Neuroendocrinology Letters Volume 45 No. 4 2024 ISSN: 0172-780X; ISSN-L: 0172-780X; Electronic/Online ISSN: 2354-4716 Web of Knowledge / Web of Science: Neuroendocrinol Lett Pub Med / Medline: Neuro Endocrinol Lett

A narrative review of relationship obsessivecompulsive disorder: Characteristics, causes and cognitive-behavioural interventions.

Jan PRASKO^{1,2,3,4}, Marie OCISKOVA^{1,2}, Ilona KRONE⁶, Julius Burkauskas⁷, Julija Gecaite-Stonciene⁷, Frantisek Hodny¹, Marija Abeltina⁵, Milos Slepecky³

- 1 Department of Psychiatry, Faculty of Medicine, Palacky University, University Hospital Olomouc, Olomouc, Czech Republic.
- 2 Jessenia Inc. Rehabilitation Hospital Beroun, Akeso Holding, MINDWALK, s.r.o., Czech Republic.
- ³ Department of Psychological Sciences, Faculty of Social Science and Health Care, Constantine the Philosopher University, Nitra, Slovak Republic.
- 4 Department of Psychotherapy, Institute for Postgraduate Training in Health Care, Prague, Czech Republic.
- 5 Latvian Association of CBT, Riga, Latvia
- 6 Riga's Stradins University, Department of Health Psychology and Pedagogy, Latvia.
- 7 Laboratory of Behavioral Medicine, Neuroscience Institute, Lithuanian University of Health Sciences, Palanga, Lithuania.

Submitted: 2023-11-05 Accepted: 2024-01-22 Published online: 2024-06-06

Key words: Relationship obsessive-compulsive disorder; R-OCD; OCD; cognitivebehavioural therapy; CBT; obsession; compulsion; relationships

Neuroendocrinol Lett 2024; 45(4):262-280 PMID: 39607356 45042406 © 2024 Neuroendocrinology Letters • www.nel.edu

Abstract

AIM: The paper describes the characteristics of relationship obsessive-compulsive disorder (R-OCD), including the types of obsessions and compulsions, the common triggers and the impact on psychological well-being and relationship functioning. It also offers basic cognitive-behavioural strategies to help patients change their attitudes towards obsessive thoughts and reduce compulsive behaviours.

METHODS: This article is a narrative review of the literature and case studies on R-OCD. To search for relevant sources, we used PubMed, PsycINFO and Web of Science databases with the keywords "relationship obsessive compulsive disorder", "R-OCD", "relationship OCD" and "partner-focused OCD". We included only studies published in English from January 1990 to June 2023. The paper provides examples of how basic cognitive-behavioural strategies help individuals with R-OCD.

RESULTS: People with R-OCD experience intrusive thoughts about whether they have the right feelings for their partner, whether their partner loves them, whether the relationship is suitable or whether their partner has flaws. These thoughts trigger the urge to perform various rituals to alleviate anxiety, such as repeated checking, reassurance or comparison. However, this behaviour leads to disruption of the relationship and long-term maintenance of the anxiety. Examples of basic cognitive-behavioural strategies can be applied in clinical practice to help individuals change their attitudes towards relational obsessive thoughts and reduce compulsive behaviours.

Correspondence to: Jan Prasko Department of Psychiatry, Faculty of Medicine and Dentistry, Palacky University Olomouc and University Hospital Olomouc, Czech Republic E-MAIL: praskojan@seznam.cz

CONCLUSION: The paper concludes that basic cognitive-behavioural strategies such as exposure and response prevention, cognitive restructuring, mindfulness and acceptance-related methods can help individuals with R-OCD change their attitudes towards obsessive thoughts and reduce compulsive behaviours.

INTRODUCTION

Obsessive-compulsive disorder (OCD) is a condition that involves multiple symptom dimensions, including fear of contamination, intrusive thoughts and compulsive behaviours such as washing, checking and ordering (Bloch et al. 2008). One type of OCD that has received increasing attention in recent years is relational obsessive-compulsive disorder (R-OCD), which involves obsessive-compulsive symptoms focused on close interpersonal relationships (Doron et al. 2013; Doron et al.2014a; Doron et al. 2014b; Doron et al. 2015). R-OCD is associated with significant personal and relational consequences (Doron & Szepsenwol 2015). However, no study has systematically compared clinical samples of individuals with R-OCD, OCD and nonclinical controls on their levels of functioning, OCD symptoms, mood and maladaptive beliefs.

R-OCD is characterized by persistent and intrusive doubts and worries about various aspects of the romantic relationship, such as the intensity of one's love for the partner, the partner's attractiveness, compatibility or the suitability of the relationship (Doron et al. 2012; Belus et al. 2014; Pozza et al. 2022; Misirli & Kaynak 2023). These doubts often lead to compulsive behaviours that aim to reduce anxiety, such as seeking reassurance from a partner or others, searching for information on the Internet, comparing oneself or one's partner with other couples or individuals, checking one's feelings about or reactions towards the partner or avoiding situations that could trigger uncertainty (Doron et al. 2016; Misirli & Kaynak 2023). Although these behaviours may provide temporary relief, they also reinforce and maintain the obsessions in the long term. R-OCD can harm various domains of life, and psychotherapy is recommended for this subtype, with cognitive behavioural therapy (CBT) being the method of choice (Lombardi & Rodriguez 2019).

R-OCD is a relatively new concept that has not yet been officially recognized as a distinct diagnosis in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). However, it has recently received increasing attention from researchers and clinicians (Doron *et al.* 2012; Doron *et al.* 2014; Pozza *et al.* 2022). R-OCD may also be overlooked or misdiagnosed in clinical settings (Aardema *et al.* 2018; Doron *et al.* 2016); thus, raising awareness of and providing guidance for identifying and treating R-OCD effectively is important. This article overviews R-OCD, its manifestations, causes and treatment. We focus on specific aspects of therapy and present several case studies from our practice.

METHOD

This article is a narrative review of the literature and case studies on R-OCD. A narrative review is a comprehensive, critical and objective analysis of the current knowledge on a related topic (Grant & Booth 2009; Green et al. 2006). To search for relevant sources, we used the PubMed, PsycINFO and Web of Science databases with the keywords "relationship obsessive compulsive disorder", "R-OCD", "relationship OCD" and "partnerfocused OCD". We included only studies published in English from January 1990 to June 2023. Using Google Scholar, we also searched for references cited in the retrieved articles and for those that mentioned them. We identified 38 papers on this topic, which we categorized into three main themes: characteristics of R-OCD, causes of R-OCD and treatment for R-OCD. We also included five case studies from our clinical practice to illustrate the application of CBT for R-OCD.

RESULTS

Characteristics of R-OCD

R-OCD often involves doubts and preoccupations focused on the perceived appropriateness of the relationship itself, including the strength of feelings toward the partner, the "rightness" of the relationship, and the partner's feelings toward oneself. These symptoms have been referred to as relationship-focused obsessive-compulsive (OC) symptoms (Doron et al. 2012). Relational-focused obsessions have been theoretically and empirically distinguished from worries (Doron et al. 2012; Doron et al. 2013). For example, relationship-focused symptoms are less congruent, more likely to be associated with compulsive behaviours and perceived as less rational than worries. In addition, while worries commonly appear in a verbal format and relate to various domains of life, relationship-focused obsessions come in multiple forms-including images and thoughts, which often lead to compulsions and are primarily focused on the relationship domain. According to the Penn State Worry Questionnaire, relationship-focused symptoms were only moderately correlated with worry (Doron et al. 2013).

Another common presentation of R-OCD involves a preoccupation with a partner's perceived shortcomings in various areas, such as appearance, intelligence, sociability and morality. This presentation of R-OCD has been termed partner-focused OC symptoms (Doron *et al.* 2012; Doron & Szepsenwol 2015). Although it resembles what has been referred to in the literature as body dysmorphic disorder by proxy (i.e., obsessive focus on perceived physical defects; Greenberg *et al.* 2015), partner-focused OC symptoms refer to an obsessive preoccupation with a wider range of partner shortcomings (Doron *et al.* 2014).

Symptoms of R-OCD often come in the form of thoughts (e.g. "Is he/she the one?") and images (e.g.

the face of the partner), but can also appear in the form of compulsions (e.g. leaving the current partner). Obsessive thoughts and various rituals are common in the general population, but they become problematic if the person overestimates their importance and significantly decrease the quality of life (Purdon and Clarke 1999; Blom et al. 2011; Spencer et al. 2023). These intrusions are generally ego-dystonic because they contradict the individual's values (e.g., "appearance should not be important in choosing a partner") and the subjective experience of the relationship (e.g. "I love her/ him, but I keep questioning my feelings"). Individuals, therefore, perceive these thoughts as unacceptable and undesirable and often develop guilt and shame for their occurrence and content. Compulsive behaviours in R-OCD may include monitoring one's feelings repeatedly, comparing the partner's characteristics with those of other potential partners, neutralizing (e.g. visualizing that we are happy together), and seeking reassurance. These compulsive behaviours aim to alleviate the considerable distress caused by unwanted intrusions (Doron et al. 2012; Calkins et al. 2013).

Recent studies in community cohorts have shown that R-OCD symptoms are associated with severe

personal and dyadic distress. R-OCD symptoms have been associated with OCD, negative affect, low selfesteem, low relationship satisfaction, attachment insecurity and impaired sexual functioning (Doron *et al.* 2014). In addition, R-OCD symptoms significantly predicted relationship dissatisfaction and depression over and above common OCD symptoms and other measures of mental health and relationship insecurity (Doron *et al.* 2012).

In this type of OCD, obsessions may concern various aspects of one's romantic relationship, such as one's feelings, one's partner's feelings and one's own or partner's behaviour or the suitability of the relationship (Littman *et al.* 2023). Pathological jealousy can also be viewed as R-OCD. A phenomenological overlap exists between OCD and obsessional jealousy (Ecker 2012; Sheikhmoonesi 2017). R-OCD obsessions are accompanied by compulsions that aim to reduce anxiety and uncertainty triggered by obsessions. Compulsions may include seeking reassurance from the partner or others or searching for online information.

One of the main differences between R-OCD and other forms of OCD is the content of obsessions and compulsions. In R-OCD, obsessions and compulsions

Tab. 1. Types and subtypes of Relationship Obsessive-Compulsive Disorder (R-OCD	Tab.	1. Types	and subtypes	of Relationship	Obsessive-Con	npulsive Disorder	(R-OCD)
---	------	----------	--------------	-----------------	---------------	-------------------	---------

ТҮРЕ	SUBTYPE	OBSESSIONS	COMPULSIONS
Relationship- centred	Feeling- related	 Doubting one's love for the partner Doubting the partner's love for oneself Worrying about not having the right feelings for the partner Worrying about losing feelings for the partner 	 Seeking reassurance from the partner or others Checking one's feelings or physical reactions towards the partner Comparing one's senses with those of other couples Searching for information on how to know if one is in love
Relationship- centred	Suitability- related	 Doubting the suitability of the relationship Worrying about making a mistake in choosing a partner Worrying about missing out on a better relationship Worrying about waking up with the partner 	 Seeking reassurance from the partner or others Checking for signs of compatibility or incompatibility with the partner Comparing one's relationship with those of other couples Searching for information on how to know if a relationship is right
Partner- focused	Personality- related	 Focusing on perceived flaws in the partner's personality Worrying about the partner's intelligence, morality, sociability or values Worrying about the partner's mental health or stability Worrying about the partner's honesty or fidelity Worrying about losing a partner or losing one's place in the partner's affection 	 Seeking reassurance from the partner or others Testing or questioning the partner about their personality traits Comparing the partner's personality with those of other individuals Searching for information on how to evaluate a person's personality Checking the partner's belongings to find evidence of infidelity
Partner- focused	Appearance- related	 Focusing on perceived flaws in the partner's appearance Worrying about the partner's attractiveness, weight, height, skin, hair or body parts Worrying about being embarrassed by the partner's appearance Worrying about being attracted to someone else more than to the partner 	 Seeking reassurance from the partner or others Checking or inspecting the partner's appearance closely Comparing the partner's appearance with those of other individuals Searching for information on how to judge a person's appearance

are related to the romantic relationship, such as doubts about the partner's love or compatibility and compulsive checking or seeking reassurance (Bloch *et al.* 2008). Compulsions in R-OCD involve reassurance seeking and mental introspection on one's feelings and thoughts towards one's partner, while in other forms of OCD, compulsions may vary from contamination to symmetry.

It is important to note that there are many subtypes of OCD, each with its unique symptoms and compulsions (Doron *et al.* 2012). However, all forms of OCD involve intrusive thoughts and repetitive physical or mental behaviours to reduce anxiety (Doron *et al.* 2017). There are two main types of relational OCD: relation-centred and partner-focused (Table 2).

- Relation-centred R-OCD involves obsessions about the relationship itself, such as whether one loves the partner enough, whether the partner loves one back, whether the association has a future or whether the relationship is right for one.
- Partner-focused R-OCD involves obsessions about the partner's characteristics, such as personality, intelligence, morality, appearance or compatibility with oneself. Some people may experience only one type

of R-OCD, while others may experience symptoms of both types.

Examples of obsessions and compulsions in R-OCD are listed in Table 2.

Compulsions are motivated by maladaptive beliefs about what it means to be in the right relationship or to love someone (Tennov 1998; Doron & Szepsenwol 2015). The beliefs and neutralizations listed in Table 4 lead to a person with R-OCD interpreting common variations in their feelings or perceptions as evidence of problems in their relationship (Willmott & Bentley 2015; Aardema *et al.* 2018). This triggers strong emotions such as anxiety, guilt, anger or sadness (Rajaee 2023). These emotions reinforce the need to perform compulsions to achieve reassurance or relief (Taylor *et al.* 2002; Calkins *et al.* 2013).

R-OCD harms the quality of life and functioning of he affected person and their partner (Eisen *et al.* 2006; Doron *et al.* 2012). A person with R-OCD may suffer from reduced self-confidence, depression, social isolation or problems in intimate life (Doron *et al.* 2013; Subramaniam *et al.* 2013). The partner of a person with R-OCD may feel frustration, lack of trust, support or pressure to change (Doron *et al.* 2016; Aardema *et al.*

Tab. 2. Examples of typical obsessions and compulsions in R-OCD

OBSESSION	COMPULSION		
Is she "the one" for me, or is someone better?	The patient constantly asks himself or others if his partner is the right person. He may also compare his partner to others and look for evidence that she is better o worse.		
Am I a good enough partner?	The patient constantly blames himself for his mistakes or shortcomings and worries that he is not attractive, intelligent or loving enough for his partner. He may also seek confirmation from his partner or others that he is a good partner.		
I did not feel excited when my partner kissed me. Does this mean there is something wrong with our relationship?	The patient analyses his bodily reactions or feelings towards his partner and interprets them as evidence of the quality or correctness of the relationship. The may try different sexual practices or fantasies to verify their sexual attraction to a partner.		
Do I love my partner or stay in a relationship out of inertia?	The patient doubts the depth or authenticity of his feelings for his partner and tries to verify them in various ways. For example, he may compare his emotions with those he experienced in past relationships or those described by others or the media.		
Another person is attractive to me. Does this mean that I am not faithful enough to my partner?	The patient fears that every thought or look at another person shows infidelity or loss of love for the partner. He may also try to suppress or avoid these thoughts views to feel better.		
What if I made a mistake staying in this relationship?	The patient fears missing a better opportunity or being trapped in the wrong relationship. He may also imagine how his life would be different if he were with someone else.		
Should I stay with my partner if I am unsure if I want to be in this relationship forever?	The patient feels indecisive or confused about his future with his partner and struggles to determine whether the partner is right. He may also seek advice fro other people or sources on how to know if a relationship is steady and lasting.		
I do not always think about my partner – does that mean I do not really love him?	The patient thinks that if he really loved his partner, he would always think about him and have no other interests or activities. He may also feel guilty or anxious when doing something without a partner.		
It is unbearable to be alone when we break up with our partner.	The patient fears the possibility of breaking up with his partner and imagines how sad, lonely or desperate he would be. He may stay in a relationship even when he is not happy or satisfied just to avoid the pain of a breakup.		
She/He has an affair.	The patient constantly checks the partner's phone, nuzzling up clothes, looking for foreign hairs in the car interior.		

Neuroendocrinology Letters Vol. 45 No. 4 2024 • Article available online: www.nel.edu

MALADAPTIVE BELIEF	NEUTRALIZATION
If I loved my partner, I would never doubt them or our relationship	Seeking reassurance from others that doubts are normal and do not mean anything bad
If my partner has any flaw, it means he is not the right one for me	Checking my partner's appearance or personality for flaws or comparing them with ideal standards
If I break up with my partner, I will never find anyone else who loves me	Staying in the relationship even when unhappy or dissatisfied or avoiding any conflict that could lead to a breakup
If I make a mistake in choosing my partner, it will ruin my life forever	Making lists of the pros and cons of staying with my partner or imagining alternative scenarios
If I do not feel excited every time I see my partner, our relationship is fading.	Trying to recreate the feelings of excitement by engaging in romantic gestures or activities
If I find someone else attractive, it means I do not love my partner enough	Avoiding looking at other people or mentally listing all the reasons why my partner is better than them
If someone is telling me that he/she loves me, he/she lies	Seeking reassurance and asking for proof from the partner

2018). R-OCD can thus lead to more frequent conflicts or breakups over time (Doron *et al.* 2012c; Doron *et al.* 2014). Moreover, R-OCD may interfere with other domains of life, such as work, education or leisure activities, and reduce the overall well-being and satisfaction of the individual (Eisen *et al.* 2006; Subramaniam *et al.* 2013). Therefore, it is important to address the symptoms of R-OCD and the impact of R-OCD on quality of life and functioning in treatment.

Causes of the R-OCD

Although R-OCD is increasingly recognized as a specific form of OCD, empirical studies on its aetiology, diagnosis and treatment are lacking. The exact cause of R-OCD remains unknown, but it is likely multifactorial, involving genetic, neurobiological, cognitive and environmental factors (Eisen et al. 2006; Lack et al. 2023). Some authors believe that R-OCD is caused by dysfunctional views of love and relationships related to certain sociocultural factors, such as romantic ideals, media portrayals or family patterns (Doron et al. 2012; Shihata et al. 2017). For example, they suggest that obsessions arise from maladaptive beliefs (e.g., that a relationship I am not certain about will lead to extreme disaster (Abramowitz et al. 2013; Doron & Derby 2017). Other authors emphasize the role of personality traits such as perfectionism, low self-esteem or fear of abandonment, which can increase sensitivity to perceived threats in close relationships (Sookman & Pinard 2002; Egan & Shafran 2018). Another possible factor is a lack of emotional regulation, which may suppress or amplify negative emotions associated with relationship doubts (See et al. 2022).

Genetic factors may predispose some individuals to develop R-OCD, as there is evidence of familial aggregation and heritability of OCD in general and of R-OCD in particular (Eisen *et al.* 2006; Stewart *et al.* 2013). Neurobiological factors may also contribute to the pathophysiology of R-OCD, as there is evidence of structural and functional abnormalities in brain regions and circuits related to emotion processing, decision-making and impulse control in OCD patients. For example, some studies have found reduced grey matter volume or altered activation in the orbitofrontal cortex, the anterior cingulate cortex, the striatum and the thalamus in OCD patients compared to healthy controls. These brain regions are part of the corticostriato-thalamo-cortical circuit, which generates and regulates OC symptoms (Taylor *et al.* 2014; Stein *et al.* 2019).

Cognitive factors may also play a role in developing and maintaining R-OCD, as there is evidence of cognitive biases and distortions in OCD patients that may affect their interpretation of relationship-related information (Salkovskis 1985; Olatunji *et al.* 2011; Doron & Derby 2017). For example, some cognitive biases that have been identified in OCD patients include:

- *Overestimation of threat:* The tendency to exaggerate the probability or severity of negative outcomes related to one's obsessions (e.g., thinking that if one does not love one's partner enough, one will be unhappy for the rest of one's life (Salkovskis 1985; Moritz & von Mühlenen 2008; Hezel & McNally 2016);
- *Intolerance of uncertainty:* The inability to cope with or accept ambiguous or unpredictable situations (e.g., thinking that one needs to be absolutely certain about one's feelings or relationship; Miegel *et al.* 2019);
- *Thought-action fusion:* The belief that having a negative thought is equivalent to acting on it or that it increases the likelihood of it happening (e.g. thinking that if one finds someone else attractive, it means one is unfaithful or will cheat on one's partner; Berle & Starcevic 2005; Lee *et al.* 2023; Ouellet-Courtois & Radomsky 2023);
- *Inflated responsibility*, which is the belief that one is responsible for preventing or causing harm to oneself or others by one's actions or inactions (e.g., thinking that if one breaks up with one's partner, they will be

devastated or suicidal; Rachman 1997; Cludius et al. 2021); and

• *Perfectionism* is the belief that one has to meet unrealistically high standards or expectations to be acceptable or worthy, e.g., thinking that one has to be the perfect partner or have the perfect relationship (Doron & Szepsenwol 2015; Krause & Radomsky 2021).

Environmental factors may also influence the onset and course of R-OCD, as there is evidence of environmental stressors and triggers that may elicit or exacerbate OC symptoms (Eisen *et al.* 2006; Stein *et al.* 2019). For example, some environmental factors that have been associated with R-OCD include:

- *Sociocultural influences:* The exposure to social norms, values or messages that shape one's beliefs and expectations about love and relationships, e.g., the idea that there is only one true soulmate for everyone or that love should be constant and unconditional (Doron *et al.* 2012; Shihata *et al.* 2017);
- *Family influences:* The experience of family dynamics, relationships or conflicts that may affect one's attachment style, self-esteem or trust in others, e.g., the presence of parental divorce, abuse or neglect (; (Sookman & Pinard 2002; Egan & Shafran 2018);
- *Relationship influences:* The experience of relationship events, changes or challenges that may trigger or worsen relationship doubts or worries, e.g., a conflict, a breakup, infidelity or life transition (Doron *et al.* 2012; Doron *et al.* 2016).

Cognitive-behavioural theories of OCD suggest that a catastrophic (incorrect) interpretation of normal internal or external stimuli (e.g., intrusive thoughts) is the cause of the onset and maintenance of OCD (Calkins & Berman 2013). Catastrophic evaluation of such stimuli promotes selective attention and ineffective strategies in response to their occurrence, which paradoxically worsens their frequency and emotional impact (e.g., compulsive behaviour; Rachman 1997; Obsessive Compulsive Cognitions Working Group 1997; 2005). Findings from community participants have shown that OCD-related beliefs are associated with R-OCD symptoms (Doron et al. 2012). For example, attributing excessive importance to the mere occurrence of thoughts may heighten attention to common relational doubts and encourage using ineffective, counterproductive thought suppression strategies. However, the moderate range of correlations between R-OCD symptoms and OCD-related maladaptive beliefs suggests that other cognitive distortions contribute to developing and maintaining relationshiprelated OC phenomena (Doron et al. 2012; Doron et al. 2019). More recently, Doron et al. (2012; 2017; 2019) suggested that catastrophic beliefs regarding the future consequences of relationship-related decisions may be central to developing and maintaining R-OCD. According to Rachman's (1997) model of OCD, they proposed several beliefs likely to promote anxiety following shared concerns in a relationship. These include catastrophic thoughts about the consequences of staying in a "bad" relationship (e.g., making a bad romantic decision would lead me down a path of great suffering) or leaving an existing relationship (e.g. breaking up with the partner could cause irreparable damage). Thus, OCD-related maladaptive beliefs and specific relationship beliefs were proposed as being involved in exacerbating shared relationship concerns into debilitating obsessions.

Treatment of R-OCD

R-OCD is typically treated with CBT, which involves learning to recognize problematic thinking and behaviours and then, over time, replacing them with healthier, more productive ones. Exposure and Response Prevention therapy (ERP) is a type of CBT commonly used to treat OCD, including R-OCD (Doron & Derby 2017). Selective serotonin reuptake inhibitors (SSRIs) may be used alongside therapy to help manage symptoms (Fineberg *et al.* 2020; Nezgovorova *et al.* 2022). SSRI dosages are higher when used to treat OCD than in other conditions, such as depression (Doron & Derby 2017).

It is important to note that assessing R-OCD symptoms requires particular care. The initial evaluation should include a clinical interview to ascertain the diagnosis of OCD and coexisting disorders or medical conditions. Among anxiety disorders, including social phobia, generalized anxiety and post-traumatic stress disorder, OCD has the highest risk (53 %) of having at least one comorbid personality disorder (Friborg et al. 2013). The most frequent personality disorder in OCD is OCPD, with a range of 20 to 34% (Albert et al. 2004; Eisen et al. 2006; Garyfallos et al. 2010; Lochner et al. 2011; Starcevic et al. 2013; Burkauskas & Fineberg 2020). Early-onset OCD patients are particularly vulnerable to having comorbid OCPD (Pinto et al. 2006). Individuals with OCD and comorbid OCPD show poorer CBT outcomes, especially when perfectionism, one of the cardinal features of this type of personality disorder, is more pronounced (Pinto et al. 2011) and a greater risk of OCD chronicity (Wewetzer et al. 2001) and relapse (Eisen et al. 2013). The second most common personality disorder in OCD is an avoidant personality disorder, with the prevalence ranging from 5 to 17 % (Denys et al. 2004; Pinto et al. 2006; Prabhu et al. 2013; Zhang et al. 2015; Bulli et al. 2016), followed by dependent personality disorder with a range from 3 to 8 % (Denys et al. 2004; Pena-Garijo et al. 2013), borderline personality disorder with a range from 4 to 6 % (Denys et al. 2004; Pena-Garijo et al. 2013) and schizotypal personality disorder with a range of 1 % (Denys et al. 2004; Pinto et al. 2006; Prabhu et al. 2013). Thus, assessing recognized personality disorders might be useful for individual treatment planning (Wu 2013). Consequently, additional instruments should be used

to quantify R-OCD symptom severity, other OCD symptoms, OCD-related cognitions, depression, anxiety, body dysmorphic symptoms and personality characteristics. A thorough history would include the presenting problem(s), the background of the problem(s) and personal history, specifically emphasizing relational history, family history and environment.

There is no standardized protocol for treating R-OCD. However, most studies have used CBT as the primary treatment approach for OCD and R-OCD (Doron & Derby 2017; Lombardi & Rodriguez 2019; Reid *et al.* 2022; Soondrum *et al.* 2022; Millar *et al.* 2023). CBT helps patients develop adaptive ways to cope with anxiety and doubt without resorting to compulsions. It focuses on identifying and challenging maladaptive beliefs about relationships and love, exposing patients to obsessive thoughts without engaging in compulsions (exposure and response prevention exposure; ERP) and strengthening adaptive problem-solving and relationship communication skills (Doron *et al.* 2014; see Table 4).

Other approaches have also been described, such as mindfulness, acceptance and commitment therapy, and metacognitive therapy. These approaches aim to enhance patients' ability to tolerate uncertainty and unpleasant emotions without eliminating them (Doron & Derby, 2017; Pascual-Vera *et al.* 2019). The results of these studies appear promising but are limited by small sample sizes, short follow-up periods and the absence of control groups.

If patients seek psychotherapy, their desire for control may also manifest in the therapeutic relationship (Doron & Molding 2009). Processing transference and countertransference can create tension and feelings of helplessness in the patient and therapist (Doron *et al.* 2012).

CBT for R-OCD

The foundation for CBT is a model based on the premise that everyone experiences unwanted intrusive thoughts, images and compulsions (Spencer *et al.* 2023). Individuals with OCD interpret these intrusive experiences as negative – a sign of inadequacy, a distortion of their character or a threat to their future (e.g. a disaster will occur; Marcks & Woods 2007). For instance, the mere presence of an unwanted thought about a loved one being in an accident may mean that they want something bad to happen to that person (Littman *et al.* 2023). Such interpretations heighten attention to intrusive experiences, making them more distressing and increasing their occurrence (Albertella *et al.* 2020; see Figure 1). These distorted interpretations originate from maladaptive core beliefs (Kasalova *et al.* 2020).

Due to their distorted beliefs, individuals with OCD attempt to control, neutralize or prevent the occurrence of intrusive thoughts using various mental and behavioural rituals (Smith *et al.* 2022; Tolin *et al.* 2002; Cervin 2023). However, these attempts to control paradoxically increase the occurrence of unwanted obsessions and the distress associated with them (Figure 2).

CBT for R-OCD can be provided individually or as couples therapy, depending on the patient's and their partner's needs and preferences (Castle et al. 2023). However, individual CBT is preferred, as the partner may have difficulty tolerating some obsessions. Treatment of R-OCD symptoms often includes psychoeducation about the disorder and the CBT model, exposure to feared thoughts or images and prevention of response to them, challenging maladaptive relational beliefs (e.g., the idea that being in love means always being happy; Hodny et al. 2022b) and self-beliefs related to perfectionism and intolerance of uncertainty (Pozza et al. 2019). During therapy, the patient develops a tolerance for delay in their relationship and learns that unpleasant thoughts are a normal part of their partner's life (Doron & Moulding 2009; see Table 5).

In the following paragraphs, we describe the individual treatment techniques in more detail.

Psychoeducation

Psychoeducation is the first step in the treatment of R-OCD. It provides information about OCD and its causes, manifestations, mechanisms, course and effects on the relationship (Taylor *et al.* 2002; Remmerswaal *et al.* 2019). Psychoeducation aims to help the patient understand the nature of their problems, distinguish between normal and harmful doubts about the relationship and have reasonable certainties. It also aims to reduce guilt or shame associated with obsessions,

Tab. 4. Treatment of Relationship Obsessive-Compulsive Disorder (R-OCD)

The severity of symptoms is associated with a reduced ability to establish and maintain a romantic relationship. Treatment for relational OCD may include psychotherapy, medication or a combination of approaches:

Psychotherapy:

- CBT: Symptom management – exposure with response prevention

- In addition to managing OCD symptoms, psychotherapy can provide a useful framework for working on specific areas such as difficulties with assertiveness, poor social skills and lack of self-confidence

- Mobile applications and online therapeutic platforms can supplement classic CBT and significantly help with mild problems even without an additional therapeutic modality (Cerea et al. 2020)

Medications:

- SSRIs and clomipramine are antidepressants that can help significantly (Del Casale et al. 2019)

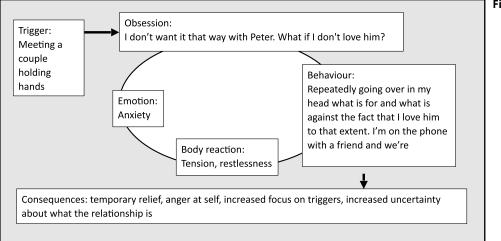


Fig. 1. The vicious cycle of relational obsessive compulsive disorder.

increase motivation for treatment and increase motivation for exposure or cognitive restructuring (Doron *et al.* 2014; Doron & Derby, 2017).

Psychoeducation also includes partner involvement in treatment if possible and appropriate. The partner can be informed about OCD and its manifestations in the patient, about how they can help or not harm them with their behaviour (e.g., by providing reassurance or supporting compulsions), as well as about how they can reduce the negative effects of OCD on their well-being and the quality of the relationship (Belus *et al.* 2014; Doron *et al.* 2014). The partner may also be supported in expressing their needs and boundaries, communicating their feelings and concerns with the patient or working with the therapist to plan exposures or resolve conflicts (Doron & Derby 2017; Remmerswaal *et al.* 2019).

John is a 32-year-old man experiencing intrusive thoughts and doubts about his relationship with his partner, Sarah. He has been diagnosed with R-OCD and has started therapy to address his symptoms. During their first session, John's therapist explains the concept of psychoeducation and its importance in treating R-OCD. The therapist provides John with information about OCD, its causes, manifestations, mechanisms, course and relationship effects. The therapist also helps John understand the difference between normal and harmful doubts about his relationship and provides him with tools to manage his symptoms.

Therapist: John, it's important to understand that OCD is a common condition that can affect many aspects of a person's life, including their relationships. It's characterized by intrusive thoughts and repetitive behaviours that can cause significant distress.

John: I've been having these thoughts about Sarah and our relationship. I keep doubting whether she loves me or if we're compatible.

Therapist: Those are common obsessions in R-OCD. It's important to recognize that these thoughts are not based on reality and result from your OCD. We can reduce the anxiety and distress associated with these thoughts through therapy.

John: I feel guilty for having these thoughts. I love Sarah, and I don't want to hurt her.

Therapist: It's common to feel guilt or shame associated with obsessions. But it's important to remember that these thoughts are not your fault nor a reflection of your feelings towards Sarah. We can work on reducing these negative emotions and increasing your motivation for treatment through psychoeducation.

The therapist suggests involving Sarah in the treatment process if possible and appropriate. Sarah attends a session with John, and the therapist provides information about OCD and its manifestations in John. The therapist explains how Sarah can support John in his treatment by avoiding reassurance or supporting compulsions. The therapist helps Sarah express her needs and boundaries, communicate her feelings and concerns with John, and plan exposures or resolve conflicts.

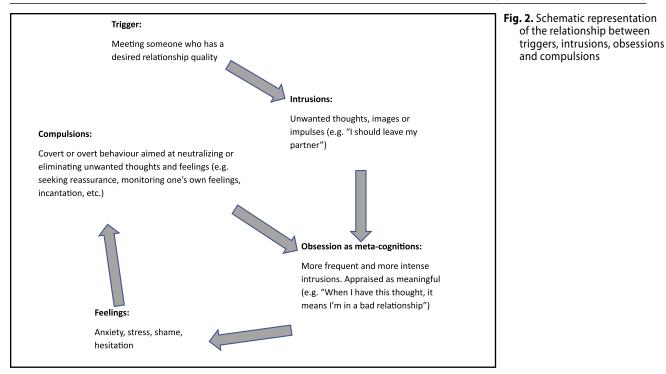
Sarah: I want to help John, but I'm not sure how. Sometimes I feel like I'm always making things worse by reassuring him.

Therapist: It's great that you want to support John in his treatment. Providing reassurance can reinforce obsessions in the long term. Instead, you can help John by encouraging him to face his fears and engage in exposure exercises. We can work together to plan these exposures and support John in his recovery.

Exposure with Response Prevention (ERP)

Behavioural therapy in the form of ERP aims to help patients reduce their reliance on compulsive behaviours that give them a false sense of security or relief (Aboujaoude 2017; Littman *et al.* 2023). ERP is a key treatment technique for R-OCD (Aboujaoude 2008; Fineberg *et al.* 2020; Heinzel *et al.* 2021). ERP consists of repeated exposure to obsessive situations or thoughts without performing compulsive behaviours or mental acts; it aims to reduce the anxiety and doubt associated with obsessions and weaken their connection to compulsions. It also helps the patient develop a tolerance for uncertainty and acceptance of unpleasant emotions.

ERP is performed according to an individually compiled hierarchical list of situations or thoughts that cause obsessions. The list is created with the patient Prasko et al: A narrative review of relationship obsessive-compulsive disorder: Characteristics, causes and cognitive-behavioural interventions



based on their experience and the difficulty of individual situations or thoughts. The patient is then progressively exposed to situations or thoughts from the least difficult to the most difficult until they achieve a 50% or more reduction in anxiety or doubt. Exposure can be done in real situations (e.g. being with a partner when someone attractive is present) or in the imagination (e.g. imagining that the partner is cheating). Response prevention means that the patient refrains from performing compulsions during the exposure (e.g. does not ask the partner if they love them, does not check their feelings or physical reactions and does not search for information on how to recognize the right relationship). Response prevention can also be gradual if the patient finds it too difficult to prevent compulsions (e.g. they can limit themselves to one question instead of five or set a time limit for information retrieval). The goal is to reduce the anxiety associated with obsessions and increase tolerance for uncertainty (Abramowitz 2013).

Jane is a 28-year-old woman who has been in a relationship with her partner, Mark, for two years. She has been diagnosed with R-OCD and experiences intrusive thoughts and doubts about Mark's love for her and the compatibility of their relationship. These thoughts cause her significant anxiety and distress, and she engages in compulsive behaviours such as repeatedly asking Mark for reassurance and checking her feelings towards him.

Jane's therapist suggests using ERP as part of her treatment. Together, they create a hi erarchical list of situations or thoughts that trigger Jane's obsessions, ranked from least to most difficult. The list includes situations such as being in the same room

Tab. 5. Cognitive Behavioural Therapy (CBT) for Relationship Obsessive-Compulsive Disorder (R-OCD)

- Detailed examination and description of problems, frustrations, interactions in relationships and cognitions related to the relationship. The therapist does not evaluate or moralize but validates and empathizes
- Education about the vicious cycle of obsessions and compulsions related to relational areas
- Exposure to and prevention of reassurance-seeking and safety behaviours, usually through a planned gradual reduction
- Cognitive restructuring of cognitions regarding the relationship, obsessions and consequences of compulsions
- Cognitive restructuring of schemas and assumptions typically focused on overestimating uncertainty, powerlessness and needing control
- Imagery rescripting may be necessary for traumatic events identified as possible predisposing factors for OCD, particularly those associated with feelings of helplessness and loss of control
- Imaginal exposure to the worst-case scenario of relinquishing control
- Problem-solving, particularly regarding freedom in a partner relationship
- Improving problem-solving and communication skills in a relationship
- Enhancing emotional regulation and self-esteem
- Preparing for the future by focusing on maintaining improvement and preventing relapse

as Mark when an attractive person is present, imagining Mark unfaithful and thinking about the future of their relationship. Jane begins ERP by exposing herself to the least difficult situations or thoughts on the list without engaging in compulsive behaviours such as seeking reassurance or checking her feelings. Over time, she progresses to more difficult situations or thoughts until she achieves a 50% reduction in anxiety or doubt. During the ERP process, Jane learns to tolerate uncertainty and unpleasant emotions, and her reliance on compulsive behaviours decreases. She reports feeling less anxious and more confident in her relationship with Mark.

Cognitive Restructuring

Cognitive restructuring is another important treatment technique for R-OCD. Cognitive restructuring involves identifying and challenging maladaptive beliefs and cognitive distortions associated with obsessions (Doron & Derby 2017). The cognitive restructuring aims to develop a more realistic and flexible outlook and help the patient recognize and challenge the irrational beliefs about relationships and love that sustain their obsessions and compulsions. Thus, the therapist can use techniques such as Socratic questioning, behavioural experiments or thought record to have the patient examine the evidence for and against their beliefs, test alternative hypotheses or change their distorted perceptions (Misirli & Kayanak 2023). The patient is thus led to examine the evidence for and against their irrational beliefs about relationships and love and develop a more realistic and flexible view, which includes tolerance of uncertainty, acceptance of differences and variability of emotions (Table 6).

Charts for recording obsessive thoughts can take different forms. With their help, the patient usually looks for the possibility of change and less often tests the truth of obsessions (Table 7).

Behavioural experiments

Behavioural experiments are another important treatment technique for R-OCD. The patient is led to test their assumptions about what would happen if they performed or did not perform certain compulsions. The goal is to verify whether these assumptions are true or not. For example, it can test the belief: "If I think about something, it will happen" (the meta-cognition of thought-event fusion). Determine specifically what they fear and then find out if it really happens. They can also test their belief that "love is when I'm constantly attracted to someone" by discovering how others who love their partner feel.

Patrick, a patient with R-OCD, believes that if he does not constantly ask his girlfriend Alicia for reassurance about their relationship, she will leave him. The therapist asked Patrick to test this belief by intentionally not asking Alicia for reassurance for a short period. The therapist can then help Patrick examine the evidence for and against this hypothesis. Alicia noticed that Patrick no longer repeatedly reassures her of his love. She said it was fine because he talked about it so often that it bothered her. After all, she had to reassure him that she loved him too. It's nicer when he does not say it all the time. She said she thinks they have a good relationship and does not need to keep making sure about it.

Dagmar, a patient with R-OCD, may believe that if her friends and family do not approve of her partner, Tom, her partner is not the right one for her. The therapist may ask the patient to test this belief by intentionally not seeking reassurance from her friends and family for a short period. The therapist can then help Dagmar examine the evidence for and against her belief. If Dagmar's relationship with Tom does not suffer during this time, it could help her to develop a more realistic and flexible view of their relationship without compulsions.

Action Fusion)	
What is the evidence that the idea is true?	What is the evidence against the idea?
This thought keeps coming back to me.	Even though she attacked me repeatedly, I´ve never hurt her. I help her and her daughter as much as possible.
I have a strong feeling of restlessness and tension; I'm afraid I won't be able to control myself.	I'm nervous about the obsession because I'm afraid I won't blow it. However, I've never lost control.
I shouldn't mind if I love her. Do I even love her?	I love her because I can't imagine life without her and consider her needs.
I must be crazy to have such ideas!	I'm not crazy; it can happen to anyone.
I'm a bad person for having such ideas. That's why she's leaving me.	They are just obsessions. I really don't want to do anything bad. She repeatedly told me that she liked me.

Appraisal of the Obsession (Meta-cognition): If I have a though that I can stab my girlfriend, I can actually do it (Though-

Rational answer: I'm afraid I will stab my girlfriend. They are my obsessions. I have no evidence for I shall do that. I don't even really want to do anything like that. I like her, and she likes me too. If I have a thought, it does not automatically lead to action (the alternative thought for meta-cognition)

Tab. 6. Testing automatic negative thought

Obsession: What if I stab my girlfriend?

Prasko et al: A narrative review of relationship obsessive-compulsive disorder: Characteristics, causes and cognitive-behavioural interventions

Situation	Obsession	Emotion	Compulsion	Possibility of change
My boyfriend kissed me. I'm not experiencing anything.	What if I don't love him anymore?	Anxiety 8	l say in my head why l don't love him and why l love him.	I'm telling myself I'm not dealing with it because I've dealt with it a thousand times to no avail and not doing anything other than brooding over it.
In the film, a woman is troubled by love.	Our relationship is weird!	Anxiety 9	l keep asking my boyfriend how he experiences our relationship.	I won't ask him because I do it every day. It would be better to do something pleasant together. Maybe go out.

Challenging Maladaptive Beliefs

Challenging maladaptive beliefs is important in treating R-OCD. The patient is guided to identify and modify their maladaptive schemas about themselves, others and the world associated with their obsessions and compulsions (Marcks et al. 2007; Doron et al. 2016). Once maladaptive beliefs have been identified, the patient is led to examine the evidence against them (Doron & Derby, 2017; Miegel et al. 2017). Maladaptive beliefs can be about oneself, people and the environment around one. For R-OCD, it can be the belief that "love is when I am constantly attracted to someone", or "a relationship that I am not absolutely sure about will lead to extreme disaster", or even the belief about oneself that "if I am not perfect, he will leave me". The patient may be led to challenge these false beliefs by realizing that love is not only a feeling but also a choice and commitment. It is not possible to find the perfect partner, but it is possible to find a partner that is right for them and compatible.

Emma is a 25-year-old woman experiencing intrusive thoughts and doubts about her relationship with her partner, Tom. She has been diagnosed with R-OCD and has started therapy to address her symptoms. Emma's therapist introduces the concept of challenging maladaptive beliefs during one of their sessions. The therapist explains that Emma may have developed certain beliefs about herself, others and the world, contributing to her obsessions and compulsions.

Therapist: Emma, it's important to identify and challenge any maladaptive beliefs contributing to your R-OCD symptoms. These beliefs can be about yourself, others or the world. We spoke about one of your beliefs about constant attraction. Can you remember it?

Emma: I believe love is when I'm constantly attracted to someone. And if I'm not feeling that attraction always, then it must mean something is wrong with our relationship.

Therapist: That's a common belief but not necessarily accurate. Love is not just a feeling, it's also a choice and a commitment. It's normal for attraction to fluctuate in a relationship. What's important is the connection and compatibility between you and Tom. **Emma:** I also believe Tom will leave me if I'm imperfect.

Therapist: Perfection is an unrealistic standard that no one can achieve. It's important to challenge this belief by recognizing that everyone has flaws and imperfections. What matters is how

you and Tom support each other and work through challenges together.

The therapist guides Emma in identifying and challenging her maladaptive beliefs. Together, they examine the evidence against these beliefs and work on developing more realistic and adaptive ways of thinking. Over time, Emma reports feeling less anxious and more confident in her relationship with Tom.

Therapist: Let's continue to work on identifying and challenging any maladaptive beliefs contributing to your R-OCD symptoms. Can you think of any other beliefs that might be causing you distress?

Emma: If I'm unsure about our relationship, it will lead to extreme disaster.

Therapist: That's another common but not necessarily accurate belief. Uncertainty is a normal part of any relationship. It's impossible to be 100% sure about anything in life. What's important is how you and Tom communicate and overcome the problems.

Emma: But how do I deal with the uncertainty? It makes me so anxious.

Therapist: One way to challenge this belief is to examine the evidence against it. Has there been a time when you were uncertain about something in your relationship, but it didn't lead to disaster?

Emma: Well, there was a time when we had a big argument, and I wasn't sure if we could work through it. But we talked it out and were able to resolve the issue.

Therapist: That's a great example. It shows that even when there is uncertainty, it doesn't necessarily lead to disaster. You and Tom were able to communicate and work through the challenge together. Can you think of other examples like this?

Emma: Yes, there have been other times when we've faced challenges and were able to work through them together.

Therapist: That's great. By examining the evidence against your belief, you can develop a more realistic and adaptive way of thinking. Instead of focusing on the uncertainty, you can focus on the strengths of your relationship and your ability to work through challenges together.

Through this process, Emma learns to challenge her maladaptive beliefs by examining the evidence against them and developing more realistic and adaptive ways of thinking. Over time, she reported feeling less anxious and more confident in her relationship with Tom.

Another strategy is Socratic questioning, which may be used to challenge R-OCD-related beliefs that maintain the obsessional cycle. For example, the belief that the absence of constant feelings of love means the relationship is not right can be addressed by asking questions that promote a deeper understanding of emotions, their temporary nature and the factors influencing them. Questions like "Can you describe some of the emotions you experienced today? How long did they last? What caused them to change? How can your interpretations of what happened affect your emotions and their fluctuations?" can be effective.

Similarly, beliefs such as the notion that constantly thinking about one's partner is a prerequisite for true love can be challenged through inquiries like "What would it look and feel like to think about your partner constantly? How would it impact you, your life or your partner's life?" Additionally, encouraging patients to seek input from their friends about their perspectives on relationships often reveals contradictions with the patient's "idealized notions of others" relationships. Online self-help programmes on mentalhealthonline.org and ROCD.net offer effective CBT exercises for individuals struggling with OCD or R-OCD-related beliefs. These evidence-based platforms, like the GGtude mobile platform developed by Guy Doron, can help clients reduce the beliefs and symptoms associated with R-OCD (Derby et al. 2021).

Improving the Quality of The Relationship

Improving the quality of the relationship is another important part of treating R-OCD (Abbey et al. 2007; Doron et al. 2012a; Rajaee 2018). The therapist helps the patient and their partner understand the nature of R-OCD and its impact on their relationship while offering them strategies for collaborative treatment (Doron & Moulding 2009). There are several ways to improve patients' relationships. Some are very simple. One of them is to spend time apart. It looks counterintuitive as a way to improve the relationship, but taking a break from a partner can help patients not be reassured, and both appreciate each other more when they are together again. Another way is to go to sleep at the same time. This can help both people in the relationship get the seven to eight hours per night of healthy sleep they need. The therapist can use various techniques for this. Enhancing positive interaction, improving communication skills, conflict resolution or promoting intimacy has been proven to help the patient and their partner strengthen their trust, support and satisfaction in the relationship (Doron et al. 2014; Fernandez et al. 2021). For example, the patient and their partner can be guided to express their needs and expectations in the relationship and find common ground, or they can plan activities together that bring them joy and a sense of closeness.

Therapist: Now that we've worked on challenging your maladaptive beliefs, let's focus on improving the quality

of your relationship with Tom. We can use several strategies to help you and Tom strengthen your trust, support and satisfaction in the relationship.

Emma: That sounds good. What can we do?

Therapist: One simple strategy we could start with is spending time apart. It may seem counterintuitive, but taking a break from each other can help you appreciate each other more when you're together again. It will also help to stop making checking in about the relationship altogether.

Emma: That makes sense. We spend so much time together, so maybe some time apart would be good for us.

Therapist: Another simple strategy at the beginning is to sleep simultaneously. This can help you get seven to eight hours of healthy sleep each night.

Emma: We have different sleep schedules, so that could be helpful.

Therapist: We can also enhance positive interactions, improve communication skills, and resolve conflicts. For example, you and Tom could practise expressing your needs and expectations in the relationship and finding common ground.

Emma: That sounds like a good idea. We do have some communication issues that we could work on.

Therapist: You can also plan activities together that bring you joy and a sense of closeness. What are some things that you and Tom enjoy doing together?

Emma: We both love hiking and being outdoors. Maybe we could plan a weekend camping trip together.

Therapist: That's a great idea. By spending quality time together and working on improving your communication and connection, you and Tom can strengthen your relationship and increase your satisfaction with each other.

Through this process, Emma learns strategies to improve the quality of her relationship with Tom. She enhances positive interactions, improves communication skills, resolves conflicts and promotes intimacy. Over time, Emma reports feeling more connected and satisfied in her relationship with Tom.

The next text shows an example of a continued dialogue between Emma and her therapist as they work on enhancing positive interactions and improving communication skills to strengthen Emma's relationship with Tom.

Therapist: Let's continue to enhance positive interactions and communication skills in your relationship with Tom. These are important strategies for strengthening your connection and increasing your satisfaction with each other.

Emma: I want to improve our communication, but I'm not sure how to do that.

Therapist: One strategy is to practise active listening. This means paying attention to what Tom is saying without interrupting or getting defensive. You can also try to understand his perspective, even if you don't agree with it.

Emma: That makes sense. Sometimes I get so caught up in my thoughts that I don't listen to what Tom says.

Therapist: Another strategy is to use "I" statements when expressing your thoughts and feelings. Instead of saying, "You never listen to me," you could say, "I feel unheard when you don't notice what I'm saying."

Emma: I can see how that would be more effective. It's less confrontational and more focused on my feelings.

Therapist: You can also practise expressing appreciation and gratitude towards Tom. This can help to increase positive interactions and strengthen your connection.

Emma: I appreciate Tom but don't always express it. I'll make an effort to show him more appreciation.

Therapist: That's great. By practising active listening, using "I" statements and expressing appreciation, you can improve your communication with Tom and enhance positive interactions in your relationship.

Through this process, Emma learns strategies to enhance positive interactions and improve communication skills in her relationship with Tom. Together with the therapist, they rehearsed many situations in which Emma and Tom found themselves role-playing, and Emma practised how to respond constructively in those situations. To better understand Tom, they rehearsed situations so that the therapist and Emma herself alternately played Tom. She practised active listening, using "I" statements and expressing appreciation towards Tom at home. Over time, Emma reported feeling more connected and satisfied in her relationship with Tom.

Relapse Prevention and Preparation for the Future

Before ending the treatment, it is important to recapitulate the steps that led to success and how they were achieved. Preparing for possible stressful situations and discussing possibilities for their resolution is also necessary. The patient should know that obsessions and compulsions can return and that he has learned to face and eliminate them (Abramowitz 2013). The therapist can encourage the patient to continue exposure to all situations related to the obsession triggers that the patient would like to avoid and prevent a neutralization reaction (Doron & Moulding 2009). For example, the patient can be guided to create a plan for situations that might trigger his obsessions or compulsions and write down how he will carry out the exposure, avoiding neutralization.

The patient and their partner can also learn to strengthen positive interactions, improve communication skills, resolve conflicts and promote closeness. They can learn more effective ways of managing anxiety or unpleasant emotions, such as relaxation, mindfulness or emotional regulation (See *et al.* 2022).

Therapist: As we near the end of your therapy, it's important to discuss relapse prevention and preparation for the future. This means recapping your successes and how you achieved them and preparing for possible stressful situations in the future. **Emma:** I feel like I've made much progress, but I'm still worried that my obsessions and compulsions might return.

Therapist: It's normal to have concerns about relapse. But remember that you've learned strategies to face and overcome your obsessions and compulsions. You can continue to use these strategies to manage any challenges that may arise.

Emma: That's true. I feel more confident in my ability to handle my symptoms now.

Therapist: One way to prevent relapse is to continue exposing yourself to situations that might trigger your obsessions or

compulsions without engaging in neutralization behaviours. You can plan how you will carry out these exposures and avoid neutralization.

Emma: That makes sense. I'll make sure to keep practising exposure and response prevention.

Therapist: You and Tom can also continue to work on strengthening positive interactions, improving communication skills, resolving conflicts and promoting closeness. And you can learn more effective ways of managing anxiety or unpleasant emotions, such as relaxation, mindfulness or emotional regulation.

Emma: I'll make sure to keep using those strategies as well. I feel more prepared for the future now.

Therapist: That's great. By continuing to use the skills and strategies you've learned in therapy, you can prevent relapse and maintain your progress in managing your R-OCD symptoms.

Emma learns about relapse prevention and preparation for the future through this process. She recaps her successes in therapy and creates a plan for managing potential triggers of her obsessions or compulsions. Emma also continues to work on strengthening her relationship with Tom and managing anxiety or unpleasant emotions. Over time, Emma reported feeling confident in maintaining her progress and preventing relapse.

CASE REPORTS

In this section, we present several case studies from our practice that illustrate various manifestations of R-OCD and their treatment with CBT. Patient names have been changed to preserve anonymity.

Linda is a 35-year-old woman in a relationship with Charles for eight years. Linda suffers from R-OCD and worries about being good enough for Charles. Linda often has thoughts like: "What if I bore Charles? What if I'm too fat for him? What if he cheats on me?" These thoughts cause Linda strong anxiety and doubts about herself and her relationship. Linda tries to suppress these thoughts or convince herself that they are nonsense. To do this, she uses various compulsions, such as repeatedly:

- comparing herself to other women in her environment or the media;
- searching for information on the Internet about how to be a better partner or how to lose weight;
- verifying her appearance or personality by asking Charles or others for their opinion;
- seeking reassurance from Charles that he loves her or that he is not cheating on her; and
- avoiding situations or people that might trigger her obsessions, such as meeting Charles's friends or family.

Linda decided to seek help after her compulsions led to problems concentrating at work. She began to suffer from depression and felt worthless. She realized her relationship with Charles suffered because of her obsessions and compulsions. Charles complained that Linda is often nervous, dissatisfied or jealous.

Linda underwent individual CBT. During therapy, she worked to identify and challenge her maladaptive beliefs about herself and her relationship that maintained her obsessions and compulsions. The therapist used Socratic questioning to have Linda examine the evidence for and against her beliefs, such as "I have to be perfect for Charles, or he will leave me", or, "If I have negative thoughts about myself or Charles, it means I'm a bad partner". Linda also worked to develop a more realistic and flexible view of herself and her relationship, including tolerance of uncertainty, accepting herself and her shortcomings and recognizing her strengths.

During therapy, Linda exposed herself to her obsessive thoughts or situations without engaging in compulsive behaviours. The therapist used ERP to make Linda face her thoughts like, "What if I'm boring Charles?" Or: "What if I'm too fat for Charles?" Linda learned to tolerate the anxiety and unpleasant emotions associated with these thoughts without suppressing or reassuring them. She also worked on developing more effective ways of managing anxiety or unpleasant emotions using mindfulness.

The therapist strengthened positive interactions between the partners and asked about happy moments together and what Linda values and likes about Charles. He also helped her improve her communication skills by practising complimenting, expressing needs, practising conflict resolution and promoting intimacy. After 12 sessions of CBT for R-OCD, Linda showed a significant reduction in her obsessions and compulsions. She was also more satisfied with her relationship.

Peter is a 25-year-old man who has been in a relationship with Jana for three years. Peter is troubled by intrusive thoughts about whether Jana is right for him, such as: "What if I find out that Jana is not attractive enough? What if I have nothing to say to Jana? What if I would be happier with someone else?" These thoughts cause severe anxiety and increase his doubts about the relationship. Peter tries to suppress the compulsive thoughts or make sure they are pointless. He uses various compulsions to do this, such as repeatedly:

- validating his feelings for Jane by imagining other women or watching pornography;
- searching for information on the Internet or in books about how to find the right relationship or partner;
- comparing his relationship with Jana to other couples in his environment or in the media;
- seeking reassurance from his friends or family that Jana is good for him; and
- avoiding situations or people that might trigger his obsessions, such as meeting Jana's friends or family.

Peter sought help after his compulsions led to problems with concentration at work and insomnia. He realized his relationship with Jana suffered from his obsessions and compulsions. Jana complained that Peter was often absent-minded, cold and suspicious.

Peter underwent individual CBT. During therapy, he worked to identify and challenge his maladaptive beliefs about relationships and love that sustained his obsessions and compulsions. The therapist used Socratic questioning to have Peter examine the evidence for and against his views, such as, "I have to be constantly attracted to Jane, or it is not love". Or: "If I have doubts about Jana, it means she is not the right one for me". Peter also worked to develop a more realistic and flexible view of relationships and love, which included tolerance of uncertainty, acceptance of differences and fluidity of emotions. During behavioural techniques, Peter exposed himself to his obsessive thoughts or situations without performing compulsions. Peter used ERP to confront his doubts about Jana's attractiveness or satisfaction with the relationship. He also learned to tolerate the anxiety and unpleasant emotions associated with these thoughts without the need to suppress or reassure them. He also worked on developing more effective ways of managing stress or unpleasant emotions by learning to relax. CBT for R-OCD also included interventions to improve the relationship quality between Peter and Jana. With Peter, the therapist focused on strengthening positive interactions with Jana, improving communication skills, conflict resolution or fostering closeness so Peter and Jana could strengthen their trust, support and satisfaction. The therapist also helped Peter and Jana understand the nature of R-OCD and its impact on their relationship while offering them strategies for collaborative treatment.

After 14 sessions of CBT, Peter showed a significant reduction in his obsessions and compulsions. He also reported improvements in his mood, confidence and quality of life.

Diana is a 25-year-old woman who has been in a relationship with Joseph for four years. Diana and Joseph live together and go to the same university. Both study pedagogy. Diana suffers from R-OCD and is focused on the obsession that she could have been unfaithful to Joseph and not remember. Diana often has intrusive thoughts such as: "What if I cheated on Joseph with someone? What if I went to a pub and had sex with someone in the toilet? What if I was under alcohol or drugs and didn't know what I had done?" These thoughts cause Diana strong anxiety and doubts about herself and her relationship. Diana tries to suppress obsessive thoughts or tell herself that they are meaningless. To do this, she uses various compulsions, such as repeatedly:

- going through the path she took and looking for evidence that she was unfaithful;
- checking body or clothing for signs of sexual activity or foreign odours;
- searching for information on the Internet or in books about how to recognize infidelity or how to avoid infidelity;
- going to pubs along the way and asking staff or guests if she was in the toilet or flirting with someone; and
- asking for reassurance from Joseph that he loves her or would not leave her if she turned her back on him.

Diana sought help after her compulsions began to interfere with her daily functioning, and she had problems attending school and panic attacks. She felt desperate. Joseph complained that Diana was often paranoid, pushy or hysterical. He did not understand and was angry with her.

Diana underwent individual CBT. During therapy, she worked on identifying and challenging maladaptive beliefs about herself and her relationship. The therapist used Socratic questioning to have Diana examine the evidence for and against her beliefs, such as: "I have to remember everything I did; otherwise, it means I was unfaithful to Joseph". Or: "If I have thoughts about infidelity, it means I cheated on Joseph or want to cheat on him". Diana learned to look at her relationship less rigidly, tolerate uncertainties more, accept that neither she nor her partner can be perfect and appreciate her own and Joseph's positive qualities even if they are "just good enough". During behavioural therapy, Diana exposed herself to her obsessive thoughts and situations without performing compulsive behaviours. The therapist used ERP to make Diana face her thoughts like: "What if I cheated on Joseph?" Or: "What if I went to a pub and had sex with someone in the toilet?" Diana learned to tolerate the anxiety and unpleasant emotions associated with these thoughts without the need to suppress or reassure them.

Interventions aimed at improving the quality of the relationship between partners were included in the therapy. The therapist practised conducting a conversation with Joseph with Diana. Diana tried to open up, express her needs, say no, appreciate Joseph, empathize with him and validate his feelings, among other strategies. After 16 sessions of CBT, Diana described a significant change, a significant subside of obsessions and compulsions and a balanced mood; her self-confidence and overall quality of life also increased.

Hanna is a 27-year-old woman living with her boyfriend, Jeff, for two years. Hanna suffers from R-OCD focused on whether Jeff has any faults or shortcomings. Hanna often thinks, "What if Jeff isn't intelligent enough? What if he isn't moral enough? What if he isn't good-looking enough?" These thoughts cause Hanna strong anxiety and doubts about her partner. Hanna tries to suppress these thoughts or make sure they are true. To do this, she uses various compulsions, such as repetitive and compulsive:

- finding faults or shortcomings in Jeff by criticizing him or examining his behaviour;
- searching for information on the Internet or in books on how to find an ideal partner or how to avoid a bad partner;
- comparing Jeff with other men in her environment or the media;
- seeking reassurance from her friends or family that Jeff is good for her; and
- avoiding situations or people that could trigger her obsessions, such as meeting Jeff's friends or family.

Hanna sought help after becoming overly irritable, and her partner began to complain that Hanna was often aggressive, unfair or spiteful. At that time, she also became grumpy at work, unable to concentrate.

Hanna underwent individual psychotherapy. During therapy, she worked to identify and challenge her maladaptive beliefs about her partner and the ideal relationship that sustained her obsessions and compulsions. In Socratic questioning, she examined the evidence for and against her beliefs, such as, "I must find the perfect partner, or I will be unhappy", or, "If Jeff has any flaws, that means he is a bad partner". Hanna worked on developing a more realistic and flexible view of the partner and the relationship, which included tolerance of uncertainty, acceptance of human imperfection and recognition of Jeff's positive qualities.

Hanna repeatedly exposed herself to her obsessive thoughts or situations during therapy without performing compulsions. The therapist used ERP to make Hanna face her thoughts like, "What if Jeff isn't smart enough?" Or: "What if Jeff is not moral enough?" She imagined Jeff doing stupid things or behaving immorally. She gradually learned to tolerate the anxiety and unpleasant emotions associated with these images and concurrent thoughts without suppressing or reassuring them.

From the beginning of the therapy, the therapist and Hanna also focused on the relationship between the partners. Hanna wrote a list of things she likes and values about Jeff and kept a daily record of the good things Jeff does for her every day. Gradually, with the help of exercises, she learned how to tell Jeff what she needed, ask him for a favour and give him a sincere compliment. She learned to understand more about her needs and Jeff's needs and to talk about them.

After 16 CBT sessions, Hanna confirmed a significant decrease in obsessions and compulsions. There was also an improvement in mood, an increase in self-confidence and the quality of the partner relationship.

Elan, a 37-year-old man, presents with symptoms of Relationship Obsessive-Compulsive Disorder (R-OCD). He has been in a committed relationship with his girlfriend, Agnes, for four years. However, he constantly questions his feelings for her and worries about the stability of their relationship. Elan experiences intrusive thoughts that he doesn't truly love Agnes or may be better off with someone else. These thoughts are distressing and cause him significant anxiety.

Elan seeks therapy and is referred to a cognitive-behavioral therapist specialising in OCD, including Relationship OCD. The therapist conducts an assessment to understand the specific nature of Elan's symptoms and their impact on his daily life.

The therapist determines that intrusive thoughts, doubt, and reassurance-seeking behaviours characterize Elan's R-OCD. The therapist explains the treatment plan to Elan, ensuring he understands the rationale and goals of therapy.

- Psychoeducation: The therapist educates Elan about OCD, explaining that it involves intrusive thoughts and the resulting compulsive behaviours or mental rituals used to alleviate anxiety.
- Identifying Obsessions and Compulsions: The therapist helps Elan identify his specific obsessions related to his relationship and his compulsions to alleviate his anxiety, such as seeking constant reassurance from Agnes.
- Cognitive Restructuring: The therapist works with Elan to challenge and reframe his negative thoughts and irrational beliefs about his relationship. They explore alternative, more rational interpretations of his intrusive thoughts.
- Exposure and Response Prevention (ERP): The therapist gradually exposes Elan to situations that trigger his relationshiprelated obsessions. This may involve imagining or engaging in scenarios that provoke uncertainty or doubt without resorting to reassurance-seeking behaviours or mental rituals. For example, Elan might be asked to imagine a scenario where he encounters an attractive person and resists the compulsion to seek reassurance from Agnes.
- Mindfulness Techniques: The therapist introduces mindfulness-based techniques to help Elan observe and accept his intrusive thoughts without judgment or engaging in compulsive behaviours. This helps him develop a more balanced

and accepting attitude toward his thoughts and reduces the emotional distress they cause.

• Relapse Prevention: Throughout therapy, the therapist helps Elan develop strategies for maintaining progress and preventing relapse. This may involve identifying potential triggers, practising coping skills, and implementing self-care strategies.

Throughout therapy, Elan gradually learns to tolerate uncertainty, challenge his obsessive thoughts, and reduce his reliance on reassurance-seeking behaviours. With consistent practice of CBT techniques, he experiences a reduction in the frequency and intensity of his intrusive thoughts and a decrease in anxiety related to his relationship.

CONCLUSION

Repeated doubts about the romantic relationship and partner can manifest as R-OCD. These doubts are accompanied by an intense search for certainty and compulsive behaviour that disrupts the quality of the patient's relationship and the quality of life of the patient and his or her partner. The treatment of choice is CBT, which focuses on challenging maladaptive beliefs about relationships and love, focusing on exposure to obsessions without committing compulsions and strengthening adaptive ways of problem-solving and relationship communication. CBT for R-OCD can be provided individually or in couples, depending on the needs and preferences of the patient and partner. In addition to CBT, other forms of treatment, such as pharmacotherapies or mobile apps, may be helpful.

R-OCD is a little-recognized form of OCD that significantly affects the relationships between the patient and his or her loved ones and deserves systematic psychotherapy. More rigorous and systematic research is needed that could contribute to a better understanding of the onset, course and treatment of R-OCD. It is also important to raise awareness of R-OCD among professionals and the general public to increase the detection of the disorder and its effective treatment.

REFERENCES

- 1 Aardema F, Moulding R, Melli G, Radomsky AS, Doron G, Audet JS, Purcell-Lalonde M. The role of feared possible selves in obsessivecompulsive and related disorders: A comparative analysis of a core cognitive self-construct in clinical samples. Clin Psychol Psychother. 2018; 25(1): e19–e29.
- 2 Abbey RD, Clopton JR, Humphreys JD. Obsessive-compulsive disorder and romantic functioning. J Clin Psychol. 2007; 63(12): 1181–1192.
- 3 Aboujaoude E. Compulsive Acts: A Psychiatrist's Tales of Ritual and Obsession. University of California Press; 2008.
- 4 Aboujaoude E. Three decades of telemedicine in obsessive-compulsive disorder: A review across platforms. Journal of Obsessive-Compulsive and Related Disorders. 2017; 14: 65–70.
- 5 Abramowitz JS, Baucom DH, Boeding S, Wheaton MG, Pukay-Martin ND, Fabricant LE, Paprocki C, Fischer MS. Treating obsessive-compulsive disorder in intimate relationships: a pilot study of couple-based cognitive-behavior therapy. Behav Ther. 2013; **44**(3): 395–407.

- 6 Abramowitz JS, Fabricant LE, Taylor S, Deacon BJ, McKay D, Storch EA. The relevance of analogue studies for understanding obsessions and compulsions. Clin Psychol Rev. 2014; **34**: 206–217.
- 7 Abramowitz JS. The practice of exposure therapy: relevance of cognitive-behavioral theory and extinction theory. Behav Ther. 2013; **44**(4): 548–558.
- 8 Albertella L, Le Pelley ME, Chamberlain SR, Westbrook F, Lee RSC, Fontenelle LF, Grant JE, Segrave RA, McTavish E, Yücel M. Rewardrelated attentional capture and cognitive inflexibility interact to determine greater severity of compulsivity-related problems. J Behav Ther Exp Psychiatry. 2020; 69: 101580.
- 9 Albert U, Maina G, Forner F, Bogetto F. DSM-IV obsessive-compulsive personality disorder: prevalence in patients with anxiety disorders and in healthy comparison subjects. Comprehensive Psychiatry. 2004; 45(5): 325–332.
- 10 Belus JM, Baucom DH, Abramowitz JS. The effect of a couplebased treatment for OCD on intimate partners. J Behav Ther Exp Psychiatry. 2014; **45**(4): 484–484.
- 11 Berle D, Starcevic V. Thought-action fusion: review of the literature and future directions. Clin Psychol Rev. 2005; **25**(3): 263–284.
- 12 Blier P, de Montigny C. Possible serotonergic mechanisms underlying the antidepressant and anti-obsessive-compulsive disorder responses. Biological Psychiatry. 1998; **44**(5): 313–323.
- 13 Bloch MH, Angeli Landeros-Weisenberger MD, Rosario MC, Pittenger C, Leckman JF. Meta-analysis of the symptom structure of obsessive-compulsive disorder. Am J Psychiatry. 2008: 165(12): 1532–1542.
- 14 Blom RM, Hagestein de Bruijn C, de Graaf R, ten Have M, Denys DA. Obsessions in normality and psychopathology. Depress Anxiety. 2011; **28**(10): 870–5.
- 15 Bulli F, Melli G, Cavalletti V, Stopani E, Carraresi C. Comorbid Personality Disorders in Obsessive-Compulsive Disorder and Its Symptom Dimensions. Psychiatr Q, 2016; **87**(2): 365–376.
- 16 Burkauskas J, Fineberg NA. History and Epidemiology of OCPD; Chapter 1. Obsessive-compulsive personality disorder/edited by Jon E. Grant, Anthony Pinto, Samuel R. Chamberlain. Washington, DC: American Psychiatric Association Publishing, 2020.
- 17 Calkins AW, Berman NC, Wilhelm S. Recent advances in research on cognition and emotion in OCD: a review. Curr Psychiatry Rep. 2013; 15(5): 357.
- 18 Castle D, Feusner J, Laposa JM, Richter PMA, Hossain R, Lusicic A, Drummond LM. Psychotherapies and digital interventions for OCD in adults: What do we know, what do we need still to explore? Compr Psychiatry. 2023; **120**: 152357.
- 19 Cerea S, Ghisi M, Bottesi G, Carraro E, Broggio D, Doron G. Reaching reliable change using short, daily, cognitive training exercises delivered on a mobile application: The case of Relationship Obsessive Compulsive Disorder (ROCD) symptoms and cognitions in a subclinical cohort. J Affect Disord. 2020; 276: 775–787.
- 20 Cervin M. Obsessive-Compulsive Disorder: Diagnosis, Clinical Features, Nosology, and Epidemiology. Psychiatr Clin North Am. 2023; 46(1): 1–16.
- 21 Cludius B, Mannsfeld AK, Schmidt AF, Jelinek L. Anger and aggressiveness in obsessive-compulsive disorder (OCD) and the mediating role of responsibility, non-acceptance of emotions, and social desirability. Eur Arch Psychiatry Clin Neurosci. 2021; **271**(6): 1179–1191.
- 22 Del Casale A, Sorice S, Padovano A, Simmaco M, Ferracuti S, Lamis DA, ... & Pompili M. Psychopharmacological treatment of obsessive-compulsive disorder (OCD). Current Neuropharmacology. 2019; **17**(8): 710–736.
- 23 Denys D, Tenney N, van Megen HJ, de Geus F, Westenberg HG. Axis I and II comorbidity in a large sample of patients with obsessivecompulsive disorder. J Affect Disord. 2004; 80(2–3): 155–162.
- 24 Derby DS, Tibi L, Doron G. Sexual dysfunction in relationship obsessive compulsive disorder. Sexual and Relationship Therapy. Advanced online publication. 2021; https://doi.org/10.1080/1468 1994.2021.2009793
- 25 Doron G, Derby D, Szepsenwol O, Nahaloni E, Moulding R. Relationship obsessive-compulsive disorder: interference, symptoms, and maladaptive beliefs. Front Psychiatry. 2016; **7**: 58.

- 26 Doron G, Derby D, Szepsenwol O, Talmor D. Tackling relationshiprelated obsessive-compulsive disorder: The development and preliminary evaluation of couple-based cognitive-behavioural therapy. Behav Modif. 2012; 36(4): 451–479.
- 27 Doron G, Derby D. Assessment and treatment of relationshiprelated OCD symptoms (ROCD): A modular approach. In J. Abramowitz, D. McKay, & E. Storch (Eds.), The Wiley Handbook of Obsessive-Compulsive Disorders (pp 547–564). Hoboken, NJ: Wiley-Blackwell 2017.
- 28 Doron G, Derby D. Assessment and Treatment of Relationship-Related OCD Symptoms (ROCD) A Modular Approach. The Wiley Handbook of Obsessive-Compulsive Disorders. 2017; 1: 547–564.
- 29 Doron G, Derby DS, Szepsenwol O, Talmor D. Flaws *et al.* Exploring partner-focused obsessive-compulsive symptoms. Journal of Obsessive-Compulsive and Related Disorders. 2012a; **1**(4): 234–243.
- 30 Doron G, Derby DS, Szepsenwol O, Talmor D. Tainted love: Exploring relationship-centred obsessive-compulsive symptoms in two non-clinical cohorts. Journal of Obsessive-Compulsive and Related Disorders. 2012b; **1**(1): 16–24.
- 31 Doron G, Derby DS, Szepsenwol O. Relationship obsessive-compulsive disorder (ROCD): A conceptual framework. J Obsessive Compuls Relat Disord. 2014a; **3**(2): 169–180.
- 32 Doron G, Kyrios M, Moulding R. Sensitive domains of self-concept in obsessive-compulsive disorder (OCD): further evidence for a multidimensional model of OCD. J Anxiety Disord. 2007; **21**(3): 433–444.
- 33 Doron G, Mizrahi M, Szepsenwol O, Derby D. Right or flawed: relationship obsessions and sexual satisfaction. J Sex Med. 2014b; 11(9): 2218–2224.
- 34 Doron G, Moulding R, Nedeljkovic M, Kyrios M, Mikulincer M, Sar-El D. Adult attachment insecurities are associated with obsessive compulsive disorder. Psychol Psychother. 2012; 85(2): 163–178.
- 35 Doron G, Moulding R. Cognitive behavioral treatment of obsessive-compulsive disorder: a broader framework. Isr J Psychiatry Relat Sci. 2009; 46(4): 257–263.
- 36 Doron G, Szepsenwol O, Karp E, Gal N. Obsessing about intimate relationships: testing the double relationship-vulnerability hypothesis. J Behav Ther Exp Psychiatry. 2013; 44(4): 433–440.
- 37 Doron G, Szepsenwol O. Partner-focused obsessions and selfesteem: An experimental investigation. J Behav Ther Exp Psychiatry. 2015; 49(Pt B): 173–179.
- 38 Ecker W. Non-delusional pathological jealousy as an obsessivecompulsive spectrum disorder: Cognitive-behavioural conceptualization and some treatment suggestions. J Obsessive-Compulsive and Related Disorders. 2012; **1**(3): 203–210.
- 39 Egan SJ, Shafran R. Cognitive-behavioral treatment for perfectionism. In J. Stoeber (Ed.), The psychology of perfectionism: Theory, research, applications (pp. 284–305). Routledge/Taylor & Francis Group 2018.
- 40 Eisen JL, Mancebo MA, Pinto A, Coles ME, Pagano ME, Stout R, Rasmussen SA. Impact of obsessive-compulsive disorder on quality of life. Compr Psychiatry. 2006; 47(4): 270–275.
- 41 Eisen JL, Coles ME, Shea MT, Pagano ME, Stout RL, Yen S. . . . Rasmussen SA. Clarifying the convergence between obsessive compulsive personality disorder criteria and obsessive compulsive disorder. J Pers Disord. 2006; **20**(3): 294–305.
- 42 Fernandez S, Sevil C, Moulding R. Feared self and dimensions of obsessive-compulsive symptoms: Sexual orientation-obsessions, relationship obsessions, and general OCD symptoms. Journal of Obsessive-Compulsive and Related Disorders. 2021; 28: 100608.
- 43 Fineberg NA, Hollander E, Pallanti S, Walitza S, Grünblatt E, Dell'Osso BM, Albert U, Geller DA, Brakoulias V, Janardhan Reddy YC, Arumugham SS, Shavitt RG, Drummond L, Grancini B, De Carlo V, Cinosi E, Chamberlain SR, Ioannidis K, Rodriguez CI, Garg K, Castle D, Van Ameringen M, Stein DJ, Carmi L, Zohar J, Menchon JM. Clinical advances in obsessive-compulsive disorder: a position statement by the International College of Obsessive-Compulsive Spectrum Disorders. Int Clin Psychopharmacol. 2020; **35**(4): 173–193.

- 44 Friborg O, Martinussen M, Kaiser S, Øvergård KT, Rosenvinge JH. Comorbidity of personality disorders in anxiety disorders: A metaanalysis of 30 years of research. J Affect Disord. 2013; 145(2): 143–155.
- 45 Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. Health Info Libr J. 2009; 26(2): 91–108.
- 46 Green BN, Johnson CD, Adams A. Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. J Chiropr Med. 2006; 5(3): 101–117.
- 47 Greenberg JL, Falkenstein M, Reuman L, Fama J, Marques L, Wilhelm S. The phenomenology of self-reported body dysmorphic disorder by proxy. Body Image. 2013; **10**: 243–246.
- 48 Guzick AG, McCabe RE, Storch EA. A review of motivational interviewing in cognitive behavioral therapy for obsessive-compulsive disorder. J Cogn Psychother. 2021; 35(2): 116–132.
- 49 Heinzel CV, Kollarik M, Miche M., Clamor A, Ertle A. Is a Ruminative Thinking Style Related to Obsessive-Compulsive Symptom Severity Beyond Its Associations with Depressive and Anxiety Symptom Severity? J Cogn Ther. 2021; 14: 575–591.
- 50 Hezel DM, McNally RJ. A Theoretical review of cognitive biases and deficits in obsessive-compulsive disorder. Biol Psychol. 2016; 121(Pt B): 221–232.
- 51 Hodny F, Ociskova M, Prasko J, Houdkova M, Vanek J, Sollar T, Visnovsky J, Slepecky M, Nesnídal V, Latalova K, Kolek A, Bocek J. Early life experiences and adult attachment in obsessive-compulsive disorder. Part 1: Relationships between demographic, clinical, and psychological factors in pharmacoresistant OCD. Neuro Endocrinol Lett. 2022a; **43**(6): 333–344.
- 52 Hodny F, Ociskova M, Prasko J, Vanek J, Visnovsky J, Sollar T, Slepecky M, Nesnídal V, Kolek A. Early life experiences and adult attachment in obsessive-compulsive disorder. Part 2: Therapeutic effectiveness of combined cognitive behavioural therapy and pharmacotherapy in treatment-resistant inpatients. Neuro Endocrinol Lett. 2022b; **43**(6): 345–358.
- 53 Hodny F, Prasko J, Ociskova M, Vanek J, Holubova M. Attachment in patients with an obsessive-compulsive disorder. Neuro Endocrinol Lett. 2021; 42(5): 283–291.
- 54 Issari Y, Jakubovski E, Bartley CA, Pittenger C, Bloch MH. Early onset of response with selective serotonin reuptake inhibitors in obsessive-compulsive disorder: a meta-analysis. J Clin Psychiatry. 2016; 77(5): e605–e611.
- 55 Jelinek L, Hauschildt M, Hottenrott B, Kellner M, Moritz S. Further evidence for biased semantic networks in obsessive-compulsive disorder (OCD): when knives are no longer associated with buttering bread but only with stabbing people. J Behav Ther Exp Psychiatry. 2014; **45**(4): 427–434.
- 56 Kasalova P, Prasko J, Ociskova M, Holubova M, Vanek J, Kantor K, Minarikova K, Hodny F, Slepecky M, Barnard L. Marriage under control: obsessive compulsive disorder and partnership. Neuro Endocrinol Lett. 2020; 41(3): 134–145.
- 57 Kiliç N, Altınok A. Obsession and relationship satisfaction through the lens of jealousy and rumination. Personality and Individual Differences. 2021; **179**: 110959.
- 58 Krause S, Radomsky AS. "Was I asking for it?": An experimental investigation of perceived responsibility, mental contamination and workplace sexual harassment. J Behav Ther Exp Psychiatry. 2021; 71: 101633.
- 59 Lack CW, Huskey A, Weed DB, Highfill MJ, Craig L. The etiology of obsessive-compulsive disorder. In: Lack CW, editor. Obsessivecompulsive disorder: Etiology, phenomenology, and treatment. Onus Books; Oklahoma City: 2015. pp. 24–52.
- 60 Laposa JM, Collimore KC, Hawley LL, Rector NA. Distress tolerance in OCD and anxiety disorders, and its relationship with anxiety sensitivity and intolerance of uncertainty. J Anxiety Disord. 2015; 33: 8–14.
- 61 Lee SW, Jang TY, Kim S, Lee SJ. Heightened but inefficient thoughtaction fusion in obsessive-compulsive disorder: new insight from a multiple trial version of the classic thought-action fusion experiment. Psychiatry Investig. 2023; **20**(2): 120–129.

- 62 Littman R, Leibovits G, Halfon C, Schonbach M, Doron G. Interpersonal transmission of ROCD symptoms and susceptibility to infidelity in romantic relationships. Journal of Obsessive-compulsive and Related Disorders. 2023; **37**: 100802.
- 63 Lochner C, Serebro P, van der Merwe L, Hemmings S, Kinnear C, Seedat S, Stein DJ. Comorbid obsessive–compulsive personality disorder in obsessive–compulsive disorder (OCD): A marker of severity. Progress in Neuro-Psychopharmacology and Biological Psychiatry. 2011; **35**(4): 1087–1092.
- 64 Lombardi A, Rodriguez C. Enhancing exposure and response prevention treatment in an individual with relationship obsessivecompulsive disorder: a case report. J Cogn Psychother. 2019; 33(3): 185–195.
- 65 Marcks BA, Woods DW. Role of thought-related beliefs and coping strategies in the escalation of intrusive thoughts: an analog to obsessive-compulsive disorder. Behav Res Ther. 2007; **45**(11): 2640–2651.
- 66 Miegel F, Jelinek L, Moritz S. Dysfunctional beliefs in patients with obsessive-compulsive disorder and depression as assessed with the Beliefs Questionnaire (BQ). Psychiatry Res. 2019; 272: 265–274.
- 67 Millar JFA, Coughtrey AE, Healy Á, Whittal M, Shafran R. The current status of mental contamination in obsessive compulsive disorder: A systematic review. J Behav Ther Exp Psychiatry. 2023; 80: 101745.
- 68 Misirli M, Kayanak GK. Relationship Obsessive Compulsive Disorder: A Systematic Review. Current Approaches in Psychiatry. 2023; 15(4): 549–561.
- 69 Moritz S, von Mühlenen A. Investigation of an attentional bias for fear-related material in obsessive-compulsive checkers. Depress Anxiety. 2008; **25**(3): 225–229.
- 70 Nezgovorova V, Reid J, Fineberg NA, Hollander E. Optimizing firstline treatments for adults with OCD. Comprehensive Psychiatry 2022; **115**: 152305.
- 71 Obsessive Compulsive Cognitions Working Group. Cognitive assessment of obsessive-compulsive disorder. Behav Res Ther. 1997; **35**: 667–681.
- 72 Obsessive Compulsive Cognitions Working Group. Psychometric validation of the obsessive beliefs questionnaire: factor analyses and testing of a brief version. Behav Res Ther 2005; **43**: 1527–1542.
- 73 Olatunji BO, Ciesielski BG, Zald DH. A selective impairment in attentional disengagement from erotica in obsessive-compulsive disorder. Prog Neuropsychopharmacol Biol Psychiatry. 2011; 35(8): 1977–1982.
- 74 Ouellet-Courtois C, Radomsky AS. Can immorality be contracted? Appraisals of moral disgust and contamination fear. Behav Res Ther. 2023; **166**: 104336.
- 75 Parker G, Barrett E. Morbid jealousy as a variant of obsessivecompulsive disorder. Aust N Z J Psychiatry. 1997; 31(1): 133–138.
- 76 Pascual-Vera B, Akin B, Belloch A, Bottesi G, Clark DA, Doron G, Fernández-Alvarez H, Ghisi M, Gómez B, Inozu M, Jiménez-Ros A, Moulding R, Ruiz MA, Shams G, Sica C. The cross-cultural and transdiagnostic nature of unwanted mental intrusions. Int J Clin Health Psychol. 2019; **19**(2): 85–96.
- 77 Pena-Garijo J, Edo Villamón S, Meliá de Alba A, Ruipérez M. Personality disorders in obsessive-compulsive disorder: a comparative study versus other anxiety disorders. The Scientific World Journal, 2013.
- 78 Pinto A, Liebowitz MR, Foa EB, Simpson HB. Obsessive compulsive personality disorder as a predictor of exposure and ritual prevention outcome for obsessive compulsive disorder. Behaviour Research and Therapy. 2011; **49**(8): 453–458.
- 79 Pinto A, Mancebo MC, Eisen JL, Pagano ME, Rasmussen SA. The Brown Longitudinal Obsessive Compulsive Study: clinical features and symptoms of the sample at intake. J Clin Psychiatry. 2006; 67(5): 703.

- 80 Pozza A, Albert U, Dèttore D. perfectionism and intolerance of uncertainty are predictors of OCD symptoms in children and early adolescents: a prospective, cohort, one-year, follow-up study. Clin Neuropsychiatry. 2019; **16**(1): 53–61.
- 81 Pozza A, Casale S, Dèttore D. Therapists' emotional reactions to patients with obsessive-compulsive disorder: the role of therapists' orientation and perfectionism. Journal of Rational-Emotive & Cognitive-Behavior Therapy. 2022; 40: 879–904.
- 82 Prabhu L, Cherian AV, Viswanath B, Kandavel T, Math SB, Reddy YJ. Symptom dimensions in OCD and their association with clinical characteristics and comorbid disorders. Journal of Obsessive-Compulsive and Related Disorders. 2013; 2(1): 14–21.
- 83 Purdon CL; Clark DA. Metacognition and Obsession. Clinical Psychology & Psychotherapy. 6(2): 102–110.
- 84 Rachman S. A cognitive theory of obsessions. Behav Res Ther. 1997; **35**: 793–802.
- 85 Rajaee S. Relationship OCD: A CBT-Based Guide to Move Beyond Obsessive Doubt, Anxiety, and Fear of Commitment in Romantic Relationships. New Harbinger Publications, 2023.
- 86 Reid JE, Laws KR, Drummond L, Vismara M, Grancini B, Mpavaenda D, Fineberg NA. Cognitive behavioural therapy with exposure and response prevention in the treatment of obsessive-compulsive disorder: A systematic review and meta-analysis of randomized controlled trials. Comprehensive Psychiatry. 2021; **106**: 152223.
- 87 Remmerswaal KCP, Batelaan NM, van Balkom AJLM. Relieving the Burden of Family Members of Patients with Obsessive-Compulsive Disorder. Clin Neuropsychiatry. 2019; 16(1): 47–52.
- 88 Salkovskis PM. Obsessional-compulsive problems: a cognitivebehavioural analysis. Behav Res Ther. 1985; **23**(5): 571–583.
- 89 See CCH, Tan JM, Tan VSY, Sündermann O. A systematic review on the links between emotion regulation difficulties and obsessivecompulsive disorder. J Psychiatr Res. 2022; **154**: 341–353.
- 90 Sheikhmoonesi F. Obsessional Jealousy: A Narrative Literature Review. Iranian Journal of Psychiatry and Behavioral Sciences. 2017: **11**(4): e7273.
- 91 Shihata S, McEvoy PM, Mullan BA. Pathways from uncertainty to anxiety: An evaluation of a hierarchical model of trait and disorder-specific intolerance of uncertainty on anxiety disorder symptoms. J Anxiety Disord. 2017; 45: 72–79.
- 92 Smith E, Carrigan N, Salkovskis PM. Different cognitive behavioural processes underpinning reassurance seeking in depression and obsessive-compulsive disorder. J Behav Ther Exp Psychiatry. 2022; 77: 101774.
- 93 Sookman D, Pinard G. Overestimation of threat and intolerance of uncertainty in obsessive compulsive disorder. In R. O. Frost & G. Steketee (Eds.), Cognitive approaches to obsessions and compulsions: Theory, assessment, and treatment (pp. 63–89). Pergamon/ Elsevier Science Inc 2002.
- 94 Soondrum T, Wang X, Gao F, Liu Q, Fan J, Zhu X. The Applicability of Acceptance and Commitment Therapy for Obsessive-Compulsive Disorder: A Systematic Review and Meta-Analysis. Brain Sci. 2022; **12**(5): 656.
- 95 Spencer SD, Stiede JT, Wiese AD, Goodman WK, Guzick AG, Storch EA. Cognitive-Behavioural Therapy for Obsessive-Compulsive Disorder. Psychiatr Clin North Am. 2023; 46(1): 167–180.
- 96 Starcevic V, Berle D, Brakoulias V, Sammut P, Moses K, Milicevic D, Hannan A.Obsessive-compulsive personality disorder co-occurring with obsessive-compulsive disorder: conceptual and clinical implications. Australian & New Zealand Journal of Psychiatry. 2013; 47(1): 65–73.
- 97 Stein DJ, Costa DLC, Lochner C, Miguel EC, Reddy YCJ, Shavitt RG, van den Heuvel OA, Simpson HB. Obsessive-compulsive disorder. Nat Rev Dis Primers. 2019; 5(1): 52.

- 98 Stewart SE, Yu D, Scharf JM, Neale BM, Fagerness JA, Mathews CA, Arnold PD, Evans PD, Gamazon ER, Davis LK, Osiecki L, McGrath L, Haddad S, Crane J, Hezel D, Illman C, Mayerfeld C, Konkashbaev A, Liu C, Pluzhnikov A, Tikhomirov A, Edlund CK, Rauch SL, Moessner R, Falkai P, Maier W, Ruhrmann S, Grabe HJ, Lennertz L, Wagner M, Bellodi L, Cavallini MC, Richter MA, Cook EH Jr, Kennedy JL, Rosenberg D, Stein DJ, Hemmings SM, Lochner C, Azzam A, Chavira DA, Fournier E, Garrido H, Sheppard B, Umaña P, Murphy DL, Wendland JR, Veenstra-Vander Weele J, Denys D, Blom R, Deforce D, Van Nieuwerburgh F, Westenberg HG, Walitza S, Egberts K, Renner T, Miguel EC, Cappi C, Hounie AG, Conceição do Rosário M, Sampaio AS, Vallada H, Nicolini H, Lanzagorta N, Camarena B, Delorme R, Leboyer M, Pato CN, Pato MT, Voyiaziakis E, Heutink P, Cath DC, Posthuma D, Smit JH, Samuels J, Bienvenu OJ, Cullen B, Fyer AJ, Grados MA, Greenberg BD, McCracken JT, Riddle MA, Wang Y, Coric V, Leckman JF, Bloch M, Pittenger C, Eapen V, Black DW, Ophoff RA, Strengman E, Cusi D, Turiel M, Frau F, Macciardi F, Gibbs JR, Cookson MR, Singleton A; North American Brain Expression Consortium; Hardy J; UK Brain Expression Database; Crenshaw AT, Parkin MA, Mirel DB, Conti DV, Purcell S, Nestadt G, Hanna GL, Jenike MA, Knowles JA, Cox N, Pauls DL. Genome-wide association study of obsessivecompulsive disorder. Mol Psychiatry. 2013; 18(7): 788-798.
- 99 Subramaniam M, Soh P, Vaingankar JA, Picco L, Chong SA. Quality of life in obsessive-compulsive disorder: impact of the disorder and of treatment. CNS Drugs. 2013; 27(5): 367–383.
- 100 Taylor S, Abramowitz JS, McKay D. Non-adherence and nonresponse in the treatment of anxiety disorders. J Anxiety Disord. 2012; **26**(5): 583–589.

- 101 Taylor S, Thordarson DS, Söchting I. Obsessive-compulsive disorder. In M. M. Antony & D. H. Barlow (Eds.), Handbook of assessment and treatment planning for psychological disorders (pp. 182–214). The Guilford Press 2002.
- 102 Tennov D. Love and limerence: The experience of being in love. Chelsea, MI: Scarborough House 1998.
- 103 Tolin DF, Abramowitz JS, Przeworski A, Foa EB. Thought suppression in obsessive-compulsive disorder. Behav Res Ther. 2002; 40(11): 1255–1274.
- 104 Wewetzer C, Jans T, Müller B, Neudörfl A, Bücherl U, Remschmidt H.... Herpertz-Dahlmann B. Long-term outcome and prognosis of obsessive-compulsive disorder with onset in childhood or adolescence. European Child & Adolescent Psychiatry. 2001; **10**(1): 37–46.
- 105 Wheaton MG, Huppert JD, Foa EB, Simpson HB. How important is the therapeutic alliance in treating obsessive-compulsive disorder with exposure and response prevention? An empirical report. Clin Neuropsychiatry. 2016; **13**(6): 88–93.
- 106 Willmott L, Bentley E. Exploring the lived-experience of limerence: a journey toward authenticity. The Qualitative Report. 2015; 20(1): 20–38.
- 107 Wu KD. Contemporary personality disorder assessment in clients with anxiety disorders. In Handbook of assessing variants and complications in anxiety disorders (pp. 189–201): Springer 2013.
- 108 Zhang T, Chow A, Tang Y, Xu L, Dai Y, Jiang K . . . Xiao Z. Comorbidity of personality disorder in obsessive-compulsive disorder: special emphases on the clinical significance. CNS Spectr. 2015; 20(5): 466–468.