Case Report

Cognitive Behavioural Therapy for Disruptive Mood Dysregulation Disorder

Ayushi Dixit[1], Pooja Mahour[2], Vivek Agarwal[3]

[1]Clinical Psychologist, Shafa Home Drug Deaddiction and Rehabilitation Centre, Kotdwara, Uttarakhand.
[2]Associate Professor, Department of Psychiatry, King George's Medical University, Lucknow, UP.
[3]Professor, Department of Psychiatry, King George's Medical University, Lucknow, UP.
Corresponding author: Pooja Mahour
Email – poojapsy@gmail.com

ABSTRACT

Disruptive mood dysregulation disorder (DMDD) is a relatively new diagnosis that was introduced for the first time in DSM-5. The most prominent features of this disorder consist of behavioral as well as mood disruptions. There are very few treatment studies on DMDD. This present case study presents the use of cognitive-behavioral therapy (CBT) for anger and aggression in a 10-year-old boy presenting with complaints of DMDD. At the time of intake evaluation, he demonstrated several temper outbursts and two to three episodes of aggressive behavior per week. A total of 11 CBT sessions were conducted over 15 weeks. Post-treatment evaluation demonstrated significant decreases in the target symptoms of anger, aggression, and irritability. Thus, the current case study suggests CBT for anger and aggression as a viable treatment in DMDD.

Keywords: DMDD, Cognitive-Behavioral Therapy (CBT), Anger, Aggression

(Paper received – 24th April 2020, Peer review completed – 6th May 2020)
(Accepted – 8th May 2020)

INTRODUCTION

A new diagnostic category has been introduced that encompasses the symptoms of anger, aggression, and irritability: Disruptive Mood Dysregulation Disorder (DMDD) [1]. Prevalence rates for DMDD in the community have been documented to range widely, from 0.8 to 9.0 percent [2-3]. Since DMDD has been introduced recently hence there are very few intervention based studies on the disorder. Literature has demonstrated that CBT is useful for the management of anger, aggression and irritability [4] as these symptoms also constitute to be the core features of DMDD thus CBT might be helpful. Two studies have demonstrated some effectiveness in treating concurrent ODD/ADHD and disruptive mood symptoms in children. In a randomized controlled trial of 112 children suffering from symptoms of ODD with or without emotional dysregulation, CBT was more effective in emotional-dysregulated youth than in those with just ODD characteristics [5]. Whereas in the other study on youths suffering from ADHD with SMD symptoms parent management training and CBT together were found to be effective [6]. Thus, it is indicated that CBT might help manage the DMDD if we target the symptoms of anger, irritability, and aggression yet, many questions regarding the treatment of DMDD in children remain, especially in an individual therapy format. The present case study allows for an initial exploration of CBT for anger and aggression as a viable treatment for a child with DMDD.

CASE REPORT

X was a 10-year-old student of class 3rd. He was brought to the child and adolescent psychiatric OPD of KGMU, for emotional and behavioral problems by his parents. As the parents were the primary caregivers and had been living with the child since his birth thus were able to provide a clear, consistent and coherent account of the child's problems and were considered as reliable informants.

Presenting Complaints

- Increased irritability
- Argues a lot
- Aggression
- Onset is insidious, Course is progressive, Duration is 3 years, Episode first continuous, Precipitating factor is the change of school

History of Present Illness

The child was apparently asymptomatic 3 years back when he gradually started becoming very irritable. It became difficult to handle his temper tantrums. His mood remained cranky ranging from most of the day to several days. Even after parental discipline his behavior became more and more unmanageable.

Initially, all these activities were limited to the home environment. In 2014 the symptoms worsened when the school of the child was changed and he moved from a small school of about 50 students to a bigger school of more than 500 students. He began to appear constantly "on-edge". At school, whenever he got irritated, he would just sit quietly in class, clench his fist and tear pages of his notebook.

In 2016 his symptoms increased as he went to a higher class, his anger outburst was noted all the time at school. He had hit his classmates; he had broken the mirror of the washroom when he scored less in a test. He was exhibiting temper outbursts several times a day that lasted about 10 minutes, and more intense 30-minute outbursts multiple times a week. Attempts to cheer him up were unsuccessful and sometimes even worsened his irritability.

Despite having cognitive abilities that ranged from average to superior, he struggled academically, partly due to a large amount of time spent out of the classroom because of disruptive behavior and also due to his nervousness in social situations.

He had no friend at school and even at home he just played with a younger cousin sister, who was 6 years younger to him. Every second day some or the other complaint was made to his parents and they were advised to seek doctor's help. So, they consulted King George's Medical University, psychiatric OPD in December 2016 and was started on pharmacological and referred for non- pharmacological therapeutic intervention.

Assessment

As part of the study, tests were administered for a better understanding of the case-

Standard Progressive Matrices suggested that the child has average level of intellectual functioning (25th - 50th percentile) [7]. These results indicated that the child would be a good candidate for the CBT content and activities [8]. Behavioral assessment was done using 'children behavior checklist' [9] in which a score of 23 on the externalizing scale indicates that the child has clinically significant externalizing tendencies which included social anxiety, aggressive behavior and social problems.

Disruptive Behavior Rating Scale [10] was used to measure symptoms of DMDD. A mean DBRS score of 12 and above indicates clinically significant symptoms, and the patient's score of 13 was above this clinical threshold. Aggressive behavior was measured using the Modified Overt Aggression Scale [11]. The patient evidenced significant levels of aggressive behaviors in all subscales of MOAS except for self-directed aggression, resulting in an overall score of 32.

Case Conceptualization

Clinical formulation was made to understand the genesis of pathology: the Temperamental difficulties which includes withdrawn tendencies, low threshold of responsiveness, irritable and dissatisfied mood and

increased intensity of reactions; are the predisposing factor, Change of school was the precipitating factor for the child's symptoms, whereas the maintaining factors were teachers and family members responding in an inadvertently reinforcing manner. Average intelligence of the child, adherence to therapy and presence of family support acted as protective factors. The child fulfilled the DSM-5 criteria of DMDD.

Course of Treatment and Assessment of Progress

Objectives

- Managing the patient's emotional dysregulation with focus on anger, irritability ,and aggression
- Enhancement of social skills.

Types and techniques of intervention used

Cognitive Behavior Therapy for anger and aggression in youth being planned by using a structured treatment manual. The treatment was organized into three modules: emotion regulation, social problem solving, and social skills.

Structure of Sessions

- Number of Sessions: 11 sessions
- Duration of each session: 1 hour
- Frequency of Sessions: Once in a week
- All the sessions were held at both, individual level as well as with parents.

Therapy Process

Sessions 1-3

Sessions 1 to 3 involved an introduction to therapy, psychoeducation, identification of anger triggers, and the development of strategies to prevent anger episodes.

The child was explained the difference between anger and aggression while emphasizing that Anger is an emotion that can be felt at times but aggression is the inappropriate expression of the feeling of anger. The negative consequence of expressing his anger in an inappropriate manner was focused up, child and the parents were asked to make a record of the triggers that make the child angry, the way he acts and the consequences. He was asked to monitor his anger on a scale of 1 to 10, called the anger meter. It was explained that by becoming more aware of the triggers the habit of displaying anger frequently and aggressively can be broken.

The parents were explained that most of the time the child had faced adverse consequences due to his aggressive acts which in turn made him more angry and the vicious cycle continued, thus the use of negative reinforcement rather than punishment was encouraged.

A meta-analysis by Bowman [12] pointed out that anger expressions were best treated by relaxation treatment, thus use of relaxation training in the form of deep breathing was focused upon in order to deal with anger cues. The child responded well to this phase of treatment and was particularly impressed that there were alternative approaches to handling angry behaviors [13-14].

Sessions 4-7

Sessions 4 to 7 covered social problem-solving skills. It was found that the child has significant social problems that included inability to get along with people and he would get teased very easily. As symptoms of anger, irritability and aggression started at a very young age the child had just one response to any conflict or disagreement and that was aggression. The focus was problem identification and generating different solutions. This helped the child excessively in exploring alternative behaviors and his aggressive outbursts reduced considerably.

Behavioral contracts were developed between the mother and the child to prevent specific conflicts at home. The child also excelled at decreasing his hostile attribution bias by reframing his previously negative perceptions of others' intentions.

Session 8-11

Sessions 8 to 11 addressed social skills.

Role-playing was used to deal with conflicting situations. The family of the child was also involved in the role play and the child was given homework regarding the practice of the skills learnt in these sessions in real life situations. It was helpful in making him more confident in social situations.

The child also used effective communication, like asking for a break when he feels angry or upset rather than using aggressive ways of showing it.

Outcome

Pre-Treatment, Post-Treatment Assessments

Measures	Pre- Intervention Score	Post Intervention Score
MOAS	32	2
CBCL	19	6
DBRS	13	2

Complicating Factors

The child's social anxiety served as a mildly complicating factor, which hindered in completing planned session material, but was manageable by calming the child and the use of relaxation techniques.

Treatment Implications of the Case

The current case demonstrates the feasibility of CBT for children with DMDD. In the present case the symptoms of aggression, behavioral difficulties significantly reduced similar to the findings of Sukhodolsky in a meta- analysis done to assess the usefulness of CBT in reducing symptoms of anger and aggression in children and adolescents (Cohen's d = 0.67). Presently the pharmacological treatment used for DMDD includes antidepressants, mood stabilizers, and antipsychotics, however, they too have their side effects. The CBT program appears to be effective in treating DMDD over a short period of time and can thus be used as the first line of treatment [4].

Future suggestions

Youth with DMDD and significant anxiety or depressive symptoms may benefit from additional anxiety-focused/ depression focused behavioral interventions. This therapy module can be tried with bare minimum doses to check the efficacy of CBT in a more refined way.

REFERENCES

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (5th ed). Arlington, VA: American Psychiatric Publishing; 2013.
2. Copeland WE, Angold A, Costello EJ. Prevalence, comorbidity, and correlates of DSM-5 proposed disruptive mood dysregulation disorder. Am J Psychiatry 2013;170(3):173–9.
3. Mayes SD, Waxmonsky JD, Calhoun SL. Disruptive mood dysregulation disorder symptoms and association with oppositional defiant and other disorders in a general population child sample. J Child Adolesc Psychopharmacol 2016;26:101– 6.
4. Sukhodolsky D. G, Kassinove H, & Gorman B. S. Cognitive-behavioral therapy for anger in children and adolescents: A meta-analysis. Aggress Viol Behav 2004;9:247-69.
5. Scott S, O'Connor TG. An experimental test of differential susceptibility to parenting among emotionally-dysregulated children in a randomized controlled trial for oppositional behavior. J Child Psychol Psychiatry 2012;53(11):1184–93.
6. Waxmonsky JG, Wymbs FA, Pariseau ME. A novel group therapy for children with ADHD and severe mood dysregulation. J Atten Disord 2013;17(6):527–41.
7. Raven, J.C., Court, J.H. Manual for Raven's Progressive Matrices and Vocabulary Scales. San Antonio, TX: Harcourt Assessment; (2003, updated 2004).

8. Lickel A, MacLean W. E, Jr Blakeley-Smith A, & Hepburn S. Assessment of the prerequisite skills for cognitive behavioural therapy in children with and without autism spectrum disorders. J Autism Dev Disord 2012;42:992-1000
9. Achenbach TM, Rescorla L. ASEBA school-age forms & profiles. Burlington, VT: ASEBA;2001.
10. Barkley R. Defiant children: A clinician's manual for assessment and parent training (2nd ed.). New York, NY: Guilford; 1997.
11. Silver JM, Yudofsky SC. The Overt Aggression Scale. J Neuropsychiatry 1991;3:22-9.
12. Sukhodolsky DG, Scahill L. Cognitive-behavioural therapy for anger and aggression in children. New York, NY: Guilford Press; 2012.
13. Gershoff ET. Corporal punishment by parents and associated child behaviors and experiences: a meta-analytic and theoretical review. Psychol Bull 2002;128:539–79.
14. Bowman-Edmondson C, Cohen-Conger J. A review of treatment efficacy for individuals with anger problems: Conceptual, assessment, and methodological issues. Clin Psychol Rev1996;16:251–75.

****

Acknowledgements – Nil
Conflict of Interest – Nil
Funding – Nil