



## Brief Review on Obsessive Compulsive Disorder

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### ABSTRACT:

Obsessions are unwelcome, intrusive, and persistent thoughts, pictures, emotions, or desires that are frequently linked to worry. Compulsions are habitual actions or thoughts that a person feels compelled to carry out in response to an obsession in accordance with strict guidelines or in order to feel "complete.". OCD usually begins early in life and lasts for a very long time. According to neuropsychological theories, changes in the front striatal circuitry are the cause of OCD. One of the most important initial steps in the diagnosis and treatment of OCD is a thorough evaluation. The designed Clinical Interview for DSM-5 (SCID-5 Clinician or Research version) for adults and the Anxiety Disorders Interview Schedule for DSM-5 (ADIS-5), which has both an adult and a child or parent version, are two structured diagnostic interviews used to diagnose OCD. Cognitive behavioral therapy (CBT) and medication using selective serotonin reuptake inhibitors (SSRIs) are first-line therapies).

Keywords: Obsessions, compulsions , DSM-5 , Cognitive behavioral therapy (CBT) ,selective serotonin reuptake inhibitors (SSRIs) .

### Introduction

The neuropsychiatric condition known as obsessive-compulsive disorder (OCD) is typified by disturbing, time-consuming, or minimally damaging obsessions or compulsions (or both). With a lifetime frequency of 1 to 3%, OCD is the fourth most frequent psychiatric disorder.<sup>[1]</sup>

The presence of compulsions and/or obsessions is a indication of OCD. Obsessions are unwelcome, intrusive, and persistent thoughts, pictures, emotions, or desires that are frequently linked to worry. Compulsions are habitual actions or thoughts that a person feels compelled to carry out in response to an obsession in accordance with strict guidelines or in order to feel "complete."<sup>[2]</sup>

In the past, the Diagnostic and Statistical Manual of Mental Disorders (DSM) classified OCD as an anxiety condition. Nonetheless, the DSM divided OCD from the "Anxiety Disorders" section in the fifth edition and added a new section titled "Obsessive-Compulsive and Related Conditions." Researchers noticed significant distinctions between OCD and anxiety disorders, which led to the modification.<sup>[3]</sup>

The anterior cingulate gyrus, basal ganglia, and orbitofrontal cortex are among the brain regions implicated in the pathogenesis. All things considered, OCD might result from an issue with the brain's cortico-striato-thalamo-cortical circuit. OCD has been linked to neurotransmitters such as glutamate, dopamine, and serotonin.<sup>[4]</sup>

When combined with excessive worrying and contamination anxieties, OCD may be a serious OCD was once thought to be uncommon. Nonetheless, OCD was found to be among the most common mental diseases in the first thorough community survey that employed operational criteria for the diagnosis of mental disorders.and burdensome condition that manifests itself in a dizzying range of ways. The most obvious way it manifests itself is through checking and washing.<sup>[5]</sup>

OCD is ranked by the World Health Organization as one of the ten disorders that most severely impair life quality and cause lost income..<sup>[6]</sup>

### Pathophysiology

Dorsolateral prefrontal cortex (DLPC), anterior cingulate cortex (ACC), basal ganglia, orbito-frontal cortex (OFC), striatum, amygdala, thalamus, and brainstem are among the brain regions affected by OCD.<sup>[9]</sup>

Studies primarily using structural and functional imaging provide the foundation for this theory. OCD may also impact the hippocampal, superior temporal gyrus, and parietal lobe. The brain region most relevant to OCD may be the basal ganglia. The execution of learnt behaviors is one of the complex integrative motor and behavioral processes performed by the basal ganglia. The striatum (caudate nucleus and putamen), globus pallidus,

substantia nigra, nuclear accumbens, and subthalamic nucleus make up the basal ganglia. Acquired OCD has been linked to documented lesions of the basal ganglia. [4]

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## Epidemiology :

OCD was once thought to be uncommon. Nonetheless, OCD was found to be among the most common mental diseases in the first thorough community survey that employed operational criteria for the diagnosis of mental disorders.

OCD usually begins early in life and lasts for a very long time. Almost 25% of male participants in the National Comorbidity Survey Replication (NCS R) study had onset before to the age of ten. OCD typically manifests in females throughout adolescence, while some women may experience symptoms during the peripartum or postpartum period. [2]

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## Etiology

OCD has a complicated etiology that involves many different aspects, such as neurological, biochemical, genetic, cognitive, and environmental components. Twin research indicates a strong genetic propensity with an estimated heritability quotient of roughly 48%..[7]

According to neuropsychological theories, changes in the frontostriatal circuitry are the cause of OCD. Hyperactivation of the orbitofrontal cortex has been proposed to mediate persistent thoughts about threat and harm (ie, obsessions), which in turn lead to attempts to balance the perceived threat (ie, compulsions). Functional neuroimaging studies provide strong evidence that OCD patients, including adults and children, have higher activation in the lateral and medial orbitofrontal cortex..[8]

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## Diagnosis

One of the most important initial steps in the diagnosis and treatment of OCD is a thorough evaluation. This assessment aims to accurately diagnose the patient, gather information about the presentation of obsessive-compulsive symptoms, estimate the severity of the symptoms, and help choose appropriate therapy targets. Taking a thorough psychiatric history and assessing the mental state constitute the main components of this assessment. Furthermore, a number of well-researched assessment tools with strong psychometric qualities may be helpful in identifying symptoms, measuring the intensity of symptoms, tracking the effectiveness of treatment, and diagnosing OCD.

The designed Clinical Interview for DSM-5 (SCID-5 Clinician or Research version) for adults and the Anxiety Disorders Interview Schedule for DSM-5 (ADIS-5), which has both an adult and a child or parent version, are two structured diagnostic interviews used to diagnose OCD. A shorter version of the DSM-5-revised Mini International Neuropsychiatric Interview (MINI version 7.0) is available for use with both adults and children/adolescents. For OCDs, a Structured Clinical Interview may be helpful in determining common comorbidities [5]

OBSESSIONS	DESCRIPTONS/EXAMPLES
Contamination	worries about sickness, body waste, dirt, and germs
Symmetry	needing everything to be "just so," precisely, or arranged in an arbitrary manner
Aggressive	The majority of the time, the focus is on unintentional harm, such starting a fire or breaking into someone's home; but, there are also horrifying ideas or visuals of purposefully hurting somebody, like stabbing a loved one or knocking someone over by accident.
Sexual	Unpleasant hetero-erotic thoughts or undesired, improper sexual ideas concerning children are examples of disturbing sexual thoughts that are not in line with a person's orientation or cultural norm
Religious	Examples include having ideas about selling one's soul to the devil, purposefully thinking unsuitable things about well-known religious people, or sinning gravely.
Somatic	Exaggerated worries about getting a brain tumor or a catastrophic illness like hepatitis in the absence of any known high risk.

COMPULSIONS	DESCRIPTIONS/EXAMPLES
Washing	Overindulgence in hand washing, showering, or cleaning
Checking	turning on and off the burner repeatedly; going over every email again to make sure the content is suitable; driving around the block to make sure nobody was struck; desiring constant comfort
Ordering	Folding garments precisely or positioning all cans in the cabinet with their labels facing outward
Counting	executing a task a predetermined, arbitrary number of times, like tapping each foot four times to get out of bed
Repeating	Stair climbing or toilet flushing repeatedly; usually done to chase away a negative notion or until it feels "right"

### DSM-IV-TR diagnostic criteria for obsessive-compulsive disorder

Obsessions as defined by:

- Persistent and recurrent inappropriate and intrusive thoughts, urges, or pictures that significantly increase worry or distress.
- Ideas, feelings, or visions that go beyond obsessive concern with actual issues
- Dismissing or repressing such ideas, feelings, or visions, or counterbalancing them with different ideas or deeds
- The admission that the obsessive thoughts, emotions, or images are personal and not forced by outside forces

Compulsions as defined by:

- Repetitive actions or thoughts that the person feels compelled to carry out as a result of an obsession or in accordance with strict standards that must be followed
- Overindulgent actions or thoughts that are obviously intended to avoid or lessen discomfort or to stop a feared event or circumstance

Other criteria:

- The individual (does not apply to youngsters) has acknowledged that the obsessions or compulsions are excessive or unjustified.
- The obsessions or compulsions are extremely distressing, take up a lot of time (more than an hour per day), or seriously impair the person's ability to perform in social and professional contexts.
- Other Axis I disorders are not exclusive to the obsessions and compulsions.
- Neither a general medical condition nor a substance's direct physiological effects are the cause of the disturbance.[11]

### Treatment

Pharmacotherapy, specialist psychotherapy, anatomically targeted treatments, or a combination of these approaches can be used to treat OCD. Cognitive behavioural therapy (CBT) and medication using selective serotonin reuptake inhibitors (SSRIs) are first-line therapies<sup>[12]</sup>

Establishing a therapeutic partnership and providing psych education is the first step in treating OCD. Other components of treatment include psychological and/or pharmaceutical methods, neurosurgery and neuromodulator for patients whose OCD is resistant to treatment. Although they need further research, alternative therapies have also piqued attention. While there are fundamental management concepts, each situation requires a customized approach.

Therefore, some comorbid diseases (like depression) can be treated with first-line OCD pharmacotherapies, whereas other comorbid conditions (like bipolar disorder) may need for further interventions. While identical psychotherapies and pharmacotherapies are employed across the lifespan, treating children and adolescents requires certain important adjustments; a thorough examination of these is outside the purview of this primer.<sup>[11]</sup>

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