



Case Report

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Effectiveness of Cognitive-Behavioral Play Therapy on Improving Anxiety and Aggression Disorders in a Child With ADHD: A Case Study

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ABSTRACT

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This study aimed to assess the effects of cognitive-behavioral play therapy on anxiety and aggression in children with attention-deficit hyperactivity disorder (ADHD) by reporting a 7-year-old boy with ADHD inattentive type diagnosed by a psychiatrist. According to the interview, it was observed that the child was physically abused by the father. The chief complaint of the patient's family was the symptoms of aggression, anxiety disorder, and urinary incontinence. We used the trauma system therapy model, which is used for children and adolescents who have had traumatic experiences and problems with emotional and behavioral modifications. The intervention was provided in 8 sessions for 2 days a week and lasted 45 minutes each. The child was evaluated using the Aggression Scale for Preschoolers and Preschool Anxiety Scale. The results of this study showed that cognitive behavior play therapy can reduce anxiety and aggression in ADHD children who are physically abused.

Introduction

Attention-Deficit Hyperactivity Disorder (ADHD) is one of the most common psychiatric disorders in childhood. Various statis-

tics have been reported on the prevalence of this disorder. In the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders, the prevalence of ADHD was reported 2.5% for adults and 5% for children [1] and its major symptom is signs of impulsivity, and sever-

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al symptoms are observed before the age of 12 at least in two different situations, such as school and home and it is diagnosed using a psychological assessment or examination [2]. The high prevalence of psychiatric disorders associated with this disorder has been reported in clinical and epidemiological studies, It has been shown that children with ADHD who have high levels of anxiety, depression, and aggression are less likely to benefit from current treatments [3].

Aggression can occur in a variety of forms. Its verbal and physical form represent instrumental or behavioral components, and anger, emotion, and hostility are cognitive aspects of aggression [4]. Due to the prevalence of childhood aggression and its effects on different aspects of life, special attention has been paid to its treatment and various studies have been conducted on different aspects of treatment for this disorder, using drug therapy, behavior therapy, cognitive therapy, or a combination of different approaches [5].

The ultimate goal of treating ADHD is to enable children to cope with the problems they face throughout life. This goal cannot be achieved by drug therapy, or by forcing children to obey the rules, but the only way is to educate them on how to deal with people and tasks helpful for the daily functioning of the child [6]. Involvement of the child in the treatment process is an important predictor of its outcome [7]. One of the non-pharmacological treatment methods is the use of play therapy techniques with different approaches. O'Connor in 1997 examined the impact of play therapy on children with behavioral disorders and observed a significant improvement in the final evaluation after treatment [8].

Play therapy is a structured, theory-based approach based on natural and normative learning and communication processes in children. Play therapy is a way of overcoming anxiety in anxious and aggressive children, in which playing is used as a communication interface between the child and the therapist. This method is based on a general assumption that playing in places where the child first recognizes the difference between "what I am" and "what I am not" can improve his or her relationship with the outside world [9].

Cognitive-Behavioral Play Therapy (CBPT) is a cognitive model for the treatment of children with emotional disorders. CBPT is time-limited, directive, and problem-oriented and is dependent on a flawless therapeutic relationship and affects the educational adaptability of the students [10]. Kaduson in 1997 used CBPT in the

treatment of children with ADHD. Cognitive Behavioral Play Therapy (CBPT) can increase task-related behaviors, verbal expression of emotions, and self-control [11]. The child can then join social skills groups to generalize newly learned behaviors. Regarding the success of CBPT, regardless of the therapist's approach, most play therapists believe that 80% of their treatments are successful [11] Jansma and Kambbe examined the impact of combined painting and play therapy programs on enhancing children's adaptive skills in ADHD cases. The results of their observation indicated that the subjects had less compromised behaviors and increased adaptive skills.

According to a review of research on the effects of CBPT on reducing anxiety and aggression in children with ADHD, the present study may also provide further information on anxiety and aggression in children with ADHD. At the applied level, doing this research can be an effective step towards reducing aggressive and anxious behaviors in children that are physically abused. In past studies, this approach has not been examined on physically abused children. Therefore, the purpose of the present study was to investigate the effect of CBPT on reducing anxiety and aggression in a child with a diagnosis of ADHD and mental retardation.

Case Presentation

The subject was a 7-year-old boy living in Semnan, Iran. Treatment was provided in eight 45-min sessions and 2 days a week. Written consent was obtained from the caregiver of the participant during the first session of the treatment, during which the purpose of evaluation and treatment was explained. The patient had been diagnosed with ADHD (inattentive type) by a child psychiatrist before being referred to an occupational therapy clinic. According to family reports and unstructured therapist assessments, the child had been physically abused by his father. The chief complaint of the patient's family was symptoms of aggression, anxiety, and urinary incontinence. The patient and his parent received a full briefing before and after treatment. After a comprehensive evaluation. the treatment approach was designed.

Research instruments

Aggression Scale For Preschoolers (ASFP): This scale is a 43-item Likert-rated questionnaire for assessing physical, relational, and verbal-verbal aggression in preschool children. This questionnaire was designed for the first time in 2008 by Vahedi et al. using the Shahim Child Aggression Questionnaire and Ahwaz Aggression Ques-

Table 1. The intervention process

Sessions	Goals	Tasks
1 & 2	Introductory session	I want to know you (play between child and therapist) and music therapy
3 & 4	Defining problems	Puppet show, dictionary of emotions, and hot chair (in a group)
5 & 6	Problem-solving	Puppet show and art therapy
7 & 8	Increasing attention	Sand therapy with storytelling and dark room



tionnaire to assess different dimensions of aggression in preschool children [12]. The questionnaire, completed by the child’s instructor or parent, contains four subscales: verbal-aggressive aggression, physical-aggressive aggression, relational aggression, and impulsive anger. The scale is scored on a five-point Likert scale (not at all: 0, rarely: 1, once a month: 2, once a week: 3, and often: 4 days). The total scores of all subscales provide the total score of the scale. Cronbach’s alpha coefficient of 98% was obtained in the current research for the whole scale.

Preschool Anxiety Scale (PSA): PSA is completed by parents and was designed based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and contains 28 items assessing six domains of anxiety including generalized anxiety, panic/agoraphobia, social phobia, separation anxiety, obsessive-compulsive disorder and physical injury fears in children. The total anxiety score is calculated by the sum of the obtained scores from these domains.

Session structure

A CBPT intervention was designed based on library resources (Table 1). We used the Trauma System Therapy (TST) model, which is used for children and adolescents who have had traumatic experiences and have problems with emotional and behavioral modifications but do not need Post-Traumatic Stress Disorder (PTSD) treatments. The purpose of this intervention is to eliminate emotional and behavioral disorders in the child and his family structure. During the therapeutic sessions, the therapist communicated with the family and the school, providing all necessary education and family support. After therapeutic sessions, the caregiver of the child reported that urinary incontinence completely stopped, and anxiety and aggression disorders improved according to the questionnaire scores. The therapist was satisfied with the treatment results, as the patient achieved a higher level of attention and awareness about himself.

Discussion

After the intervention and the secondary evaluation, according to the ASFP, it was observed that the subject was less likely to use dangerous devices while feeling angry. It was also observed that the child was less likely to engage in a dispute with an adult and less likely to be beaten or shout at a peer. According to the PSA, after the intervention, the child was less anxious and had lower obsessive thoughts. According to the unstructured therapist’s assessment and the parent’s report, the child was more capable of controlling anger and mastering his emotions. The child’s urinary incontinence problem was also resolved.

The purpose of this study was to evaluate the effectiveness of the CBPT on reducing anxiety and aggression in a mentally retarded child with ADHD. Treatment sessions were conducted in one of the rehabilitation clinics of Semnan University of Medical Sciences. The results can be utilized for planning the strategies to reduce anxiety and aggression in children experiencing physical abuse. CBPT has been used in various studies. Qadri et al. showed that CBPT is effective in reducing aggression in children [13]. Also, Hasani et al. confirmed the effectiveness of CBPT on reducing anxiety and increasing self-esteem in children with ADHD. Kaduson & Schaefer assessed the effectiveness of CBPT on the severity of ADHD symptoms and concluded that this approach could be used as an effective treatment for ADHD children and adolescents. The effectiveness of CBPT on reducing anxiety and aggression in children with ADHD has been confirmed, but the effectiveness of this approach for mentally retarded children with a history of physical abuse has not yet been investigated. The results of this study also highlight the need for more attention to ADHD comorbidities and emphasize the need for further studies in children with a history of physical abuse and harassment.

Ethical Considerations

Compliance with ethical guidelines

All ethical principles are considered in this article. The participants were informed of the purpose of the research and its implementation stages. They were also assured about the confidentiality of their information and were free to leave the study whenever they wished, and if desired, the research results would be available to them. A written consent has been obtained from the subjects. principles of the Helsinki Convention was also observed.

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Conflict of interest

The authors declared no conflict of interest.

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