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Obsessive Compulsive Disorder

PSX_002 Clinical Psychology - PhDr. Pavel Humpolíček, Ph.D

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History and Theories

During the Middle Age, the typical OCD behaviors were seen as bizarre. These behaviors were explained as supernatural and as having a religious origin. The people with OCD were provided with religious treatments. At the end of the XVII century, these same behaviors began to be more connected to the scientific field than to the religious, since psychiatry began to start their way as a medical discipline. In the XIX century, the obsessions were seen as mental representations linked to external events and imposed on the individual against their own will. At the turn of the XIX century OCD begins to take the form it has today (Maia, 2007).

According to Freud and the psychoanalytic model, obsessive behaviors are based on the sexual stages and in the Libido regression notions. According to the behaviorist model, obsessional phenomena are explained by the theory of two factors of Mowrer (1939). The individual with OCD comes into emotional tension and ultimately learn to issue a compulsive avoidance behavior that temporarily reduces the anxiety. According to the cognitive model, individuals with OCD perform misinterpretations, coded in organized thoughts, and perform behaviors in response to these interpretations. According to the biological model, OCD derived of abnormalities in brain structure in specific regions, highlighting the importance of the orbitofrontal and anterior cingulate cortex, as well as elements of the original nucleus and limbic structures (Maia, 2007).

Definition and Classification – DSM-V

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), obsessive-compulsive disorder (OCD) is an anxiety disorder characterized by the presence of obsessions and/or compulsions, both causing significant interference with functioning in several domains of life such as work and school, social and leisure activities, and family setings (Taylor et al., 2008).

An **obsession** is a recurrent and persistent thought, image, or impulse that are experienced as unwanted, intrusive and unacceptable, and that cause marked anxiety or distress. Obsessions are not voluntarily produced, but the affected person recognizes that these thoughts are his own, and are not introduced or controlled by some ohter force or person. When the obsession intrudes, the individual usually attempts to ignore it or suppress it, or to neutralize it with some other thought or action (i.e., by performing a compulsion) (Rachman & De Silva, 2009).

Compulsions are repetitive behaviors or mental acts that an individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly. The aim is to prevent or reduce anxiety or distress, or preventing some dreaded event or situation; In most instances the person recognizes the senselessness or irrationality of the behaviour, perceiving it as excessive or over-elaborate. No pleasure is derived from carrying it out, although it can provide a release of tension or a feeling of relief in the short term (American Psychiatric Association, 2013; Rachman & De Silva, 2009).

DSM-V Diagnostic Criteria for OCD, 300.3 (F42)

According to DSM-V, the presence of obsessions and compulsions are the characteristic symptoms of OCD (**criterion A**). Besides that, the diagnosis for OCD also includes the following criteria: the obsessions or compulsions are time-consuming (e.g., take more than 1 hour per day) or cause clinically significant distress or impairment in social, occupational, or other important areas of functioning (**criterion B**); The obsessive-compulsive symptoms are not attributable to the physiological effects of a substance or another medical condition (**criterion C**); and the disturbance is not better explained by the symptoms of another mental disorder **(criterion D)** (e.g., excessive worries, as in generalized anxiety disorder; preoccupation with appearance, as in body dysmorphic disorder; difficulty discarding or parting with possessions, as in hoarding disorder; hair pulling, as in trichotillomania; guilty ruminations, as in major depressive disorder; or repetitive patterns of behavior, as in autism spectrum disorder). It´s also important to refer that the criterion B helps to distinguish the disorder from the occasional intensive thoughts or repetitive behaviors that are common in the general population (e.g., double-checking that a door is locked) (American Psychiatric Association, 2013).

Specifiers

Individuals with OCD vary in the degree of insight they have about the accuracy of the beliefs that underlie their obsessive-compulsive symptoms. They may good or fair insight (recognition that OCD beliefs are definitely or probably not true or that they may or may not be true). Some have poor insight (the individual thinks OCD beliefs are probably true), and a few (4% or less) have absent insight/delusional beliefs (a full recognition that OCD beliefs are true). Poorer insight has been linked to worse long-term outcome (American Psychiatric Association, 2013).

Definition and Classification – ICD-10

According with the 10th revision of the *International Statistical Classification of Diseases and Related Health Problems* (ICD-10) (World Health Organization, 1992), the Obsessive-Compulsive Disorder consists of recurrent obsessional thoughts or compulsive acts. The first ones, the obsessions, are ideas, images or impulses that enter the patient's mind repeatedly, in a stereotyped form and they are recognized as his or her own thoughts, even though they are involuntary and often repugnant. They are almost invariably distressing and the patient often tries, unsuccessfully, to resist them.

Compulsive acts or Compulsions are stereotyped behaviors that are repeated again and again. They are not inherently enjoyable, nor do they result in the completion of inherently useful tasks, being that the patient recognizes them as pointless or ineffectual and repeated attempts are made to resist, not receiving any pleasure in doing them although it may provide a release from tension. The function of this acts is to prevent some objectively unlikely event, often involving harm to or caused by the patient, which he or she fears might otherwise occur, what almost invariably leads to Anxiety. This anxiety gets worse if the patient tries to resist doing the compulsions.

The ICD-10 mentions that this disorder can consist predominantly of obsessional thoughts or ruminations, predominantly of compulsive acts, mixed obsessional thoughts and acts and other unspecified obsessive-compulsive disorders.

When it consists predominantly of obsessional thoughts or ruminations, the focus is on the previously mentioned obsessions. Sometimes these obsessive thoughts are indecisive and endless consideration of all alternatives, associated with an inability to make trivial but necessary decisions in day-to-day living without taking that particular thought into account. This kind of OCD has a particularly close relationship with Depression, being that its diagnosis should only be preferred to depression of these ruminations arise or persist in the absence of a depressive episode.

It's possible that an obsessive-compulsive disorder consists predominantly of compulsive acts and the majority of these acts are related with cleaning (particularly hand washing), repeated checking to ensure that a potentially dangerous situation has not been allowed to develop or orderliness and tidiness. Through this it's possible to understand that those behaviors are based on fear or usually on danger either to or caused by the patient, and the ritual is an ineffectual or symbolic attempt to avert that danger.

In summary, the ICD-10 definition and diagnostic criteria are broadly consistent with those of DSM-IV but are arguably more descriptive and less prescriptive, which may provide added utility for the clinician but may also reduce specificity. For instance, the ICD-10 does not expressly exclude 'worries about real life problems' (as in generalized anxiety disorder), neither does it require obsessions to be time consuming - there by relaxing the threshold for the ICD-10 diagnosis relative to DSM-IV. This allows the inclusion of less severe cases or those with an overlap with anxiety-related worries or mood-related ruminations (Fineberg, N. et al, 2015).

Epidemiology

In general, people who suffer with OCD have obsessions and compulsions in simultaneous - 96% - although they may also exist separately - 2.1% evidence obsessions in the absence of compulsive rituals and 1.7% compulsion without obsession. Compulsions are performed in response to obsessions, however, compulsions not even bring pleasure to the individual but some relief from anxiety or inner suffering (Koran et al., 1996).

The OCD in children has never been extensively studied, but has been a topic increasingly studied since it assumes a similar prevalence in children and adults - 1-3% of the population. About 40% of the cases that begin in childhood extend into adulthood, since the OCD in children can be easily confused with the fertility of imagination, or with only one phase of development, not giving so much importance to this behavior. In the case of children with OCD, they can also have obsessions and compulsions, however compulsions are easier to diagnose because they are observable. Compulsions can be considered typical of adolescence if not accompanied by a feeling of lack of control or if it's a normal phase of development (Skriner et al., 2016).

The onset of OCD in adults occurs around the age of 19 and in children around the age of 10. In adults there is no gender significant difference, however, in children, boys are more likely to have OCD than girls (Piacentini et al., 2003). In dimensions, the most common is harm avoidance and checking, then cleanliness and washing, and, finally, symmetry and ordering (Ortiz et al., 2016).

Symptoms dimensions of OCD

Most of OCD patients do not fit neatly into specific symptom categories. Actually, the majority of them report multiple symptoms of different kinds. Therefore, may be preferable the examination of OCD symptom dimensions than symptom subtypes.

Therefore, according to DSM-V, certain themes or dimensions may be identified. Those include the dimension of **cleaning** (contamination obsessions and cleaning compulsions), in which the purpose of the repetitive washing is to remove the threat of the perceived contamination. Include the dimension of **symmetry** (symmetry obsessions and repeating, ordering, and counting compulsions), **forbidden or taboo thoughts** (e.g., aggressive, sexual, or religious obsessions and related compulsions) and **harm**, characterized by the fear of harming to oneself or others and by the checking compulsions, that are attemps to reduce the probability of some misfortune occurring. Some individuals also have difficulties discarding and **accumulate** (hoard) objects as a consequence of typical obsessions and compulsions, such as fears of harming others (American Psychiatric Association, 2013; Rachman & De Silva, 2009).

Also, regards to the content of obsessions, there are three common themes, in descending order of frequency: unwanted thoughts aggression/harm, unwanted sexual thoughts, and blasphemous thoughts (Rachman & De Silva, 2009).

Etiology

Speaking about the biological factors, it's possible to say that POC has often a genetic, hereditary origin, although the transmission mode of the disorder and the surrounding genes are not yet known (Fontenelle et al, 2008). This genetic factor is linked to an earlier onset of OCD, and, if exist any prior familial cases of OCD, the individual is more likely to show symptoms of OCD in childhood (Hanna et al., 2005). Insel (1987) found a link between serotonin and POC to exist in individuals with this disease low serotonin values. Also the basal ganglia dysfunction proved a cause of the POC (Wise & Rapoport, 1989). Malformations in the brain and surrounding circuits of the orbital cortex, the caudate nucleus and the thalamus, were also linked to the POC at the beginning of the 90's (Baxter et al., 1992).

Psychological theories have been used to explain the development of OCD, the two that have received the greatest support are the behavioural and cognitive theories.

The behavioral view proposes that OCD is the result of maladaptive learning that is predominantly acquired by life experiences. A person may learn, through association with a painful or threatening experiences, to become extremely anxious about certain situations, or objects, or people. He may also learn that certain behaviour reduces the anxiety, and, as a result, this behaviour becomes strengthened. Therefore, once a connection between an object and the feeling of fear becomes established, people with OCD avoid the things they fear, rather than confront or tolerate the fear (Rachman & De Silva, 2009).

The cognitive view instead of focusing on how people with OCD make an association between an object and fear, it focuses on how people with OCD misinterpret their thoughts. Most people have unvited or intrusive thoughts at some time or other, but for those with OCD normally there is an exaggerated appraisal of risk and danger. People who come to fear their own thoughts usually attempt to neutralize feelings that arise from those thoughts. One way this is done is by avoiding situations that might spark such thoughts, and another way is by engaging in rituals, such as washing, ordering or praying. Therefore, as long as people interpret intrusive thoughts as "disastrous", and continue to believe that such thinking is not questionable, they will continue to be distressed and to practice avoidance and/or ritual behaviours (Rachman & De Silva, 2009).

Comorbility

The Obsessive-Compulsive Disorder has many and complex comorbidities, what suggests that it does not behave as a unitary disorder but rather as a constellation of symptoms or dimensions that interact with additional psychopathology, increasing the vulnerability for subsequent disorders (Torres, A. et al, 2016). This is a very relevant feature since it has been related to a number of clinical features such as treatment-seeking behaviors, clinical severity and chronicity (Fineberg et al., 2013).

One of these comorbidities, OCD and tic disorders - principally Tourette syndrome – has long been recognized in the clinical literature and appears to be bidirectional, affecting 20–30 % of individuals with each disorder. However, OCD also presents comorbidity with other neurodevelopmental disorders such as attention deficit hyperactivity disorder (ADHD), being that round 25–30 % of children and adolescents

with OCD also satisfy diagnostic criteria for ADHD, while the rate of OCD among children with ADHD is estimated to be around 12 %. Anxiety disorders and depressive disorders also show high comorbidity with OCD. Between a third and a half of children with OCD suffer from an anxiety disorder during the course of their OCD (Ortiz, E. et al, 2016).

One study realized with 112 children and adolescents, ages 8-18 years, helps understand these comorbidities and their extension. All the children had OCD and only approximately 33% had only OCD, no other associated problem. However, 67% patients had one comorbid diagnosis, being that of those 67% only 23.1% had one comorbidity, 20.5 % had two such diagnoses and 2.6 % had three comorbid diagnoses. Regarding the kind of comorbidity, 20.5 % of patients presented a comorbid neurodevelopmental disorder: Tourette syndrome or other tic disorders and/or ADHD (Ortiz, E. et al, 2016).

In a more general and statistic way, the disorders that most commonly co-occur with OCD are depressive disorders, anxiety disorders, attention deficit hyperactivity disorder and tic disorders (such as Tourette) (Torres, A. et al, 2016).

Another important information regarding these matter is that the kind of obsession and/or compulsive can influence the comorbid disease that occurs. This is shown by Hasler et al (2005), whose study appointed that, for example, patients that presented aggressive, sexual, religious and somatic obsessions or checking compulsions were broadly associated with anxiety disorders and depression. Also, obsessions of symmetry and ordering/ arranging, repeating and counting compulsions were related with panic disorder/agoraphobia and bipolar disorders. This important data can help doctors to be more aware to certain aspects, anticipate the occurrence of these disorders and choose the most appropriate treatment.

Consequences

Adults with OCD have, consequently, a lower quality of life than adults who don't have this disorder. This is due to problems related to difficulties in working, in performing household chores and in enjoying all the leisure tasks (Koran et al. 1996). The way the disease affects the patient's quality of life has to do with the severity of symptoms but also to the individuals, such as if they are in a relation or not. In contrast, age, educational level and duration of the disorder, shows no impact on quality of life in OCD adults (Eisena et al. 2006)

Children with OCD have difficulties in social, family and academic levels (Toro et al 1992.). Children with OCD may also have difficulties initiating and /or maintaining friendships and, in the case of adolescents, difficulties in developing intimate relationships (Eisena et al., 2006).

The OCD effects are present not only in patients but also in their families, since individuals with OCD involve their families in their rituals (Marks, 1987). The most common consequences in families of people with OCD are depression, the risk of suicide and marital discord (Cooper, 1996).

Treatment and Prevention

Obsessive-compulsive disorders are treated by psychological methods or medications, and, not infrequently, by a combination of the two.

Psychological Interventions

Behavioral Therapy, based on the learning theory, assumes that the rituals or avoindances the individual "learns" to use are strategies that are considered useful to relief the anxiety associated to the obsessions and, when being successuf in reducing that subjetive discomfort, starts repeating such rituals, with the goal of neutralizing temporarily their suffering and fears. The therapy proposes a reversal of this condition through the use of a behavioral technique: the Exposure and Response Prevention (ERP), which consists of graded and prolongued exposure to fear-eliciting stimuli or situations, combined with instructions for strict abstinence from the rituals that cause him relieve. Although initially the discomfort is increased, if the individual tolerates for a sufficient time of exposure, the anxiety disappears spontaneously. Such phenomenon is called habituation: the gradual relief of the anxiety, with the exercises of exposure to the feared situations being repeated, until the anxiety fully disappears (O'Dell & Crowe, 2013; Taylor et al., 2008)

In recent years, behaviour therapy was expanded to include aspects of **cognitive therapy**, because the exclusive attention to problems of observable behaviour was found to be unnecessarily limited, and the therapy was expanded to include cognitions - thoughts, images ideas, beliefs, and attitudes – aiming to teach patients to identify and correct dysfunctional beliefs about feared situations. Eliciting and helping to modify these

maladaptative beliefs is a key aspect of treatment, because the therapeutic reduction of false appraisals often lead to great relief and improvement for the patient (Rachman & De Silva, 2009)

The aim of the therapist must be to teach the patient how to use some cognitive techniques automatically whenever he/she realizes that his/her mind was invaded by an obsession or when feels compelled to perform a ritual. The therapist must suggest the more appropriate techniques for each symptom or difficulty the patient presents (O'Dell & Crowe, 2013).

Psychological interventions for children and young people with OCD

Several interventions have been used in the treatment of children and young people with OCD, being the **Cognitive Behavioral Therapy** the treatment of choice.

Although OCD in young people is similar to that found in adults, there are various aspects and developmental differences that are important to consider. Young children's obsessional thoughts are more likely to be characterised by 'magical' or superstitious thinking, and not rarely children and young people with OCD have frequently other comorbid problems.

It's not possible to prevent OCD from starting, but it´s viable to prevent a relapse of OCD symptoms by initiating treatment, that is aimed at improving the young person's coping skills and teaching strategies to prevent future relapses. The aim is so to reduce symptoms, distress and interference in daily functioning. A positive outcome would also include improved social, educational and family functioning.

The best way to treat OCD in young people is to take account of the child's developmental stage in order to engage them in a collaborative working relationship, and also there is evidence to suggest that involving parents in the treatment of their children, especially in CBT protocols incorporating ERP, is linked to good outcome (National Collaborating Centre for Mental Health, 2006).

Pharmacological Treatment

Pharmacological treatment in patients with Obsessive-Compulsive Disorder are a little controversial when it comes to theirs effectively, making some authors only advice this treatment if it's combined with a CBT to improve the results (Abudy, A. et al, 2011). However, robust data supports the effectiveness of the treatment with selective serotonin reuptake inhibitors (SSRIs) and clomipramine in the short-term and the longer-term treatment, as well as for relapse prevention (Fineberg, N. et al, 2015). The common cause for the infectiveness' of this pharmacological approach seems to be a 'Technical treatment failure', meaning that the patients have not received an adequate dose, duration or type of treatment.

The main treatment, the one to be acknowledged as the first-line pharmacological treatment of choice, are the SSRIs. Although meta-analyses report a smaller effect size for SSRIs when compared to clomipramine, head-to-head comparison studies tend to demonstrate equivalent efficacy (reviewed and referenced in Fineberg et al. (2005,2012)) and since clomipramine has adverse side-effects that are more severe than SSRIs, the later have a bigger acceptability, as they are safer and better tolerated by the patients (Geller, Biederman, Stewart, Mullin, Farrell, et al., 2003) - especially as doses probably need to remain consistently at a relatively high level to sustain effectiveness. There are, however, a variety of SSRIs that differ from one another in terms of the selectivity, potency of effect at the serotonin transporter and their secondary pharmacological actions (Stahl, 2008) , and consequently one might predict differences in clinical efficacy and adverse effect profile in OCD according to the chosen SSRI.

When this treatment doesn't work, for either reasons of a failure response or the patient cannot tolerate an SSRI, the usual approach and the suggested one by the UK National Institute for Health and Clinical Excellence (2006), it's to use clomipramine instead. When the only problem it's only a failure response, evidence supports the use of adjunctive antipsychotic medication with the SSRIs or the use of a high-dose SSRIs. When to do this change its another controversial subject, being that the British Association for Psychopharmacology (Baldwin et al., 2005, 2014) suggests initial treatment periods beyond 12 week to assess efficacy but the APA guidelines (Koran et al., 2007) recommend just 4–6 weeks, there after waiting another 6 weeks to evaluate effectiveness.

In the particular context regarding children, Research has shown that children with early onset illness respond well to treatment, compared to adults if treatment is offered without delay (Fineberg, N. et al, 2015). Longer duration of untreated illness has been associated with poorer outcome, thus the importance of applying the treatment as soon as possible. It's also very important aspect is that research suggests that in order to achieve optimal outcomes, not only do clinicians need to prescribe treatments appropriately but they should also encourage and confirm satisfactory treatment-adherence, which requires adequate clinical follow-up and review (Demyttenaere et al., 2001)

Conclusion

OCD is a very heterogeous disorder that can be dificult to identify and prevent, specialy on children. For those reasons, it is required a particular attention to the warning signs that a child presents and that may represent a risk for developing OCD. An early recognition of the symptoms seems to be crucial for a good improvement in there future quality of life.

In general, the core of any effective treatment for OCD, for both children and adults, is the ability of being exposed to feared stimuli without triggering an anxiety response and, in doing that, modificating previously problematic responses.

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