzapine/clozapine-induced OCD is seen in 2-5% of patients. The presence of comorbidities pose challenges for OCD diagnosis since OC symptoms may get masked by the symptoms of the comorbid conditions. This can also lead to misdiagnosis. About 60% of patients have pure OCD or OCD with mental compulsions. These patients may not show overt compulsions thus leading to missed diagnosis.

Published evidence

The reported lifetime prevalence of BD in patients of OCD varies widely, ranging from 6-55.8% and that of schizophrenia ranging from 5-65%.[18,19] The pooled

prevalence of BD in OCD reported in a meta-analysis was 18.35%.[20] According to a retrospective Indian study, about 28% of patients had OCD with BD while 13% had OCD with schizophrenia.[15] In another Indian study among children and adolescents, one-third of the patients had comorbid psychiatric disorders; 15% of patients had depression and 11% had anxiety disorders.[21] The common comorbidities associated with OCD include anxiety disorders, mood disorders, impulse control disorders, and substance use disorders. It is critical to evaluate all OCD patients for comorbid mental disorders since misdiagnosis and inadequate treatment will affect treatment outcomes.[4]

For instance, many people with OCD have a substance use disorder (SUD) and individuals with co-occurring OCD-SUD will often deny or under-report symptoms. A significant barrier to an effective dual diagnosis of OCD-SUD is lack of adequate training among professionals about the dual disorder.[22] Likewise, when a patient presents with both psychotic and obsessive-compulsive symptoms, the clinician needs to make a differential diagnosis that includes comorbid schizophrenia and OCD, OCD with poor insight, and schizophrenia with antipsychotic-induced obsessive-compulsive symptoms.

The diagnosis has prognostic implications. The presence of obsessive-compulsive symptoms or comorbid OCD in a person with schizophrenia has been associated with poor prognosis. However, accurate diagnosis is important because treatments for OCD and schizophrenia differ.[23] In patients with Tourette syndrome (TS), repetitive behaviors might manifest as a more "OCD-like" type. Compulsions can resemble tics, and thus, sequences of motor tics may be misdiagnosed as compulsions in these patients.[24]

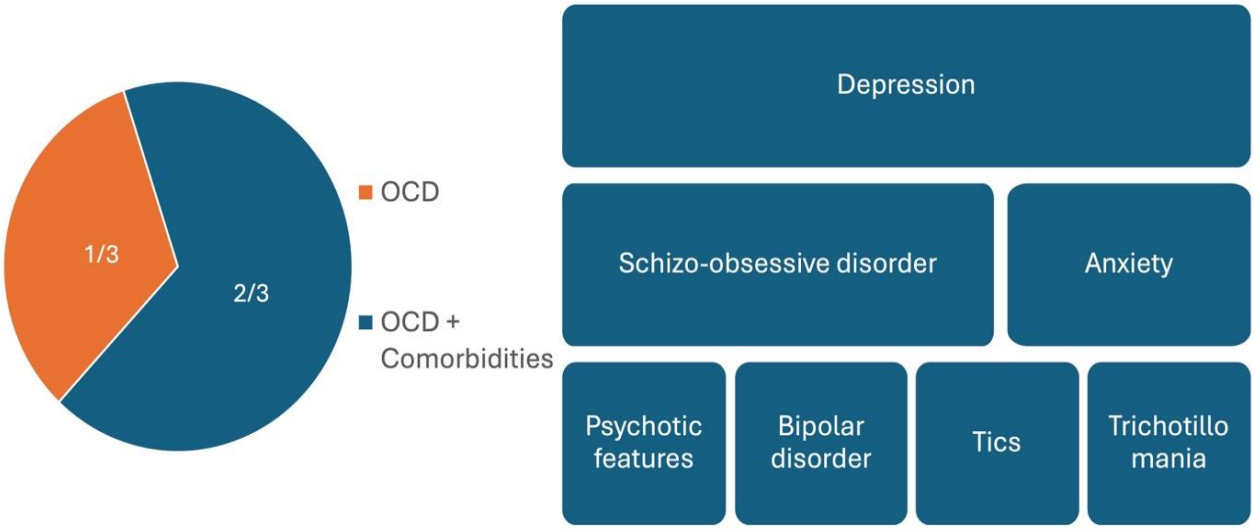

Figure 1: Comorbidities associated with OCD according to the experts' clinical experience. OCD, obsessive-compulsive disorder.

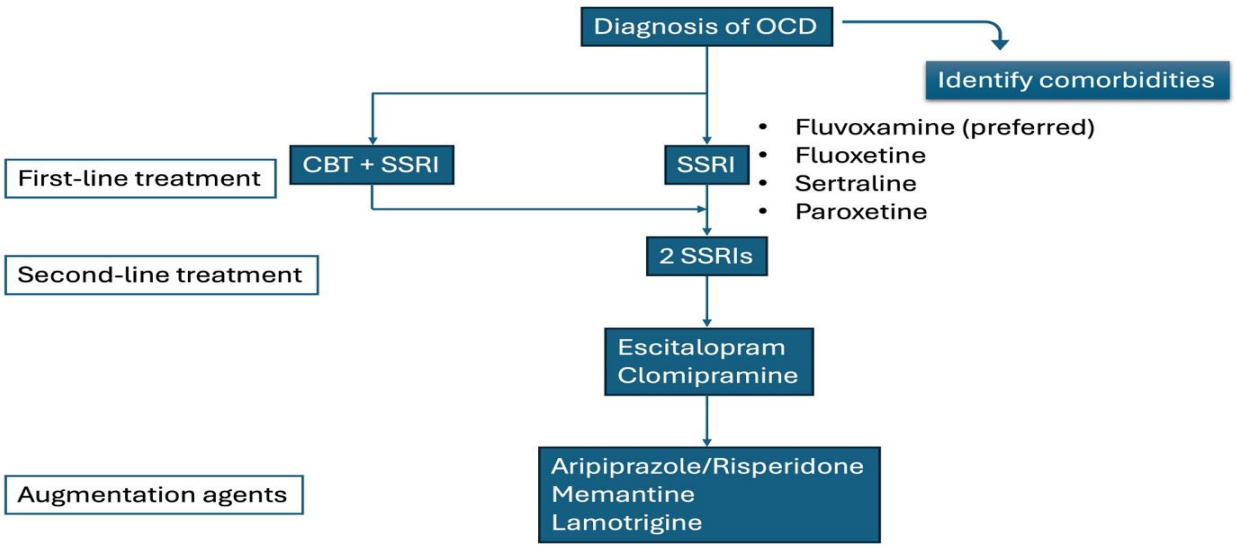

Figure 2: Recommended treatment algorithm for OCD by experts. CBT, cognitive behavioral therapy; OCD, obsessive-compulsive disorder; SSRI, selective serotonin reuptake inhibitor.

DIAGNOSIS OF OCD

Expert discussions

The diagnosis of OCD is often delayed, sometimes even by 7-8 years. This is due to the embarrassment felt by patients in sharing their symptoms. Women often do not approach psychiatrists as washing and cleaning is considered as normal behavior among them. Further, other psychiatric conditions have some symptoms that are similar to OCD. As a result, OCD is often misdiagnosed for another psychiatric condition. Most experts prefer using the Yale-Brown Obsessive-Compulsive Scale (YBOCS). According to them, this scale provides a baseline for initiating treatment of OCD. Moreover, it is simple and can be easily taught to patients, requiring less than 5 min for evaluation.

They also use this scale for follow-up to check the progress and improvement with treatment. Another recommended scale is the clinical global impression scale. Other recommended investigations include the blood count, thyroid levels, cardiac check-up, and throat culture-PANDAS. Imaging studies like MRI can be performed to rule out Tourette's syndrome which is characterized by frontal projections in corona radiata. Patients should also be screened for autoimmune disorders as inflammation is one of the pathways in the pathogenesis of OCD. Gene scanning for methylation of immunomodulins (proteins) can be performed.

Published evidence

A diagnosis of OCD can be made only if obsessions and compulsions are associated with clinically significant distress or functional impairment, and if symptoms occur for prolonged periods (e.g., more than an hour per day), are distressing, or significantly interfere with daily functioning.[3] However, OCD is often misdiagnosed for other psychiatric disorders, especially in the presence of comorbidities, as mentioned above.[4] The reasons for the delay in diagnosis include the stigma and shame surrounding OCD and a failure to identify its signs and symptoms. Schizophrenia is characterized by delusions and behavioral anomalies that often overlap with obsessions and compulsions leading to a diagnostic conundrum.[25] Moreover, intrusive thoughts and repetitive behaviors are common in the general population.[3] Hence, in routine clinical practice OCD is often misdiagnosed and mistreated (e.g., diagnosed as a psychotic disorder and treated with antipsychotic monotherapy).[3] Physicians should consider the possibility of OCD in patients with general complaints of anxiety or depression.[4]

A general psychiatric assessment is essential to differentiate OCD from normal health and other psychiatric conditions.[3] Various tools can be used for the diagnosis of OCD. YBOCS is considered the gold standard scale to measure the severity of the disease and is the most widely used for diagnosing OCD in adults and children.[4,26,27] YBOCS includes a symptom checklist consisting of 15 types of obsessions and compulsions, including miscellaneous symptoms. A total score of more than 16 indicates clinically significant OCD.[4]

However, this tool measures global symptom severity and not the severity of each particular symptom dimension. The scale requires the patient to rank the time occupied by obsessive thoughts and compulsions based on severity, the interference and distress caused by obsessive thoughts, the patient's resistance against obsessions and the degree of control achieved, the time occupied by compulsive behavior, the interference and distress caused by compulsive behavior, and the patient's resistance and degree of control achieved over compulsive behaviors.[28]

Table 1: Expert opinion on predominant OCD symptoms in different patient profiles.

Patient profile	Predominant OCD symptoms
Children	Counting, arranging, and causing harm to dear ones
Adults	Cleaning/washing, religious rituals
Menopausal women	Sexual thoughts
Post-partum women	Fear of harming their child
Men	Sexual thoughts
Elderly men	Sexual thoughts

OCD, obsessive-compulsive disorder

Table 2: Common symptoms of OCD.[4]

Obsession	Compulsion
Fear of harm/Aggressive thoughts	Avoidance and ask, tell, or confess for reassurance
Contamination	Washing/cleaning rituals
Pathologic doubt	Checking, performing actions in a particular order
Religious thoughts	Ask, tell, or confess for reassurance
Self-control	Avoidance

Continued.

Obsession	Compulsion
Sexual thoughts	Avoidance and mental rituals
Superstition	Counting
Symmetry and exactness	Ordering and arranging

OCD, obsessive-compulsive disorder

Table 3: Expert opinion on predictors of poor response to treatment.

Age > 40 years
Cluster B personality
Onset at early age
3-4 obsessions at a time
Need for higher augmentation doses
Lack of acceptance about the disorder
Bipolar disorder with OCD
Family history of OCD
Long duration of OCD
Previous treatment wherein all SSRIs have already been administered

OCD, obsessive-compulsive disorder; SSRI, selective serotonin reuptake inhibitor.

Table 4: Guidelines for the treatment of OCD.

National institute for health and care excellence (NICE) CG31 guidelines[18]	American psychiatric association (APA) guidelines [19]	Indian psychiatry society practice guidelines[20]
Adults with mild functional impairment should be directed towards low-intensity CBT	An SSRI alone may also be considered in patients who have severe OCD or those who are unable to cope with the demands of CBT	All three strategies (SSRI, CBT, and their combination) are recommended as first-line therapies in all types of patients
Adults with moderate functional impairment should be provided an option to choose between intensive SSRI or CBT	SSRIs are more efficacious when used at higher doses than for depression. Combined SSRI and CBT treatment can be provided when the patient has a co-occurring disorder, which shows a partial response to monotherapy or SSRI	CBT + SSRI is recommended over monotherapies for severe OCD
If functional impairment is severe, combined treatment with an SSRI and CBT is recommended		CBT may be considered if SSRIs alone are not beneficial
Patients with OCD starting treatment with SSRIs should be informed that response might not be felt for as long as 12 weeks	A period of at least 8–12 weeks of SSRI treatment (with at least 4-6 weeks at the maximum tolerable dose) should be allowed before considering switching to a different drug	SSRIs are preferred over CBT as first-line treatments due to the feasibility and affordability, and the limited number of trained therapists who can administer CBT
	Clomipramine is suggested as a second-line treatment. It can be used as an add-on agent in cases of resistance based on evidence	

MANAGEMENT OF OCD

Expert discussions

Even when OCD is diagnosed, the treatment is often delayed or inadequate due to factors like social stigma, hesitancy in expressing sexual and blasphemous thoughts, and lack of compliance with treatment. While most patients are treated as outpatients, up to 15% of them have to be hospitalized for treatment. Figure 2 gives the recommended treatment algorithm for OCD by experts.

The first line of treatment recommended by experts is a selective serotonin reuptake inhibitor (SSRI). Among SSRIs, fluvoxamine is the first preferred drug due to low prevalence of sexual side effects and high selective sigma-1 receptor binding affinity that offers cognitive benefits. A second SSRI is added if there is no response to fluvoxamine.

The preferred second line of treatment is escitalopram. Fluoxetine, paroxetine, or clomipramine are other SSRIs that can be used as first-line agents. Paroxetine is

considered effective for patients with hypochondriac OCD features. Some experts continue to use clomipramine for first-line treatment. The combination of fluvoxamine and clomipramine also shows good results. However, fluvoxamine might be associated with affordability concerns for some patients. They suggest that paroxetine and clomipramine should be avoided in women of childbearing age. The preferred third line of treatment is memantine 10 mg.

The initial fluvoxamine dose prescribed is 50 mg, and it is increased by 50 mg every week to a maximum dose of 300 mg. The maximum recommended dose of escitalopram is 60 mg, paroxetine 40 mg, and sertraline 400 mg. Dose adjustment of SSRI is done every 10 days until an optimal dose is reached because rapid dose escalation can cause gastric irritation. Despite optimal dosing, if there is no response, another SSRI is added.

The dosages of drugs used for treating OCD are 2-3 times higher than those used for the treatment of depression. Up-titration helps in reducing adverse effects of the SSRI. Some of the SSRIs are also available as controlled-release (CR) formulations. CR formulations are preferred because they can be used at higher doses with fewer adverse effects. These formulations also maintain steady plasma levels of the drug, reduce the pill burden leading to better compliance, and are more cost-effective. Moreover, CR formulations can replace immediate-release options during the course of treatment. In children with OCD, fluvoxamine 100 mg CR is the optimal dose.

The response to treatment is assessed after 80 days (10-11 weeks), and the duration of therapy is usually 1-2 years. If compulsions persist or are severe, treatment might be necessary for life. Cognitive behavioral therapy (CBT) forms an important part of the treatment for OCD. CBT can be initiated along with pharmacotherapy and continued for 2-3 months. In children, CBT is the first line of treatment. Around 85% of patients are treated in the OPD setting, and 15% might require admission (those with OCD Spectrum disorder, resistant cases, suicidal cases).

Cases that are difficult to treat include those with comorbid psychotic features/ bipolar features, patients with low intelligence quotient, and antipsychotic-induced OCD. Some adverse effects are associated with drugs used for the treatment of OCD. SSRIs can lead to sexual dysfunction and weight gain. SSRIs are known to cause delayed ejaculation in men, which could be sexually frustrating. Most patients do not report the sexual side effects.

Furthermore, treatment compliance also reduces due to these side effects. Since most of the patients with OCD (60%) are in the reproductive age, an SSRI with the least propensity to cause sexual side effects is ideal. Fluvoxamine causes the least sexual adverse effects while paroxetine causes the maximum. Among all SSRIs, only fluvoxamine does not affect time to ejaculation. The experts concluded that fluvoxamine should be the first SSRI to be considered for OCD treatment. High doses of clomipramine can lead to seizures. Sertraline is associated with increased sweating and urge incontinence. Furthermore, high doses of any SSRI can lead to breakthrough seizures, and lamotrigine 100 mg is added in such cases. Table 3 gives the predictors of poor response to treatment.

Published evidence

Treatment is indicated for all patients with OCD. Desirable treatment goals are less than one hour per day spent on obsessive-compulsive behaviors and achieving minimal interference with daily tasks.[4] However, in real-life settings, the treatment of OCD is often delayed. This is because patients are embarrassed to disclose their intrusive thoughts, such as inappropriate sexual beliefs or ritualistic behavior.[15] The average delay until treatment for OCD is sought is 11 years and less than a third of OCD sufferers receive appropriate pharmacotherapy and even fewer receive psychotherapy.[4]

In an Indian study among children and adolescents, the mean delay in seeking treatment was 1.18±1.34 years.[21] Among patients seeking treatment for OCD, 12% of patients visit the clinic only once, and 8% drop out within 1 year.[15] Many OCD patients are disinclined to accept CBT because it increases anxiety; they often required repetitive assurances and family support to continue with it.[15] As soon as patients feel symptomatic relief, they discontinue regular follow-up, though most continue taking treatment.[15] Guidelines for the treatment of OCD are given in Table 4.

Based on clinical studies evaluating the efficacy of fluvoxamine, the therapeutic dose for adults with OCD is 300 mg and for children with OCD is 200 mg.[32,33] A randomized, placebo-controlled clinical study showing the efficacy of fluvoxamine in children with OCD used fluvoxamine 50-200 mg/day for treatment.[33] Published evidence shows that fluvoxamine has significantly fewer sexual side effects compared to other SSRIs. A double-blind, randomized, placebo-controlled study showed that there was no clinically relevant delay in ejaculation with fluvoxamine compared to that with sertraline, fluoxetine, and paroxetine.[34]

Fluvoxamine has low incidence of desire and arousal disorders compared to fluoxetine.[35] Also, fluvoxamine use is not associated with weight gain.[36] Moreover, the selective sigma-1 receptor binding affinity may provide cognitive benefits.[37] Although CBT has been reported to be more effective than serotonergic treatment in several studies, financial cost, difficulty in attending sessions, and fear about anxiety-provoking exercises are the perceived barriers to CBT.[38-41]. pharmacotherapy is successful, it should be continued for at least one to two years, but if the patient chooses to discontinue it, the dosage should be gradually tapered over several months, and the original

dosage should be resumed if symptoms worsen.[4] A decrease of >35% in the YBOCS score and Clinical Global Impression scale score of less or equal to two is considered a complete response; a decrease between 25 and 35% as partial response and a decrease of <25% as non-response.[10] Certain factors such as more severe disease, greater functional impairment, sexual, religious, and hoarding symptoms, higher number of comorbidities, male sex, single relationship status, lower socioeconomic status, lower educational level, family history of OCD, poor compliance to treatment, and absence of early response to selective serotonin reuptake inhibitor treatment, are associated with a poor prognosis.[3]

NEWER TREATMENTS FOR OCD (TREATMENT OF REFRACTORY CASES/ TREATMENT AUGMENTATION IN NON-RESPONDERS)

Expert discussions

About one-third of patients with OCD require augmentation with other classes of drugs. Drugs mainly used for treatment augmentation are risperidone and aripiprazole. Lithium is used as an augmenting agent in OCD patients with comorbid bipolar disorder. Naltrexone is used in children with mental disability and in patients likely to indulge in self-harm. A large proportion (60%) of cases are treatment-resistant. In such cases, modafinil or stimulants can be added; lithium or lamotrigine are also used. Repetitive transcranial magnetic stimulation (rTMS) might be performed in some cases. Only 5-10% of all patients with OCD require hospitalization. These patients are usually treatment-resistant or have comorbidities such as bipolar disorder/ schizo-affective with OCD and can cause harm to others.

Published evidence

Only up to 50% of patients with OCD respond to SSRIs.42 Newer treatment augmentation options for patients with treatment-resistant OCD are available and glutamatergic medications, such as N-acetylcysteine, memantine, lamotrigine, topiramate, riluzole, and ketamine have shown some efficacy.[43–45] Of these, the largest evidence is available for N-acetylcysteine whereas several trials supported the high efficacy with memantine in treatment-resistant OCD.[46,47] A randomized double-blind, placebo-controlled study has shown the efficacy of methylphenidate extended-release combined with fluvoxamine in patients with treatment-refractory OCD wherein the combination showed enhanced clinical response when compared to fluvoxamine alone ($p<0.001$).[48] Case studies report the efficacy of fluvoxamine alone (up to 600 mg daily) in treating refractory cases.[49,50]

Neuromodulation therapy for OCD includes transcranial direct current stimulation (tDCS), repetitive transcranial magnetic stimulation (rTMS) and deep brain stimulation (DBS).[51] With tDCS, a small amount of current is applied to the scalp, of which a small fraction reaches the brain. While initial results are promising, more research is necessary.[52] rTMS, on the other hand is a non-invasive method that uses electric currents generated by a magnetic coil placed over the head to modify neural activity and has shown increasing evidence of efficacy.[53–55] In DBS, an electrode that can trigger nearby brain circuitry is surgically implanted.[56] This method is used only in the most difficult cases (less than 1% of treatment-seeking individuals).[57] Radiation therapy and radiosurgical ablation are examples of ablative techniques.58 Magnetic resonance-guided focused ultrasound is a less invasive procedure that may be used to treat OCD.[59,60]

CONCLUSION

The challenges associated with the diagnosis and management of OCD in the Indian clinical scenario can be circumvented by increased awareness about the condition and maintaining a high index suspicion in clinical practice. The self-administered YBOCS questionnaire is a simple and useful tool for the diagnosis. Even after diagnosis, the treatment of OCD is often delayed or inadequate and therefore, psychoeducation is essential. SSRIs and CBT form the mainstay of treatment, and the duration of therapy is usually 1-2 years.

Fluvoxamine is the preferred first-line SSRI among Indian experts as the sexual adverse effects with the drug are lesser than those with other SSRIs. Although the dosages of drugs used for treating OCD are 2-3 times higher than those used for the treatment of depression, the adverse effects of the drugs are not serious. Newer treatment modalities are available, and more are emerging for the treatment of patient's refractory to standard line of treatment. However, the major challenge in OCD continues to be the delay in diagnosis and the immediate need is for steps that enable an early diagnosis.

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REFERENCES

1. Robbins TW, Vaghi MM, Banca P. Obsessive-compulsive disorder: puzzles and prospects. Neuron. 2019;102(1):27-47.
2. Sharma E, Math S. Course and outcome of obsessive–compulsive disorder. Indian J Psychiatry. 2019;61(7):43.
3. Stein DJ, Costa DLC, Lochner C. Obsessive–compulsive disorder. Nat Rev Dis Primers. 2019;5(1):52.
4. Fenske JN, Petersen K. Obsessive-Compulsive Disorder: Diagnosis and Management. Am Fam Physician. 2015;92(10):896-903.
5. Krebs G, Heyman I. Obsessive-compulsive disorder in children and adolescents. Arch Dis Child. 2015;100(5):495-9.

6. Mathes BM, Morabito DM, Schmidt NB. Epidemiological and Clinical Gender Differences in OCD. Curr Psychiatry Rep. 2019;21(5):36.
7. Mahjani B, Bey K, Boberg J, Burton C. Genetics of obsessive-compulsive disorder. Psychol Med. 2021;51(13):2247-59.
8. Gargano SP, Santos MG, Taylor SM, Pastis I. A closer look to neural pathways and psychopharmacology of obsessive-compulsive disorder. Front Behav Neurosci. 2023;17:1282246.
9. Burguière E, Monteiro P, Mallet L, Feng G, Graybiel AM. Striatal circuits, habits, and implications for obsessive–compulsive disorder. Current Opin in Neurobiol. 2015;30:59-65.
10. Swierkosz-Lenart K, Dos Santos JFA, Elowe J. Therapies for obsessive-compulsive disorder: Current state of the art and perspectives for approaching treatment-resistant patients. Front Psychiatry. 2023;14:1065812.
11. Pampaloni I, Marriott S, Pessina E. The global assessment of OCD. Comprehensive Psychiatry. 2022;118:152342.
12. Guillén-Font MA, Cervera M, Puigoriol E, Foguet-Boreu Q, Arrufat FX, Serra-Millàs M. Insight in obsessive-compulsive disorder: relationship with sociodemographic and clinical characteristics. J Psych Pract. 2021;27(6):427-38.
13. Perris F, Cipolla S, Catapano P. Duration of untreated illness in patients with obsessive–compulsive disorder and its impact on long-term outcome: a systematic review. JPM. 2023;13(10):1453.
14. Gururaj G, Varghese M, Benegal V. National Mental Health Survey of India, 2015-16: Prevalence, Patterns and Outcomes. National Institute of Mental Health and Neuro Sciences; 2016.
15. Srivastava S, Agarwal AK. A Naturalistic Study of Obsessive-compulsive Disorder: A Retrospective Chart Review. Indian Journal of Private Psychiatry. 2022;16(2):87-90.
16. Sharma E, Tripathi A, Grover S. Clinical profile of obsessive-compulsive disorder in children and adolescents: A multicentric study from India. Indian J Psychiatry. 2019;61(6):564.
17. 17. Jaisoorya TS, Janardhan Reddy YC, Thennarasu K, Beena KV, Beena M, Jose DC. An epidemological study of obsessive compulsive disorder in adolescents from India. Comprehensive Psychiatry. 2015;61:106-114.
18. Amerio A, Odone A, Liapis CC, Ghaemi SN. Diagnostic validity of comorbid bipolar disorder and obsessive–compulsive disorder: a systematic review. Acta Psychiatr Scand. 2014;129(5):343-58.
19. 19. Sharma L, Reddy YJ. Obsessive–compulsive disorder comorbid with schizophrenia and bipolar disorder. Indian J Psychiatry. 2019;61(7):140.
20. Amerio A, Stubbs B, Odone A, Tonna M, Marchesi C, Ghaemi SN. The prevalence and predictors of comorbid bipolar disorder and obsessive–compulsive disorder: A systematic review and meta-analysis. J Affec Dis. 2015;186:99-109.
21. Sharma E, Tripathi A, Grover S. Clinical profile of obsessive-compulsive disorder in children and adolescents: A multicentric study from India. Indian J Psychiatry. 2019;61(6):564.
22. Stacey C. Co-Occurring OCD and Substance Use Disorder: What the Research Tells Us. OCD Newsletter. 2015;29(4):19-21.
23. Rodriguez CI, Corcoran C, Simpson HB. Diagnosis and treatment of a patient with both psychotic and obsessive-compulsive symptoms. AJP. 2010;167(7):754-61.
24. Szejko N, Müller-Vahl KR. Challenges in the Diagnosis and Assessment in Patients with Tourette Syndrome and Comorbid Obsessive-Compulsive Disorder. NDT. 2021;17:1253-66.
25. Rasmussen AR, Nordgaard J, Parnas J. Schizophrenia-spectrum psychopathology in obsessive–compulsive disorder: an empirical study. Eur Arch Psychiatry Clin Neurosci. 2020;270(8):993-1002.
26. Goodman WK. The yale-brown obsessive compulsive scale: i. development, use, and reliability. Arch Gen Psych. 1989;46(11):1006.
27. Scahill L, Riddle MA, Mcswiggin-Hardin M. Children's yale-brown obsessive compulsive scale: reliability and validity. J American Acad of Child & Adoles Psych. 1997;36(6):844-52.
28. Vogt GS, Avendaño-Ortega M, Schneider SC, Goodman WK, Storch EA. Optimizing obsessive-compulsive symptom measurement with the yale-brown obsessive-compulsive scales—second edition. J Psych Prac. 2022;28(4):294-309.
29. Skapinakis P, Caldwell DM, Hollingworth W. Pharmacological and psychotherapeutic interventions for management of obsessive-compulsive disorder in adults: a systematic review and network meta-analysis. The Lancet Psych. 2016;3(8):730-9.
30. Riddle MA, Reeve EA, Yaryura-Tobias JA. Fluvoxamine for children and adolescents with obsessive-compulsive disorder: a randomized, controlled, multicentre trial. J Am Acad of Child & Adolescent Psychiatry. 2001;40(2):222-9.
31. Waldinger MD, Hengeveld MW, Zwinderman AH, Olivier B. Effect of SSRI antidepressants on ejaculation: a double-blind, randomized, placebo-controlled study with fluoxetine, fluvoxamine, paroxetine, and sertraline. J Clin Psychopharmacol. 1998;18(4):274-81.
32. Serretti A, Chiesa A. Treatment-Emergent sexual dysfunction related to antidepressants: A Meta-Analysis. J Clin Psychopharmacol. 2009;29(3):259-66.
33. Ordacgi L, Mendlowicz MV, Fontenelle LF. Management of obsessive-compulsive disorder with fluvoxamine extended release. Neuropsychiatr Dis Treat. 2009;5:301-8.
34. Hindmarch I, Hashimoto K. Cognition and depression: the effects of fluvoxamine, a sigma-1 receptor agonist, reconsidered. Human Psychopharmacol. 2010;25(3):193-200.

35. Foa EB, Liebowitz MR, Kozak MJ, et al. Randomized, placebo-controlled trial of exposure and ritual prevention, clomipramine, and their combination in the treatment of obsessive-compulsive disorder. AJP. 2005;162(1):151-61.
36. Storch EA, Mariaskin A, Murphy TK. Psychotherapy for obsessive-compulsive disorder. Curr Psychiatry Rep. 2009;11(4):296-301.
37. Ost LG, Havnen A, Hansen B, Kvale G. Cognitive behavioral treatments of obsessive–compulsive disorder. A systematic review and meta-analysis of studies published 1993–2014. Clin Psychol Rev. 2015;40:156-69.
38. Wolitzky-Taylor K, Chung B, Bearman SK, et al. Stakeholder perceptions of the barriers to receiving and delivering exposure-based cognitive behavioral therapy for anxiety disorders in adult community mental health settings. Community Ment Health J. 2019;55(1):83-99.
39. Pittenger C. Pharmacotherapeutic Strategies and New Targets in OCD. In: Fineberg NA, Robbins TW, eds. The Neurobiology and Treatment of OCD: Accelerating Progress. Current Topics in Behavioral Neurosciences. Springer International Publishing; 2021;49:331-84.
40. Costa DLC, Diniz JB, Requena G. Randomized, double-blind, placebo-controlled trial of n-acetylcysteine augmentation for treatment-resistant obsessive-compulsive disorder. J Clin Psych. 2017;78(7):766-73.
41. Rodriguez CI, Levinson A, Zwerling J, Vermes D, Simpson HB. Open-label trial on the effects of memantine in adults with obsessive-compulsive disorder after a single ketamine infusion. J Clin Psychiatry. 2016;77(5):688-9.
42. Fineberg NA, Reghunandanan S, Simpson HB. Obsessive–compulsive disorder (OCD): Practical strategies for pharmacological and somatic treatment in adults. Psychiatry Research. 2015;227(1):114-25.
43. Couto JP, Moreira R. Oral N-acetylcysteine in the treatment of obsessive-compulsive disorder: A systematic review of the clinical evidence. Progress in Neuro-Psychopharmacology and Biological Psychiatry. 2018;86:245-54.
44. Kishi T, Matsuda Y, Iwata N. Combination Therapy of Serotonin Reuptake Inhibitors and Memantine for Obsessive– Compulsive Disorder: A Meta-Analysis of Double-Blind, Randomized, Placebo-Controlled Trials. JAD. 2018;64(1):43-8.
45. Zheng H, Jia F, Han H, et al. Combined fluvoxamine and extended-release methylphenidate improved treatment response compared to fluvoxamine alone in patients with treatment-refractory obsessive-compulsive disorder: A randomized double-blind, placebo-controlled study. European Neuropsychopharmacol. 2019;29(3):397-404.
46. Solyom L, Solyom CAE. Successful fluvoxamine treatment of a case of refractory obsessive-compulsive disorder. Can J Psychiatry. 1990;35(8):696-8.
47. Kocamer Şahin Ş, Demir B, Altindağ A. Remission of treatment-resistant obsessive-compulsive disorder with 600 milligrams of fluvoxamine daily: a case report. Int Clin Psychopharmacol. 2023;38(4):273-4.
48. Kammen A, Cavaleri J, Lam J. Neuromodulation of OCD: A review of invasive and non-invasive methods. Front Neurol. 2022;13:909264.
49. Senço NM, Huang Y, D'Urso G. Transcranial direct current stimulation in obsessive–compulsive disorder: emerging clinical evidence and considerations for optimal montage of electrodes. Expert Rev Med Dev. 2015;12(4):381-91.
50. Berlim MT, Neufeld NH, Van Den Eynde F. Repetitive transcranial magnetic stimulation (rTMS) for obsessive–compulsive disorder (OCD): An exploratory meta-analysis of randomized and sham-controlled trials. J Psych Res. 2013;47(8):999-1006.
51. Zhou DD, Wang W, Wang GM, Li DQ, Kuang L. An updated meta-analysis: Short-term therapeutic effects of repeated transcranial magnetic stimulation in treating obsessive-compulsive disorder. J Affec Dis. 2017;215:187-96.
52. Rehn S, Eslick GD, Brakoulias V. A meta-analysis of the effectiveness of different cortical targets used in repetitive transcranial magnetic stimulation (rTMS) for the treatment of obsessive-compulsive disorder (OCD). Psychiatr Q. 2018;89(3):645-65.
53. Luis LJ. Tracking the mechanisms of deep brain stimulation for neuropsychiatric disorders. Front Biosci. 2008;13:5892.
54. Garnaat SL, Greenberg BD, Sibrava NJ. Who qualifies for deep brain stimulation for OCD? data from a naturalistic clinical sample. JNP. 2014;26(1):81-6.
55. Miguel EC, Lopes AC, McLaughlin NCR. Evolution of gamma knife capsulotomy for intractable obsessive-compulsive disorder. Mol Psychiatry. 2019;24(2):218-40.
56. Jung HH, Kim SJ, Roh D. Bilateral thermal capsulotomy with MR-guided focused ultrasound for patients with treatment-refractory obsessive-compulsive disorder: a proof-of-concept study. Mol Psych. 2015;20(10):1205-11.
57. Jung HH, Chang WS, Kim SJ, Kim CH, Chang JW. The potential usefulness of magnetic resonance guided focused ultrasound for obsessive compulsive disorders. J Korean Neurosurg Soc. 2018;61(4):427-33.
58. National collaborating centre for mental health (UK). obsessive-compulsive disorder: core interventions in the treatment of obsessive-compulsive disorder and body dysmorphic disorder. British psychological society, UK. 2006. Available at: http://www.ncbi.nlm.nih.gov. Accessed on 31st July 2024.
59. Koran LM, Hanna GL, Hollander E, Nestadt G, Simpson HB, American psychiatric association. Practice guideline for the treatment of patients with obsessive-compulsive disorder. Am J Psychiatry. 2007;164(7):5-53.

60. Janardhan Reddy Y, Sundar A, Narayanaswamy J, Math S. Clinical practice guidelines for obsessive-compulsive disorder. Indian J Psychiatry. 2017;59(5):74.

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