

2015

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Recommended Citation

Keith, Charles (2015) "Obsessive-Compulsive Disorder: A Distorted Reality," *Inquiro, the UAB undergraduate science research journal*: Vol. 2015: No. 9, Article 10.

Available at: <https://digitalcommons.library.uab.edu/inquiro/vol2015/iss9/10>

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Obsessive-Compulsive Disorder: A Distorted Reality

Charles Keith

Stressed. Constantly worrying. Fidgeting. Obsessing. These are just a few of the many constant symptoms affecting millions of people around the world. In the United States, approximately 40 million adults (aged 18 or older) are affected by some sort of anxiety disorder¹. This equates to approximately 18% of the American population.

Anxiety disorders develop from a myriad of risk factors. Your genes and your brain chemistry, as well as any traumatic events that have occurred in your life, play a large role in the development of anxiety disorders. One anxiety disorder in particular is known as obsessive-compulsive disorder (OCD). Characterized by a persistent need to check things, perform routines, or rituals, or by repetitive (often negative) thoughts, OCD can certainly disrupt a person's life². For those with OCD, every day is a constant struggle of dealing with intrusive and compulsive thoughts. Although the symptoms seem rare, OCD is a rather common condition. Approximately 2.5% of the world's population has the disorder³. This is such a large portion of the population that you probably already know someone who suffers from OCD.

People who have OCD often have compulsive responses to intruding thoughts. Those who have OCD can show a

variety of symptoms and can obsess over an array of items, topics, and ideals. Some people might have a repetitive hand washing ritual that they must perform due to a constant worry of having dirty hands. Others might exhibit symptoms of OCD by exceedingly taking on the responsibilities of those close to them. They may project their fear by constantly concerning themselves for the well-being of those who they care most about³.

The causes of OCD can vary. Many studies suggest that OCD is an onset of genetic disorders and it is likely that OCD could be a result of epigenetic alterations. Research says that OCD is mainly a problem in the communication of signals in the brain. Furthermore, the neurotransmitter, serotonin, may play a large role in this miscommunication. In a study conducted by Duke University, it was found that having larger amounts of methylated serotonin transporter DNA resulted in greater reactivity of the amygdala⁴. The amygdala is a part of the brain that plays a large role in decision-making as well as emotional reactions and memory. The study suggests that "increased promoter methylation of the serotonin transporter gene" is a good predictor for amygdala reactivity and decreased mRNA expression⁴. This indication is important because the serotonin

transporter plays a large factor in anxiety disorders, often being blocked pharmacologically to treat such disorders⁴. Also, it is important to note that any DNA methylation that occurs as a result of stress or some environmental factor could lead to the onset of OCD. Therefore, learning more about epigenetic alterations of DNA through DNA methylation is crucial in understanding OCD and anxiety disorders alike.

Unfortunately, OCD can lead to a sense of shame for those that are affected. As with some disorders not well understood by the public, OCD carries a plethora of social stigmas. Those who have OCD often do not seek treatment and attempt to hide their symptoms. However, this leads to the possibility of worsening symptoms. Ociskova *et al.* investigated the effect of stigmatization on the severity of an individual's disorders. They found that mental illness stigma tended to increase the anxiety of patients with OCD⁵. They also discovered that an increased presence of OCD was associated with an increased probability of social isolation from family members and others.

Treatments for OCD vary. One modern treatment consists of serotonergic antidepressants, which are composed of clomipramine and selective serotonin reuptake inhibitors. Current research shows that intravenous clomipramine has proven more effective than its oral counterpart⁶. Other studies have demonstrated the effectiveness of cognitive-behavioral therapy (CBT) as a means of treatment. CBT proved to be more effective in instances in which the administration of serotonin reuptake inhibitors was not an effective means of treatment.

OCD is a very critical and crippling disorder that affects 3.3 million Americans. Further studies are crucial to understanding OCD and other anxiety disorders⁷. Although treatment is available, the stigma of having an anxiety disorder can

worsen matters for an individual with OCD, or even cause them to not seek treatment. Understanding OCD as a real disorder and helping the millions of individuals suffering from it can hopefully eradicate the social stigma surrounding the disease. While you may not be able to see the direct results of OCD displayed by affected individuals, this doesn't mean that they are not suffering.

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