# A Review of the Obsessive-compulsive Disorder

Yihe Wang<sup>1,a,\*</sup>

<sup>1</sup>University of Calgary, Calgary City, Albert Province, T2N 1N4, Canada a. jackieyw2002@gmail.com \*corresponding author

*Abstract:* OCD (Obsessive-Compulsive Disorder), as one of the top 10 most disabling conditions according to the World Health Organization, not only causes a psychological burden but also often occurs with other disorders. It can influence both individuals and society as a whole. It leads to challenges in mental health, interpersonal relationships, the economy, and public health systems. Because of the varied causes of OCD, including biological, environmental, and psychological factors, symptoms of OCD have varied sub-types. Even though there are advancements in treatments, OCD still has significant personal and societal impacts. It not only affects the mental health and well-being of individuals but also contributes to high healthcare costs and loss of productivity. This global problem should attract widespread attention from society. The paper, through a literature review, explores the causes, symptoms, influences, and treatment of OCD. The paper finds that OCD is a deeply challenging disorder with wide-ranging influences on individuals and society. Even though progress in understanding and treating OCD has been made, future research is still necessary to identify the cause of OCD and create even more robust treatments.

Keywords: OCD, symptoms, causes, influences

#### 1. Introduction

Obsessive-Compulsive Disorder (OCD) is a chronic mental health condition defined by one's obsessions and compulsions [1]. Obsessions are intrusive thoughts or images that cause distress, and compulsions are repetitive behaviors or mental acts in order to reduce the anxiety associated with these obsessions [1]. A typical example of OCD is that an individual may be involved in excessive hand-washing due to the fear of contamination or repeatedly checking door locks and windows to avoid harm [2]. These symptoms can cost time and disrupt daily functioning significantly.

OCD is a global problem, and it affects approximately 1-2% of the world population [3]. It has been ranked in the top 10 most disabling conditions according to the World Health Organization (2020), which highlights its societal impact. This disorder not only causes a psychological burden but also often occurs with other disorders like generalized anxiety disorder and major depressive disorder, which increase its negative impact on mental health and individuals' well-being [4]. Furthermore, the financial impact of OCD is also a problem, as it can lead to the loss of productivity and high healthcare costs [5].

The paper, through a method of literature review, explores the causes, symptoms, influences and treatment of OCD and finds that OCD is a deeply challenging disorder with wide-ranged influences

on individuals and society. Even though progress in understanding and treating OCD has been made, future research is still necessary to identify the cause of OCD and create even more robust treatments.

# 2. The cause of OCD

OCD is a multifaceted disorder influenced by biological, environmental, and psychological factors. Genetics plays a significant role in OCD. Studies have shown that individuals have a heritability rate of 45%-65% in first-degree relatives with OCD [6]. Genetic variations affecting serotonin and glutamate have also been associated with OCD [7]. Neurological abnormalities contribute further to the dysfunction of specific brain circuits and neurotransmitter systems. For example, Serotonin (5-HT) dysfunction is one of the most studied biochemical abnormalities in OCD [8]. Reduced the activity can underline the symptoms, which is supported by the efficacy of Selective Serotonin Reuptake Inhibitors (SSRIs) in the treatments [8]. Environmental influences, especially during early childhood, can lead individuals to OCD due to traumatic experiences such as abuse, which are associated with an increased risk of OCD [9]. Furthermore, stressful life events such as significant losses can often act as catalysts for the onset of OCD [10]. For psychological factors, behavioral models suggest that OCD symptoms are kept through reinforcement, where compulsions can temporarily reduce anxiety caused by obsessions [11]. Cognitive models emphasize maladaptive thoughts and their patterns, such as perfectionism and overestimation of danger, which can worsen obsessions and compulsions [12].

# 3. The symptoms of OCD

OCD is characterized by two main symptoms: obsessions and compulsions [1]. Thoughts caused by obsessions are often irrational and persistent, such as fears of contamination or causing harm [1]. Compulsions are repetitive behaviors that are used to reduce the distress caused by obsessions, such as washing hands or silently repeating phrases [1]. Even though these actions may temporarily relieve anxiety, they often reinforce the obsessive-compulsive cycle, which makes the symptoms chronic and time-consuming [2]. OCD symptoms can vary widely but are commonly grouped into sub-types. First of all, symmetry and order are characterized by a preoccupation with perfect balance, leading to repeated ordering of objects [2]. Second, contamination and cleaning, involved intense fears of germs, resulting in too much cleaning [2]. Third, harm and checking, described the fear of causing harm to oneself or others, causing repetitive checking and thinking [2]. Finally, intrusive thoughts referred to as distressing and unwanted thoughts, often occur without observable compulsions but causing significant mental distress [2]. The DSM-5 shows specific criteria for diagnosing OCD. These include the presence of obsessions, compulsions, or both, that can be time-wasting and cause impairment in social, occupational, or other areas of functioning [1].

# 4. Treatments of OCD

Effective treatment for OCD involves solving the complex interplay of cognitive, emotional, environmental, and biochemical factors [5]. Both psychological therapies and pharmacological interventions play important roles in controlling symptoms and improving the quality of life for individuals with OCD [2]. Cognitive-Behavioral Therapy (CBT) is one of the most widely known for treating OCD, and this approach focuses on modifying maladaptive thoughts and behaviors that maintain obsessive-compulsive cycles [2]. CBT helps individuals challenge their fear, such as severe fear over contamination or harm, which often is the reason of their obsessions and compulsions [2]. A specialized form of CBT is Exposure and Response Prevention (ERP), which has proven effective for OCD. ERP involves gradually exposing patients to their fear stimuli while letting them resist having compulsive behaviors [13]. For example, someone with contamination fears may be

encouraged to touch a handle or doorknob and not wash their hands immediately. Over time, this exposure decreases the anxiety associated with obsessions and the need for compulsions [13]. Pharmacological interventions are another part of OCD treatment. SSRIs, such as sertraline, are the top-choice medications for OCD. These drugs work by increasing serotonin levels in the brain, which can decrease symptoms for many patients. SSRIs are more effective when combines with psychological therapies, which can enhance the overall treatment. An integrated approach that combined both psychological therapies and pharmacological treatments often shows the best outcomes for individuals with OCD by treating the emotional, cognitive, and biochemical components of OCD. Such an approach not only reduces symptoms but also improves individuals' lives, contributing to long-term recovery and their well-being [5].

## 5. The influences of OCD on individuals and society

OCD can influence not only individuals but also society as a whole. It leads to challenges in mental health, interpersonal relationships, the economy, and public health systems. For individuals, OCD can significantly impact mental health and their overall quality of life. Individuals with OCD often have chronic anxiety and frustration due to their inability to control intrusive thoughts and compulsive behaviors, and this struggle can lead to low self-esteem and feelings of helplessness, then lead to mental distress [2]. OCD also affects daily life, such as causing disruptions in daily routines, relationships, and problems in academics [14]. For example, someone with contamination fears may avoid school or work environments for fear of being exposed to germs, which can lead to social isolation [2]. The societal impacts of OCD are also significant. OCD contributes to increased healthcare costs, decreased workforce productivity, and more economic burdens [15]. Many individuals with severe OCD require long-term therapy, special care, or even hospitalization, which creates more burden on healthcare systems [5]. Moreover, many individuals who suffer from OCD cannot maintain steady employment due to OCD, which can reduce their economic status too and impact their overall productivity [16]. Stigma around OCD also plays an important role in its societal impact. Misunderstandings about the disorder often prevent individuals from seeking help and treatment,. As a result, symptoms may worsen over time, leading to more suffering and expensive treatments [17]. In order to reduce these effects, raising public awareness about the knowledge of OCD is necessary. Educational campaigns can help decrease stereotypes towards OCD, clarify its symptoms and emphasize the importance of early intervention. By reducing stigma, these efforts can encourage individuals with OCD to seek help without fear of being judged, and additionally, understanding OCD among employers, educators, and so on can create a more supportive environment for people who have OCD [5,18].

#### 6. **Discussion**

OCD is a complex and multifaceted condition controlled by intrusive thoughts and repetitive behaviors that impact an individual's life qualities negatively. The causes of OCD are varied, including biological, environmental, and psychological factors. Genetics and neurological abnormalities, early childhood experiences and stressful life events may act as triggers [2,6]. Symptoms of OCD have varied sub-types, such as contamination fears, order obsession, and intrusive thoughts [2]. Treatment for OCD has advanced over the years, with psychological therapies like CBT and ERP, which have been highly effective for many individuals [13]. Pharmacological treatments like SSRIs, provide relief to patients, especially with psychological therapy alone [5]. Even there are advancements in treatments, OCD still has significant personal and societal impacts. It not only affects the mental health and well-being of individuals but also contributes to high healthcare costs and loss of productivity. To reduce these impacts, public awareness is crucial in decreasing

misconceptions about OCD and reducing stigma [18]. Increased understanding from healthcare providers and employers can create more harmonious environments for individuals with OCD, can then encourage earlier interventions and reduce the societal burden [5].

## 7. Conclusion

In conclusion, OCD is a deeply challenging disorder with wide-ranged influences on individuals and society. Even though the progress of understanding and treating OCD has been made, future research is still necessary to identify the cause of OCD and create even more robust treatments. Furthermore, continuing efforts to reduce stigma and increase the accessibility of treatments are essential for reducing difficulties in daily functioning of individuals with OCD. With more efforts on education and healthcare system support, individuals with OCD can receive the care and help they need so that they can receive fulfilling and productive lives.

Moreover, this paper has certain shortcoming, such as the lack of data and more clinical proofs. In the future, the author will investigate more on clinical proofs in order to complete future research.

#### References

- [1] American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.).
- [2] Abramowitz, J. S., Taylor, S., & McKay, D. (2009). Obsessive-compulsive disorder. The Lancet, 374(9688), 491-499.
- [3] Ruscio, A. M., Stein, D. J., Chiu, W. T., & Kessler, R. C. (2010). The epidemiology of obsessive-compulsive disorder in the National Comorbidity Survey Replication. Molecular Psychiatry, 15(1), 53-63.
- [4] Kessler, R. C., Berglund, P., Demler, O., Jin, R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry, 62(6), 593-602.
- [5] Fineberg, N. A., Dell'Osso, B., Albert, U., et al. (2013). Early intervention for obsessive-compulsive disorder: An expert consensus statement. BMC Psychiatry, 13(1), 294.
- [6] Taylor, S. (2011). Etiology of obsessive-compulsive disorder: A review and synthesis of genetic, neurobiological, and cognitive-behavioral perspectives. Clinical Psychology Review, 31(1), 37–50.
- [7] Pauls, D. L., Abramovitch, A., Rauch, S. L., & Geller, D. A. (2014). Obsessive-compulsive disorder: An integrative genetic and neurobiological perspective. Nature Reviews Neuroscience, 15(6), 410-424.
- [8] Pittenger, C., Kelmendi, B., Wasylink, S., et al. (2006). The role of serotonin in obsessive-compulsive disorder. Neuropsychopharmacology, 31(3), 412-432.
- [9] Brewerton, T. D. (2010). Stress, trauma, and OCD. Current Psychiatry Reports, 12(4), 255-261.
- [10] Cromer, K. R., Schmidt, N. B., & Murphy, D. L. (2007). An investigation of traumatic life events and obsessivecompulsive disorder. Behaviour Research and Therapy, 45(7), 1683-1691.
- [11] Meyer, V. (1966). Modification of expectations in cases with obsessional rituals. Behaviour Research and Therapy, 4(4), 273-280.
- [12] Salkovskis, P. M. (1985). Obsessional-compulsive problems: A cognitive-behavioural analysis. Behaviour Research and Therapy, 23(5), 571-583.
- [13] Foa, E. B., Yadin, E., & Lichner, T. K. (2005). Exposure and Response (Ritual) Prevention for Obsessive-Compulsive Disorder: Therapist Guide. Oxford University Press.
- [14] Stein, D. J., Costa, D. L. C., Lochner, C., et al. (2019). Obsessive-compulsive disorder. Nature Reviews Disease Primers, 5(1), 1–21.
- [15] Olatunji, B. O., Cisler, J. M., & Tolin, D. F. (2007). Quality of life in the anxiety disorders: A meta-analytic review. *Clinical Psychology Review*, 27(5), 572–581.
- [16] Koran, L. M., Thienemann, M. L., & Davenport, R. (2008). Quality of life for patients with obsessive-compulsive disorder. American Journal of Psychiatry, 155(11), 1529–1534.
- [17] Fenske, J. N., & Schwenk, T. L. (2009). Obsessive-compulsive disorder: Diagnosis and management. American Family Physician, 80(3), 239–245.
- [18] Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2012). The impact of mental illness stigma on seeking and participating in mental health care. Psychological Science in the Public Interest, 15(2), 37–70.