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Attachment in patients with an obsessive compulsive disorder

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Abstract

INTRODUCTION: This review aims to present the current state of knowledge about attachment and obsessive-compulsive disorder (OCD), the connection to the disorder's course, and the treatment effectiveness.
METHOD: A literature search was performed using PubMed, Google Scholar, Web of Science, and ScienceDirect databases using the following search terms: obsessive compulsive disorder, attachment, therapy, treatment, and long-term outcome. The period of extraction was between January 1990 and October 2020.
RESULTS: Insecure attachment leads to the formation of dysfunctional beliefs about the world and self, which influences the dynamics of OCD. It is associated with maladaptive cognitive processes such as an inflated sense of responsibility, perfectionism, and mind control. With worse emotional regulation and reduced self-esteem (which can also result from insecure attachment), it can lead to maladaptive behaviour such as perfectionistic and compulsive behaviour to secure and stabilize self-worth and safety. Of the two dimensions that define insecure adulthood attachment (anxiety and avoidance), attachment anxiety is more closely related to OCD. While anxious attachment can lead to a worse response in acute treatment, secure attachment is a protective factor that can improve remission.
CONCLUSIONS: Anxious attachment is common in patients with OCD and interconnects with primary OCD symptomatology. From this perspective, strategies that promote feelings of safety, acceptance, and appreciation within a therapeutic relationship may be essential in treating OCD.

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R E V I E W A R T I C L E

INTRODUCTION

Obsessive-compulsive disorder (OCD) is a severe mental disorder with a chronic and challenging course (Fineberg *et al.* 2013, Kühne *et al.* 2020). It is characterized by intrusive thoughts (obsessions) that occur involuntarily. They cause significant discomfort and distress which the individual tries to alleviate by compulsive behaviour. Cognitive and behavioural manifestations like obsessive thoughts and ritualized and avoidant behaviour are considered core symptoms (APA 2013). The obsessive-compulsive disorder is accompanied by numerous limitations in personal and interpersonal functioning (Grover & Dutt 2011). It decreases life quality and leads to deterioration in interpersonal relationships and professional status (Prasko *et al.* 2016, Sahoo *et al.* 2017, Wu *et al.* 2018, Skapinakis *et al.* 2019). It often has a severe, disabling course (Chaudhary *et al.* 2016, Weingarden *et al.* 2016). Despite following recommended treatment and cooperating well in therapy, many patients remain significantly symptomatic (Jacobson *et al.* 2016, Skapinakis *et al.* 2019).

Recent epidemiological studies have found that the incidence of obsessive-compulsive disorder is many times higher than originally thought. OCD has a lifetime prevalence of 1.6 % with a slight predominance of women over men (Kessler *et al.* 2005, Bebbington 1998). It affects all cultural and ethnic groups (Horwath & Weissman 2000). It is one of the leading causes of disability worldwide, a significant personal, social and health problem associated with high psychiatric comorbidity, particularly depressive and anxiety disorders (Rasmussen & Eisen 1992, Karno *et al.* 1988, WHO 1996, Mikulincer *et al.* 1998, Sobin *et al.* 1999, Eisen *et al.* 1999, Angst *et al.* 2004).

OCD pathogenesis is multifactorial. One of the main vulnerability factors of OCD is a genetic predisposition, followed by perinatal injuries, toxic pathogens and infections (e.g., streptococcal infection) (Cavallini *et al.* 2000, Nestadt *et al.* 2000, Swedo 2002, Hanna *et al.* 2005, Moffitt *et al.* 2005, Eapen *et al.* 2006, Vasconcelos *et al.* 2007). As far as psychosocial factors are concerned, experiences gained in early childhood are likely to play a role, including the emotional attachment between the child and the parents, the parenting style or the traumatic experiences the child has been exposed to. The disorder often develops after a significantly stressful event (Alonso *et al.* 2004, Ivarsson *et al.* 2010, Briggs & Price 2009, Kroska *et al.* 2017, Adams *et al.* 2018).

Identifying the disorder's predictors could improve the treatment outcomes by providing physicians with information about the likely prognosis and appropriate treatment strategies (Prasko *et al.* 2009, Prasko *et al.* 2016, Vyskocilova *et al.* 2016). One such predictor may be childhood attachment.

Theory of attachment assumes that it is natural for people to seek tight bound with a close person, especially in response to threats (Bowlby 1969, Bowlby 1973, Bowlby 1980, Besharat 2012). Attachment refers to the emotional bond that develops between the child and the primary caregiver. This bond is particularly evident in the time of need, such as when a child is stressed and searches for a 'safe heaven' or when it explores the surroundings (Rezvan *et al.* 2013). If the caregiver is supportive and sensitive, the child develops a stable emotional-cognitive structure that reduces stress, calms it, provides comfort, and protects from threatening situations (Besharat 2012). On the other side, when parental behaviour fails to make a child feel safe and able to trust parents in times of need, it will be less able to control their emotions and meet their needs in the future (Rezvan *et al.* 2013). According to Bowlby, such attachment-derived behaviour and inner feelings are relatively stable throughout life (Bowlby 1980, Waters *et al.* 2000). If the caregiver consistently responds to the child's crying or screaming by providing care and safety, it removes the feeling of danger and leads to the **secure attachment**. If the caregiver fails in this aspect, one of three types of **insecure attachment** (avoidant, anxiously ambivalent or disorganized) is established (Bowlby 1969, Ainsworth *et al.* 1978, Main & Solomon 1990).

The quality of the child's interactions with his primary caregiver leads to creating internal working models (IWM) of oneself and others (Bowlby 1969, Bowlby 1973). Self-related models contain cognitive and affective information about whether an individual considered himself worthy of care, support, and love. Models involving others contain cognitive and affective information about relationships, especially whether they are perceived as sensitive and responsive to support and protection needs. They go beyond previous attachment with the primary caregiver and become templates for perceptions and expectations from important people in life (e.g., friends and partners) (Hazan & Shaver 1987, Bretherton & Munholland 1999, Mikulincer & Florian 1998, Howes 1999).

Therefore, various authors strive to transfer the theory to adult life. Bartholomew & Horowitz (1991) developed a model that divides attachment in adulthood into four styles: (a) secure; (b) preoccupied; (c) fearful-avoidant; (d) dismissive-avoidant. *Securely attached* individuals are characterized by low anxiety and low avoidance; they feel good when seeking help and intimacy and expecting support from others (Guidano & Liotti 1983, Brennan *et al.* 1998, Rowa & Purdon 2003, Myhr *et al.* 2004, Fraley & Shaver 2010, Marazziti *et al.* 2010, Doron & Kyrios 2005, Sunderland & Armstrong 2005). People with a *preoccupied attachment* are characterized by high anxiety and low avoidance; they show a tense, exciting relationship with an excessive fear of losing a loved one. Individuals with a *fearful-avoidant attachment* are characterized by high anxiety and significant avoidance: they deeply need a close relationship, yet they avoid intimacy. The main

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features of people with dismissive-avoidant attachment are low anxiety and high avoidance. They show independence, avoid intimacy and distrust others (Marazziti *et al.* 2010). Brennan *et al.* (1998) conducted a study of 1,086 adults in the general population. They found that attachment quality in adulthood can be expressed using a two-dimensional model, the axes of anxiety and avoidance (Brennan *et al.* 1998, Fraley & Shaver 2010).

It is believed that the lack of safety and security typical of an individual's OCD develops within an early attachment to the caregiver and is reinforced by later experiences (Bowlby 1973, Myhr *et al.* 2004, Rezvan *et al.* 2013). Sookman *et al.* (2001) described several schemes relevant to OCD: especially those associated with perceived vulnerability to danger (core beliefs and emotional memories of danger); problems with the unpredictability of change and new things, problems with stronger feelings and an excessive need for control.

This review aims to present the current state of knowledge about the relationship between attachment and OCD, the course of the disorder and the effectiveness of the treatment. Reflecting this purpose, the following research questions were asked:

a) Does the attachment present an essential factor for understanding OCD?
b) Is the attachment linked to the severity of OCD?
c) Does the attachment affect the treatment outcomes?

METHOD

A narrative review was performed using the PubMed, Web of Science, Google Scholar, and ScienceDirect databases of the following key terms: Obsessive compulsive disorder, attachment, therapy, treatment, and long-term outcome. Papers were extracted for the period from January 1990 to October 2020. Additional references were found using reviews of relevant articles. The examination was completed by repetitive use of the words in different groupings without language and time constraints. The articles were collected, organized by their importance, and key articles itemized in reference lists were investigated. After the primary selection, relevant secondary articles were chosen from the reference lists.

RESULTS

The results of the review are organized according to the research questions.

(a) Does the attachment present an essential factor for understanding OCD?

Individuals with OCD often experience thoughts in which they negatively assess themselves and their ability to cope with a potentially threatening situation, increased perception of personal vulnerability, difficulties with unpredictability and a greater need for control (Sookman *et al.* 2001, Rowa & Purdon 2003). The range to which the world is perceived as threatening is related to early attachment experiences (Bowlby 1973, Ainsworth *et al.* 1978). Guidano & Liotti (1983) claim that the world's perception as endangering but the controllable place is reflected in active attempts to control the living environment which can be observed in the symptomatology of patients with OCD. They proposed that interactions between parents and children, which create uncertainty for children about how much they are loved, wanted, or valued, can lead them to develop conflicting self-concept in which they are either loved or unloved. This uncertain or ambivalent self-concept can result in excessive self-observation and rumination about relationships with others. Perfectionism and compulsive behaviour then emerge as a means of securing love and value.

According to Myhr *et al.* (2004), the insecure attachment may predispose children to the development of paediatric OCD. Sunderland & Armstrong also stated that insecure attachment is a risk factor for OCD in childhood (Sunderland & Armstrong 2005). Likewise, adult OCD is associated with insecure attachment in early childhood (Doron & Kyrios 2005, Ivarsson *et al.* 2016).

Ehiobuche (1988) showed that students with more severe compulsions described their parents more often as dismissive, hyper-protective, and less emotionally warm. According to Turgeon *et al.* (2002), excessive parental protection was more common in children with OCD than in control families. These parents can communicate with their children in a way: "No, you do not feel this, you feel this. No, you do not need this, you need that."(Sunderland & Armstrong 2005). These interactions undermine the child's ability to cope independently with emotionally charged events. So, when a child has no one to help them with their emotions, obsessive rituals, or controlling behaviour become their way to make the world at least a little safer. This is very similar to one of the intended purposes of compulsions – to make the environment more predictable and reliable (Sharpsteen & Kirkpatrick 1997, Sunderland & Armstrong 2005).

Ivarsson *et al.* (2016) aimed to determine whether adverse attachment experiences in childhood contribute to the development of OCD. Since the obsessive-compulsive disorder is very often comorbid with depression, they divided their sample of 100 adolescents into four groups: (a) patients with primary OCD; (b) patients with primary depressive disorder (DD); (c) patients with a combination of these disorders; and (d) a control group. Through the interview, the authors assessed the experience of attachment, including traumatic and adverse experiences. The parents of adolescents in the groups where OCD or DD occurred (a, b, c) acted less often as a "safe haven" for their children and did not meet their emotional needs. However, traumatic experiences connected with deficient parenting

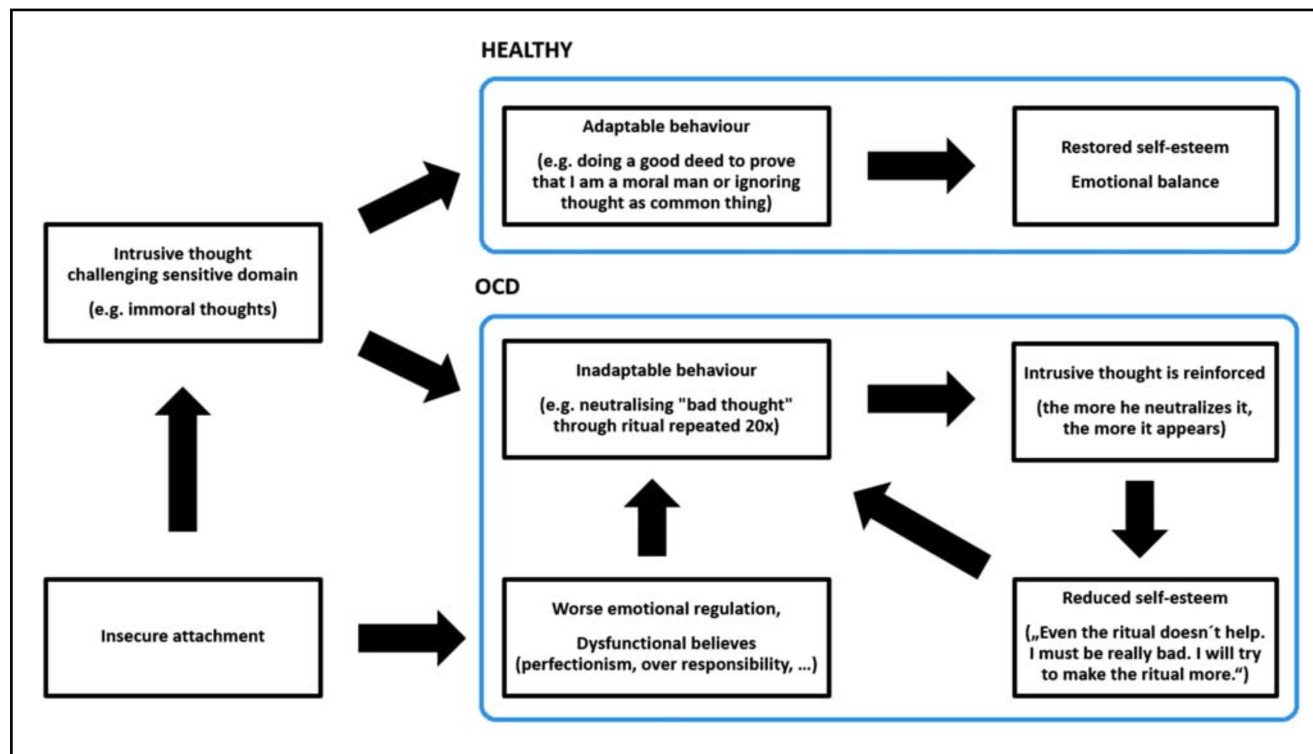

Fig. 1. Attachment and intrusive thought in healthy and OCD

behaviour occurred significantly more often only in participants with depression. Thus, the authors conclude that adverse experiences with childhood attachment may affect the development of depressive states (in depressive disorder alone and the combination of OCD with the depressive disorder). However, it is unlikely that they directly contribute to the aetiology of OCD.

Because there are common characteristics shared by parent-child and adult-adult interactions, the attachment theory has been rapidly extended to adult partnerships, emphasizing that relationships involve integrating three systems of behaviour: attachment, care, and sex (Hazan & Shaver 1987). Although the attachment system is extremely relevant, especially during early childhood, it remains active throughout life, and individual differences in internal working models can affect adaptation, mental functioning, and mental health during childhood, adolescence, and adulthood (Bowlby 1973, Hamilton 2000, Waters *et al.* 2000, Fraley 2002).

The insecure attachment relates to maladaptive cognitive processes associated with OCD (Doron *et al.* 2007, Doron *et al.* 2009, Doron *et al.* 2012, Salkovskis & Forrester 2002, Bhar & Kyrios 2007, OCCWG 1997, Mikulincer *et al.* 2000). For example, attachment anxiety is associated with dysfunctional perfectionist tendencies, difficulty in suppressing thoughts, mental rumination associated with stress, and a tendency to underestimate the ability to cope with problems in threatening situations (Mikulincer & Florian 1998, Wei *et al.* 2004, Mikulincer *et al.* 2004, Birnbaum *et al.* 1997). Anxiously attached people also tend to overestimate threat in their daily lives and may fail to seek internal sources of security or external support sources (Mikulincer *et al.* 2000). Negative internal working models can thus increase the likelihood of developing maladaptive beliefs about themselves (e.g. perceptions of self-incapacity), about others (e.g. increased doubts about the intentions and goodwill of others, increased sensitivity to rejection) and the world (i.e. increased perception of threats).

Although research shows that attachment anxiety in childhood plays an essential role in developing OCD, only a few investigations have directly examined the relationship between the insecure attachment in adulthood and OCD. In a cross-sectional study, Doron *et al.* (2012) pointed out that the association between insecure attachment in adults and OCD symptoms is mediated by dysfunctional beliefs connected with OCD, such as an excessive sense of responsibility and perfectionism and thoughts control.

According to Doron & Kyrios (2005), thoughts or events that challenge important areas of self-concept (so-called 'sensitive domains'; e.g. immoral thoughts or behaviours) damage a subjectively perceived value of the individual and trigger processes of restoring and compensating for perceived deficiencies (e.g. doing a good deed to prove that one is a moral person). However, in case of people with OCD, this compensatory behaviour tends to be non-adaptive (e.g. driving away "the bad thought" through a ritual repeated twenty

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times) and can paradoxically further increase the incidence of unwanted intrusive thoughts – the more they neutralize intrusive thoughts, the more these thoughts appear. This leads to the confirmation of "dreaded self-knowledge" (e.g. I am wrong, immoral, unworthy). In this way, common aversive experiences may trigger predominantly negative evaluations in sensitive domains in these individuals such as morality, work competence, and social acceptability, self-perception as responsible for harm prevention, view of oneself as potentially dangerous to others and ambivalent self-evaluation (Doron *et al.* 2005, Salkovskis & Forrester 2002, Bhar & Kyrios 2007). Together with the activation of other non-adaptive ideas (e.g. excessive sense of responsibility, overestimation of threats), these processes continually evolve and lead to obsessions and compulsions.

According to Doron *et al.* (2009), it is unlikely that anyone who experiences an aversive event that questions sensitive domains will be overwhelmed with negative self-esteem, maladaptive beliefs, and obsessions. For most people, experiences that threaten sensitive domains lead to the activation of stress control strategies that dispel the intrusive thoughts, affirm self-worth, and restore an individual's emotional calm. However, the insecure attachment associated with lower emotional regulation disrupts coping with experiences and contributes to the development or maintenance of OCD.

The idea that attachment acts as a mediation agent in OCD was supported by another study of Doron *et al.* (2009). In a non-clinical sample of students (n = 446), the authors found that subjectively assessed attachment anxiety and avoidance were associated with higher severity of symptoms and cognitive impairment in OCD. The dimensions of attachment (anxiety, avoidance) affected some cognitive processes (dysfunctional beliefs associated with OCD, higher susceptibility to threats), which subsequently contributed to the symptoms of OCD. Attachment anxiety had a slightly more significant impact than attachment avoidance.

Other researchers focused on attachment dynamics in adulthood and referred about schemas that connect with OCD symptomatology. According to Mikulincer & Shaver (2007), anxiety can trigger a cascade of mentally stressful events, such as catastrophizing, exaggerating the negative consequences of an aversive experience, mental ruminations about these negative consequences, and hyperactivation of the desire for attachment and a fear of it at the same time. For example, the attachment system's hyperactivation increases the manifestations of distress and demands for care from others, develops frustration and anger due to perceived lack of support, and raises doubts about one's kindness and a fear of abandonment due to alleged own bad temperament (Mikulincer & Shaver 2003). All these feelings and cognitive processes maintain overestimation of threat. They lead to crippling, uncontrollable anxiety, intensify intrusive thoughts and low self-esteem, and contribute to obsessions.

It seems intuitive that adult attachment relates to the ability to create a romantic relationship (Collins & Read 1990). Myhr *et al.* (2004) examined attachment security associations, psychopathology, and early parental interactions among 36 outpatients with OCD, 16 depressed outpatients, and 26 controls. Besides, OCD and depressed groups were more insecure than controls, and they also found that marital status was associated with greater security.

Attachment style is not connected only to OCD, but also to obsessive-compulsive personality disorder (OCPD). Both disorders share some symptoms such as perfectionism and excessive focus on detail. Zakiei *et al.* (2017) examined the attachment styles, resilience, and symptoms of obsessive-compulsive personality disorder (OCPD) in 260 college students. The results showed that this personality disorder's symptoms positively correlated with the ambivalent/avoidant attachment and negatively with resilience.

(b) Is the attachment linked to the severity of OCD?

Asad & Davoods' study (2015) aimed to determine predictors of twelve symptom dimensions of OCD. They proposed that attachment anxiety and avoidance were likely to show a positive connection. The research, which involved 90 patients with OCD, indicates that attachment avoidance could present a significant predictor of sexual obsessions but did not confirm the general hypothesis. Authors provide an interesting possible explanation of this result. Patients' early attachment experiences could be less nurturing. However, the development of the disorder and subsequent therapeutic interventions might have made parents restore a sense of attachment security to patients due to which relationship between attachment insecurities and OCD symptom dimensions might have become nonsignificant. This could be a general problem when exploring the association between attachment (evaluated retrospectively) and any long-term severe health issue. The long-term health problem and the therapy influence family relationships, skewing patients' perception of the early child-parent interaction quality.

In a sample of 397 college students, Yarbro *et al.* (2013) explored the possible contributions of early parent-child relations to the attachment styles and the severity of obsessive-compulsive beliefs in adulthood. Analyses revealed that attachment anxiety partially intermediated the link between parent-child relations and obsessive beliefs; attachment avoidance failed to function as a mediator.

In a study of 82 people with OCD and 92 controls, Carpenter & Chung (2011) examined the interrelationships between childhood trauma, attachment, alexithymia (reduced ability to recognize and understand emotions), and the severity of OCD. There was a significant positive correlation between trauma in

childhood and avoidant attachment, positively associated with alexithymia. Alexithymia was then significantly associated with the number of OCD symptoms and their severity. A mediation analysis showed that alexithymia significantly influenced attachment avoidance's effect on the severity of obsessions and compulsions. Thus, there appears to be a relationship between childhood trauma and OCD, but it is not direct. It is influenced by patients' past experiences with important people and related to relationship problems' emotional processing.

Having a research group of 334 university students, Boysan & Cam (2016) investigated direct and indirect relations between attachment insecurities, obsessional beliefs, and OCD symptoms. Attachment anxiety and attachment avoidance significantly contributed to the severity of OCD symptoms. More explicitly, respondents with fearful and preoccupied attachment styles reported higher scores on obsessive-compulsive symptomatology and obsessional beliefs.

(c) Does the attachment affect the treatment outcomes?

Although the attachment is considered one of the important causes of OCD, only a few investigations have focused on how it affects the treatment. Exposure and response prevention (ERP) or SRI antidepressants are treatment choice in OCD patients (Lambert 2008). Tibi *et al.* (2019) examined how ERP results are affected by the attachment style and expressed emotions. In a sample of 118 OCD patients, the authors examined predictors of treatment completion and outcomes and the condition of patients 4 and 13 months after the treatment. It turned out that the main moderators of the treatment outcomes were the severity of OCD and the anxious attachment style. Patients with severe symptomatology reported a faster decrease in symptoms during the treatment and at follow-up sessions than individuals with less severe OCD. Furthermore, patients with an anxious attachment style showed a worse treatment response (Tibi *et al.* 2019).

Because the previous study results highlighted the critical connection between attachment and OCD treatment results, one year later, the same collective of authors did similar research (Tibi *et al.* 2020). This time it focused on factors that can predict the likelihood of remission within two and four years after the treatment. The study included 382 adult patients with OCD, and remission was assessed using the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS). The presence of childhood trauma and the early age of onset of the disorder predicted a worse four-year follow up. On the other hand, secure attachment proved to be a protective factor that led to better results (Tibi *et al.* 2020).

When it comes to the therapy of paediatric OCD, adding the attachment theory into the therapeutical approaches could also be promising. In their preliminary study, Rezvan *et al.* (2013) treated twelve OCD patients (10 – 12 years old) with an attachment-based intervention for eight weeks. The results indicated that the OCD symptoms in children decreased significantly throughout the therapy, and this gain was maintained at the one-month follow-up. Therefore, an attachment-based intervention can be considered a valuable component of therapy for paediatric OCD, and its inclusion may ensure that the treatment effectively establishes more adaptive attachment after the standard therapy has been completed.

DISCUSSION

This review study aimed to present the current state of knowledge regarding the relationship between attachment and OCD. Specifically, we focused on three areas represented by individual research questions.

The insecure attachment may predispose people to the development of OCD. It leads to the formation of dysfunctional beliefs about the world and self, influencing the disorder's dynamics. Perceiving the world as threatening can lead to an excessive effort to control it. The subjective feeling of incompetence and vulnerability may reduce self-esteem and lead to perfectionistic and compulsive behaviour, ensuring acceptance and a sense of value. People with insecure attachment also have worse emotional regulation, and while defending against intrusive thoughts which challenge important areas of self-concept, they tend to use inadaptable strategies such as neutralization. This can paradoxically lead to increased incidence of unwanted intrusive thoughts, further reduction of self-esteem, and other dysfunctional beliefs (e.g. excessive sense of responsibility) to developing obsessions and compulsions. Of the two dimensions that define insecure attachment in adulthood (anxiety and avoidance), anxiety is more closely related to OCD.

Regarding the relation between the *attachment and the severity of obsessive-compulsive symptoms*, the studies show diverse outcomes varying from a direct link between those two phenomena to minimal connection. Some authors propose that the attachment may indirectly affect the severity of OCD symptoms through mediators such as alexithymia.

Secure attachment can improve the *probability of remission* 2 and 4 years after treatment. Contrary, *anxious attachment* can lead to a *worse response in acute treatment*. Based on the preliminary study results, attachment-based intervention could be a valuable therapy component for paediatric OCD.

Limitations and future research

Research into the relationship between insecure attachment and OCD encounters frequent comorbidity of OCD with depressive disorder. Studies with more homogenous samples could reduce the impact of intervening variables. On the other hand, the high rate of comorbidity in this population would make the results limited.

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There is also a lack of more extensive longitudinal studies exploring the link between childhood and adult attachment. We usually conclude the type of childhood attachment of an adult patient from self-assessment scales and anamnestic data. However, the information obtained in this way can be distorted by selective memory. If we have a sufficiently representative sample and map the attachment behaviour in more detail from an early age until the first contact with psychiatry, it would be possible to identify the variables involved in internal work models changes. A preventive and therapeutic approach could then be developed to complement the current treatment options.

The distortion of attachment type can be further complicated because we usually assess the attachment during the challenging period of patients´ life (which caused contact with the healthcare system). This situation itself or the treatment processes can be made parents or partner of the patient restore a sense of attachment security to him and positively distort attachment-related memories.

The review's principal limitation is the frequently low number of probands in the studies and their focus on outpatients with milder forms of the disorder.

CONCLUSIONS

Addressing attachment in patients with OCD may potentially help to improve therapeutic outcomes. Strategies that promote feelings of security, acceptance, and appreciation within a therapeutic relationship are considered especially significant in this regard. This review highlights the need for further research into OCD and childhood attachment.

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