Obsessive Compulsive Disorder

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Key points

- Immunological causes of obsessive-compulsive disorder
- Morbidity and mortality in obsessive-compulsive disorder
- Diagnosis and stages of OCD
- The Genetic Architecture of obsessive-compulsive disorder
- Empirical severity benchmarks for obsessive - compulsive disorder across the lifespan

Obsessive-compulsive disorder (OCD) is a highly disabling mental illness that can be divided into frequent primary and rarer organic secondary forms. Its association with secondary autoimmune triggers was introduced through the discovery of Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococcal infection (PANDAS) and Pediatric Acute Onset Neuropsychiatric Syndrome (PANS). Autoimmune encephalitis and systemic autoimmune diseases or other autoimmune brain diseases, such as multiple sclerosis, have also been reported to sometimes present with obsessive-compulsive symptoms (OCS). Subgroups of patients with OCD show elevated proinflammatory cytokines and autoantibodies against targets that include the basal ganglia.1

Obsessive-compulsive disorder (OCD) is a chronic and often debilitating psychiatric condition with a prevalence of 1–2%. OCD is usually accompanied by a range of psychiatric comorbidities, substantially reduced quality of life, and long-term socio-economic adversity. Like in other, there is increased awareness that OCD may also be associated with a range of general medical conditions and premature mortality.2 Obsessive-compulsive disorder (OCD) is a severe and common mental illness with a lifetime prevalence of 1–3% in adults. Because of the underlying stigma, considerable delays are common before OCD is diagnosed and a treatment is initiated. Affected patients suffer from agonizing irrational thoughts (obsessions) that lead to a strong emotional reaction,such as anxiety or disgust, and repeated excessive behavior (compulsions) to reduce this anxiety. The most common compulsive thoughts concern contamination (in ~50% of patients), and the most common compulsive behaviors are ordering (in ~60%) and washing rituals (in ~50%;). OCD onset follows a bimodal age distribution and typically first manifests in late childhood and early adolescence or again in early adulthood. The fifth version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) distinguishes primary and secondary organic OCD forms. In the tenth version of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) criteria, only primary OCD is mentioned but a symptom code for obsessive-compulsive behavior is also included as an alternative.3

Narrow-sense heritability of OCD was estimated at 29% (SE=4%). The estimate was robust, varying only modestly under different models. Contrary to an earlier study, however, SNPs with MAF between 0.01 and 0.05 accounted for 10% of heritability, and estimated heritability per MAF bin roughly followed expectations based on a simple model for SNP-based heritability. These results indicate that common inherited risk variation (MAF ≥0.01) accounts for most of the heritable variation in OCD. SNPs with low MAF contribute meaningfully to the heritability of OCD, and the results are consistent with expectation under the “infinitesimal model” (also referred to as the “polygenic model”), where risk is influenced by a large number of loci across the genome and across MAF bins.4 Obsessive compulsive disorder (OCD) is characterized by time consuming obsessions and compulsions that cause distress and impairment. It can affect people of all ages and has a lifetime prevalence of 1-2%. The severity of OCD is assessed with the Yale-Brown Obsessive Compulsive Scale (Y-BOCS). Despite extensive use of this scale for several decades, there is still uncertainty about what constitutes subclinical, mild, moderate and severe OCD.5

References

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