

**INTEGRATING COGNITIVE BEHAVIOURAL
THERAPY AND MINDFULNESS TECHNIQUES
IN TREATING ADOLESCENT OCD WITH
COMORBID MAJOR DEPRESSIVE DISORDER:
A CASE REPORT"**

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Abstract

Adolescents with co-occurring Obsessive-Compulsive Disorder (OCD) and Major Depressive Disorder (MDD) face significant challenges, including impaired social, academic, and emotional functioning. This paper explores an integrated treatment approach that combines Cognitive Behavioural Therapy (CBT) with mindfulness techniques to address the complex symptoms of both disorders. CBT, the gold standard for OCD and MDD, focuses on altering maladaptive thinking patterns and behaviours through Exposure and Response Prevention (ERP) for OCD and cognitive restructuring for MDD. Mindfulness techniques enhance this approach by promoting emotional regulation and reducing rumination, anxiety, and compulsive behaviours. Family involvement is also critical in supporting the adolescent's therapeutic progress. This integrated approach shows the

potential to improve emotional flexibility and overall well-being in adolescents with OCD and MDD, offering a comprehensive framework for treatment.

Introduction

Obsessive Compulsive Disorder (OCD) is one of the ten leading causes of disability worldwide (Bobes et al., 2001). OCD is characterised by the presence of obsessions, compulsions, or both. Obsessions are defined as recurrent and persistent thoughts, images, and impulses experienced by the individual as intrusive and unwanted, and that cause significant anxiety or distress in most individuals. Compulsions are defined as repetitive behaviours or mental acts that individuals feel driven to perform in response to an obsession. Also, both obsessions and compulsions are time-consuming and cause clinically significant distress or impairment in critical areas of functioning (American Psychiatric Association, 2013). Other symptomatic features that may arise include impulsivity, aggressive and avoidance behaviours (Nazeer et al., 2020).

However, the presentation of OCD in children and adolescents can vary from adults, as children and adolescents report multiple obsessions and compulsions with the content changing over time, while adults report few (Rupasinghe, Samaranayaka, & Senevirathna, 2022). The most common obsessions identified among children and adolescents are dirt and contamination, harmful catastrophes (e.g., fires, illness, or death), symmetry, order and exactness, religious scrupulosity, forbidden sexual thoughts, and aggressive urges or ideas

(Geller & March, 2012). Common anxiety-reducing compulsions among children and adolescents are washing, repeating an action, touching, ordering, collecting, praying, and reassurance seeking (Geller & March, 2012).

Children and adolescents with OCD face substantial impairments in their psychosocial functioning (Valderhaug & Ivarsson, 2005). Such impairments are vital at home (e.g., bathing, grooming, and getting ready for bed). At school, OCD severely impacts activities such as getting to school on time, concentrating on work, school attendance, and doing homework, which then causes substantial disruptions to academic performance (Valderhaug & Ivarsson, 2005; Piacentini et al., 2003). A study conducted in Sri Lank shows that more than 50% of the children studied had academic decline and impairments at school after the onset of OCD. Their symptoms affect them and their family members (Stengler-Wenzke et al., 2004). Many children with OCD depend on their family members for care, and family members are often involved in the child's rituals. This can cause emotional stress, disability, and a burden on the family (Stengler-Wenzke et al., 2004).

The prevalence of OCD in the general population is 1.1%-1.8% in adults and adolescents, with a slightly higher presentation of symptoms among females than males in adulthood (American Psychiatric Association, 2013). The onset of OCD can occur from early childhood onwards. Several disorders can co-exist with OCD, such as anxiety disorders, major depressive disorder, and personality disorders (Nazeer et al., 2020).

Temperamental factors such as higher negative emotionality, behavioural inhibition in childhood, genetic factors such as having first-degree relatives with OCD, and environmental factors such as physical or sexual abuse in childhood or stressful life events can be risky and prognostic factors for OCD (American Psychiatric Association, 2013). A study in Sri Lanka suggests that hormonal imbalances during adolescence due to puberty are an essential biological risk factor. Also, facing an examination, illnesses, or death in the family has been identified as a life stressor contributing to the onset of OCD (Dhuri et al., 2014).

The Yale-Brown Obsessive Compulsive Scale (Y-BOCS) is the gold standard for diagnosing OCD (Goodman et al., 1989). The Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS) was introduced in 1997 to assess the presence and severity of OCD symptoms in children and adolescents and to monitor treatment (Rupasinghe, Samaranayaka, & Senevirathna, 2022).

Treatments of OCD include both pharmacotherapy and psychotherapy. According to research, Cognitive Behavioural Therapy (CBT) is one of the most effective intervention methods for OCD (Nazeer et al., 2020). CBT for OCD in children typically includes psycho-education, cognitive retraining, exposure and response prevention, and relaxation training. Also, including family sessions and positive family interaction in CBT therapy sessions causes the best outcomes in treating OCD (Bolton et al., 2011), as

well as weekly CBT sessions have been identified as effective as daily sessions (Storch et al., 2007). While OCD is often treated using CBT techniques, according to research, mindfulness techniques are an effective method of managing the level of distress that occurs along with intrusive thoughts, images, and thought-action fusion (Gasnier, 2006; Hanstede et al., 2008).

Major Depressive Disorder (MDD) is the main co morbidity of OCD (American Psychiatric Association, 2013). Low mood, loss of interest or pleasure, Appetite changes, sleep difficulties, low social interaction, lack of pleasurable activities, suicidal ideation, concentration difficulties, and fatigue are the diagnostic symptoms of the disorder (American Psychiatric Association, 2013). Cognitive Behavioural Therapy (CBT) is one of the most effective methods of intervention for MDD. Thought challenges carried out during CBT often result in belief changes and cognitive restructuring (Sudak, 2012). A promising enhancement for clients who have undergone CBT is the integration of mindfulness-based therapy. Mindfulness involves intentionally focusing on the present moment and observing one's thoughts, emotions, and bodily sensations with openness and without judgment. Adaptations of mindfulness practices have shown effectiveness in treating a range of mental health conditions, particularly anxiety and depression (Hale et al., 2013). Given that mindfulness encourages a non-judgmental awareness of intrusive thoughts, it is increasingly being recognised as a beneficial approach for both OCD and Major Depressive Disorder MDD.

Case description

Presenting Complaint

A 14-year-old female was referred for psychological treatment due to severe symptoms of OCD. She exhibited repetitive, ritualistic behaviours that significantly interfered with her daily functioning. Her mother reported that she spent excessive time completing routine tasks, displayed excessive daytime sleepiness, low mood, school avoidance, severe anger outbursts, refusal to eat, and social withdrawal.

The client described experiencing intrusive mental images of both "good" and "bad" faces, including cartoon characters and deities. She felt compelled to repeat tasks until she visualized a "good" face, fearing that stopping on a "bad" image would be a grave sin, which caused her considerable distress. Additionally, she avoided religious places due to intrusive, blasphemous thoughts upon seeing religious statues, which she also interpreted as sinful and deeply distressing.

History of presenting complaint

The onset of the client's symptoms appears to be linked to psychosocial stressors, including criticism by a class teacher and subsequent bullying by peers. These experiences led to negative thoughts such as, "People blame me because I am a bad girl." This was reinforced by the attention of classmates perceived as "bad boys," which she interpreted as further evidence of her own perceived badness.

Following these events, she developed guilt related to religious practices, particularly a fear of worshipping Buddhist statues. During this period, the entire family contracted COVID-19, which heightened her anxiety, particularly regarding her mother's health. Around four months prior to hospital admission, her mother noticed the onset of ritualistic and repetitive behaviours, which progressed over time.

In the week prior to admission, her compulsions had increased significantly and she would stand for hours at the doorway before entering the house, repetitively put on and take off her school bag for over an hour, and spend approximately ten hours removing her school uniform and bathing. Her homework would often take all night due to compulsive rewriting, and she was unable to use the toilet in time due to these rituals.

These symptoms severely impacted her functioning; she stopped attending school and tuition classes, became increasingly irritable with family members, avoided social and religious settings, and was unable to look at her own face or others she associated with negative thoughts. Although she attempted to resist the compulsions, she was unable to do so. Notably, she had fair insight into her condition and expressed a desire to receive treatment.

Family History

She lived with her parents, elder sister, and paternal grandmother in their own house. Her father was a graduate teacher, and her mother was a nursing officer.

Her elder sister studied in grade ten. She had a secure relationship with both her parents and her sister. Her parents were financially stable, and they were supportive of their daughter. There is a family history of mental disorders; her paternal grandmother had dementia, and her paternal aunt had been diagnosed with OCD.

Premorbid personality

She was a child with excellent academic performance and received good grades for almost all subjects in exams. She had few friends in school. Also, she was a child who had fewer social interactions. According to her mother, she was obedient, kind, and calm in character. Also, she was a girl who was overly engaged in religious activities from a younger age.

Personal History

She reached all standard developmental milestones at the appropriate age as a child. She got 146 marks on the Grade Five scholarship exam. Her Test of Nonverbal Intelligence III score was "above average." Also, there is no history of romantic relationships.

Formulation

Her symptoms of OCD and MDD were by the DSM-5 criteria. Her symptoms included obsessional thoughts related to religious scrupulosity, intrusive Images of bad faces of gods, people, and cartoon characters, time-consuming ritualistic compulsions, and reassurance-seeking behaviours. Her irritability, hypersomnia, lack of appetite, feelings of guilt, lack of

motivation, and avoidance of social interactions classified her into a diagnosis of MDD.

A positive family history of OCD and other mental disorders suggested a possible genetic predisposition to her condition. Her childhood experience of being bullied by some of her classmates resulted in her developing low self-esteem at a very young age. Her temperament is characterised by perfectionism and neuroticism, and her beliefs of over-responsibility and cognitive distortions may have predisposed her towards symptoms of OCD. In addition, their socialisation experiences with her parents, which were very rigid, moral, and religious, may have led to dysfunctional beliefs about being good and bad or being righteous and sinful.

Tested positive for the whole family for COVID-19, not having her friends in the new classroom, the class teacher's negative evaluations, and being bullied by her friends are apparent precipitating factors of her OCD symptoms.

Perpetuating factors such as family members' accommodation of her compulsions, being negatively evaluated by her teacher, distress due to her perfectionism traits, over-responsibility and thought-action fusion, school avoidance, not engaging in daily activities, and parents' poor coping strategies and permissive parenting style, maintained her OCD symptoms as well as MDD symptoms.

The protective factors in this case included her above-average IQ level, fair insight into her mental

health condition, her family member's commitment to the treatment process, and adequate socioeconomic background.

Assessment Measures

The CY-BOCS consists of both a symptom checklist and a severity scale section. The severity scale comprises ten items rated on a 5-point Likert scale evaluating the severity of obsessions and compulsions across five dimensions. It can be administered as a semi-structured interview (Novara et al., 2020).

DASS-21 is a three-dimensional self-administered questionnaire designed to measure the presence and severity of depression, anxiety, and stress. The items will be rated using a 4-point Likert scale. It has been validated and translated in Sri Lanka (Aththidiye, 2012).

The Children's Yale-Brown Obsessive-Compulsive Scale and a validated and translated version of The Depression Anxiety Stress Scale were completed at the second session of therapy to document a baseline measurement of the client's OCD symptoms and MDD, respectively. Both scales were repeated at the 9th and 16th sessions of therapy to measure progress against that baseline measurement. The Children's Yale-Brown Obsessive-Compulsive Scale was verbally translated to the client.

Results of The Children's Yale-Brown Obsessive Compulsive Scale		
Session	Score	Description
2 nd session	31	Severe
10 th session	19	Moderate

Scores of The DASS-21		
Session	Score	Description
2 nd session	14	Severe
10 th session	08	Normal

Treatment plan

Treatment goals were developed collaboratively by the client and the therapist.

Main treatment goals

- (1).To reduce the client's OCD symptoms, reduce the severity level of CY-BOCS from "Severe" to "Moderate" level within two months.
- (2).To reduce the client's depression symptoms, reduce the severity level from "moderate" to "Mild" level within two months.

Treatment plan

Using CBT interventions to reduce the severity of OCD

- Psycho-education
- Externalising the problem
- Exposure and Response Prevention therapy and relaxation training
- Cognitive Therapy
- Family Involvement
- Mindfulness-based interventions
- Relapse prevention
 - Using CBT and Mindfulness-based interventions to reduce the symptoms and severity of MDD
 - Behavioural Activation plan
 - Cognitive therapy
 - Mindfulness-based interventions

Summary of Therapy Sessions

Session 1

The first session focused on understanding the client's current difficulties and rapport building. The symptoms, nature, and severity of her OCD and the comorbid condition of MDD were explored using a history-taking interview and psychometric instruments with the client and her mother. The session was also used to understand the family's involvement in her condition, impairments in day-to-day life, and her level of insight about her intrusive thoughts, images, and compulsions. It was clear that her insight was fair.

Session 2

During the second session, psycho-education on OCD was given to both the client and her parents. Normalising and externalising her condition was done as a part of the psycho-education. Normalising was very important for reducing the stigma of the diagnosis, and externalising the problem was significant for a child to defeat the OCD and reduce the impact of OCD (Geller & March, 2012). Also, the case formulation was explained to them. Furthermore, the therapist, the client, and her parent have collaboratively developed the treatment goals. At the end of the second session, an OCD diary was administered.

Sessions 3, 4 and 5

The Exposure response prevention (ERP) therapy was introduced and explained. The client was explained that her anxiety will reduce naturally when she does not respond to intrusive thoughts and resists the urge to act on them. Also, as the anxiety naturally reduces, the relationship between the thought and the act gradually reduces. Each time ERP is carried out, the prevention of the response will become easier. This is called habituation. The duration of the urge will also reduce gradually (Chellingsworth, 2010). The therapist and the client collaboratively arranged the OCD hierarchy. The exposure process was to be carried out by gradually moving from the least challenging situation to the most challenging one. ERP sessions were started from imaginal exposure as her anxiety levels were very high. Three ERP sessions were practised at the hospital in three sessions by using modelling. Her mother was also

instructed on ERP to be Samadhi's co-therapist at home. Externalising techniques were discussed again to facilitate the ERP program.

To manage the anxiety that arises due to Symptoms of OCD, relaxation techniques, including deep breathing, were taught and practised during the therapy sessions. During her hospital admission, sessions one, two, three, and four were conducted within two weeks.

Session 6

A Thought Diary was administered to work on her negative automatic thoughts after explaining the relationship between thoughts, emotions, physical sensations, and behaviour to her. Since she spent most of his day sleeping, an activity schedule was developed to create structure throughout the day.

Sessions 7 and 8

She was asked to look for evidence *for* and *against* her thought, "I am a bad girl." using an excerpt from the thought diary. She realized that there was much evidence against that thought other than the class teacher's negative appraisal. Samadhi practised coming up with a more realistic, evidence-based alternative thought on behalf of the automatic negative thought.

Session 9

A study schedule was developed to support her in completing the lessons she missed due to school refusal. Study techniques were discussed to do her studies effectively.

Session 10

A reassessment of OCD symptoms and symptoms of MDD was done. The CY-BOCS and DASS-21 were administered once again to the client. Her symptoms of OCD and MDD had been reduced to severe to moderate and moderate to mild, respectively.

Session 11

Therapist Discussed and planned with the family about gradually exposing the client to previously avoided places and situations that triggered obsessional thoughts.

Session 12

Addressing the anger issues and discussed anger and anger management techniques, Assertive communication skills training was done for the family with role-plays.

Session 13

Addressed the issues related to over-responsibility and perfectionist traits by using Socratic questioning.

Sessions 14 and 15

Mindfulness activities were introduced into her daily routine to help him further understand the nature of thoughts.

Session 16

A reassessment of OCD symptoms and symptoms of MDD was done. The CY-BOCS and DASS-21 were administered once again to the client. Her symptoms of OCD had been reduced to Moderate to mild levels. The scores on DASS-21 were normal. Discussing the relapse prevention strategies with the client and the parents planned a booster session after a month.

Discussion

Treating adolescents with OCD and MDD presents a unique set of challenges. Adolescents affected by these co-occurring disorders experience significant distress and impairment in daily functioning, including academic performance and social relationships (Valderhaug & Ivarsson, 2005). The symptoms of OCD, such as intrusive thoughts and compulsive behaviours, often interact with depressive symptoms like hopelessness and anhedonia, making treatment especially complex. Given the complexity of treating both disorders simultaneously, an integrated approach is essential.

CBT is well-established as the gold standard for treating both OCD and MDD. CBT for OCD typically includes ERP, which helps adolescents confront feared situations while resisting the urge to perform compulsive rituals. For MDD, CBT focuses on cognitive restructuring, helping individuals challenge negative thought patterns contributing to feelings of sadness and hopelessness. The integration of CBT into treatment for

adolescents with both disorders can be highly effective. By simultaneously addressing distorted thinking patterns in both OCD and MDD, CBT offers a comprehensive approach that targets the root causes of both conditions, enhancing therapeutic outcomes.

However, managing the overlap between OCD and MDD can be challenging, particularly when considering the behavioural avoidance that is characteristic of both disorders. This avoidance reinforces negative cycles and complicates treatment, making it harder to engage adolescents fully in therapy. CBT, when tailored to address these overlapping symptoms, can be very effective in breaking these cycles. By using CBT to target maladaptive thinking patterns in both disorders, therapists can help reduce the intensity of obsessions and compulsions while also addressing the negative cognitive distortions that fuel depression.

Incorporating mindfulness techniques into CBT further enhances the treatment's effectiveness. Mindfulness emphasising non-judgmental awareness of the present moment helps adolescents become more aware of their internal experiences without becoming overwhelmed by them. This is especially useful for adolescents with OCD, who often engage in rumination or worry about their obsessions. Mindfulness techniques, such as deep breathing and body scans, can help manage anxiety and reduce the need for compulsive behaviours. For adolescents with comorbid MDD, mindfulness promotes emotional regulation and helps break the cycle of negative thinking by encouraging acceptance of

thoughts and feelings rather than engaging with them in a self-critical way.

Mindfulness complements CBT by promoting psychological flexibility, which allows adolescents to better manage both OCD and MDD symptoms. It teaches them how to observe their thoughts and feelings without reacting impulsively, fostering a healthier relationship with distressing thoughts. This integration of mindfulness techniques can significantly improve emotional regulation and help adolescents' better cope with the challenges of both disorders.

The involvement of the family is another key factor in the success of treatment. Family members play a critical role in supporting the adolescent through therapy by reinforcing techniques such as ERP and mindfulness at home. Psycho education for families about OCD, MDD, and mindfulness helps them better understand their adolescent's struggles and provides the necessary emotional support. Family support not only encourages therapy adherence but also creates a stable and understanding environment for the adolescent. It strengthens the family unit and serves as a protective factor against relapse.

Despite the promising outcomes observed in this case study, some limitations must be acknowledged. The study's design, based on a single subject, limits the generalizability of the findings. Larger, more controlled studies are needed to assess the broader applicability of this integrated treatment approach for adolescents with OCD and MDD. Furthermore, exploring the long-term

effects of combining CBT and mindfulness would be valuable in determining the sustainability of these benefits over time.

In conclusion, integrating CBT with mindfulness techniques offers a comprehensive and effective approach to treating adolescents with both OCD and MDD. This combined treatment not only addresses the symptoms of each disorder but also promotes emotional regulation, psychological flexibility, and overall well-being. The involvement of family members further supports the adolescent's recovery, reinforcing the importance of a holistic, family-centered approach to treatment. Future research will be crucial in expanding the evidence base for this integrated model, providing further insight into its long-term efficacy and applicability across diverse adolescent populations.

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