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EARLY INTERVENTION AND DEVELOPMENTAL DISORDERS

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DEVELOPMENTAL DISORDERS-EARLY DIAGNOSTICS AND TREATMENT

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Abstract

Providing psychological services to young children is complex, demanding a wide-ranging and integrative set of knowledge and skills. Early diagnostics and intervention comprises a set of supports, services, and experiences to prevent or minimize long-term problems as early as possible. Typically children receiving early interventions are at risk for developmental, emotional, social, behavioral, and school problems because of biological and/or environmental factors. Epidemiological estimates for the prevalence rates of childhood emotional and behavioral disorders range between 15 and 22%.

In this paper I will address to the psychological treatments of the three most common developmental disorders meet at the University Children's Hospital, Skopje.

Large number of children is diagnosed for disruptive behaviors, defined as behaviors that are associated with diagnoses of Oppositional Defiant Disorder or Conduct Disorder [CD]. It is estimates that between 1.4 million to 4.2 million children in the United States meet criteria for CD alone. The designs of treatments for CD reflect the presumed causal factors at play in the onset and persistence of these behaviors. The most effective treatment for CD is combination of various psychotherapeutic strategies and pharmacotherapy. Perhaps the clearest conclusion on the developmental trajectories of children with CD and the treatment of these problems is the need for early prevention and intervention.

The treatment of childhood anxiety disorders is one of the most interesting and gratifying experiences in clinical psychology. Clinically significant anxiety among children can be described as an extreme response to a situation or event that a young person perceives as threatening and is out of proportion to the actual danger. Based upon a recent review, it has been estimated that between 2.4% and 23.9% of preadolescent children have anxiety disorders depending on the disorder, sample, time period, and methodologies used. Even though anxiety disorders are among the most prevalent mental health concerns in children, the various paths leading to their acquisition have not been completely determined yet. Cognitive-behavior therapy and exposure therapy or

systematic desensitization is two effective anxiety disorder treatments. In sum, treatments of childhood anxiety disorders have blossomed over recent years with CBT at the forefront. Future research should focus on the mechanisms of change and moderators of outcome i. e. for what individuals does treatment work or is treatment most effective.

Attention-Deficit/Hyperactivity Disorder [ADHD] is the most common neurobehavioral disorder affecting school-age children. ADHD is characterized by various symptoms of inattention, and/or impulsivity. Studies suggest that approximately 8-12% of children meet diagnostic criteria for the clinical disorder of ADHD. There have been many methods and procedures highly touted as effective treatments for ADHD but only a handful have stood the test of randomized and well-controlled clinical trials and replication. These are the evidence-based approaches like parent behavioral training, classroom management strategies, and intensive peer-based interventions that incorporate all of these approaches in a comprehensive package.

Childhood disorders are likely caused by a combination of many factors. It is important to recognize the problem and seek treatment as soon as possible. Often these conditions can be treated effectively, allowing our children to grow into happy, productive adults.

Key words: *children, CD, anxiety disorder, ADHD, early treatment.*

Introduction

Providing psychological services to young children is complex, demanding a wide-ranging and integrative set of knowledge and skills. The early childhood psychologist draws from knowledge bases, recognized as essential to the professional practice of developmental psychology. These bases include, for instance, biological, cognitive, affective and social aspects of behavior, human development, individual differences, developmental psychopathology, and social-cultural impacts on family and society. In addition, early childhood work requires a deep and fluent knowledge of child development, developmental disabilities, and family functioning. Early diagnostics and intervention comprises a set of supports, services, and experiences to prevent or minimize long-term problems as early as possible. Typically children receiving early interventions are at risk for developmental, emotional, social, behavioral, and school problems because of biological (e.g., low birth weight) and/or environmental (e.g., poverty) factors. Treatment plan should cover the aspects as:

- how the early intervention program eliminated or compensated for risk factors (which ones and how many?);
- what extent will the treatment modify parenting practices, or provide stimulating experiences directly to the child independent of the parent and
- timing, duration, and intensity of the treatment.

In the case of young children, it is far from easy to distinguish between those difficulties which are of a temporary nature and those which may have more lasting effect. Today there is increasing concern about the rising numbers of behavior problems reported among young children. The question is what behaviors should be of concern during the early years? However, early years practitioners perceptions of young children's behavior suggest that any behavior that has an effect on the child's own and other children's well-being and on the teaching and learning processes should receive due attention to eliminate future difficulties. Increasingly, attention is turning to the significance of children's mental health. This attention results from a confluence of information sources collectively emphasizing the prevalence of childhood problems. Epidemiological estimates for the prevalence rates of childhood emotional and behavioral disorders range between 15 and 22% (1-5). These rates may be underestimates as epidemiological studies often do not include children exhibiting subclinical distress despite the fact that these subclinical conditions have been found to be associated with significant functional impairments (6). Childhood difficulties have been associated with problems in adolescent and adult adjustment (7). Evidence exists suggesting that childhood psychopathology has long-term social consequences including truncated educational attainment, teen parenthood, early marriage, and marital instability (8-10).

In this paper I will address to the psychological treatments of the three most common developmental disorder meet in the clinical practice at the University Children's Hospital, Skopje.

Conduct disorder

Large number of children is diagnosed for disruptive behaviors, defined as behaviors that are associated with diagnoses of Oppositional Defiant Disorder or Conduct Disorder (CD). The behaviors that comprise these diagnoses include argumentativeness, temper tantrums, often being angry or resentful, lying, stealing, hurting or threatening to hurt others, cruelty to animals and destruction of property. It is estimates that between 1.4 million to 4.2 million children in the United States meet criteria for CD alone (11). Young children's problem behaviors are often understood as transient developmental phenomena

which are "trial-and-error problem-solving attempts to meet new and unambiguous experiences, social and biological, external and internal. In general, boys tend to show more acting out behaviors, whereas girls tend to be more withdrawn, indicating that the nature of behavior problems is also gender-related. It is common to attribute behavioral differences in boys and girls to learned sex roles. Children learn what is expected of them as boys or girls and tend to hold increasingly to these stereotypes as they grow.

The designs of treatments for CD reflect the presumed causal factors (e.g., environmental, cognitive) at play in the onset and persistence of these behaviors. For example, researchers point to infrequent use of positive parenting and inconsistent or harsh parenting as factors in development and maintenance of child conduct problems (12).

Most often in my practice *Cognitive Behavioral Therapy* (CBT) is used, which is the term used for a group of psychological treatments that are based on scientific evidence. These treatments have been proven to be effective in treating many psychological disorders among children. CBT for children usually are short-term treatments (i.e., often between 6-20 sessions) that focus on teaching young people and their parents specific skills. CBT is different from many other therapy approaches by focusing on the ways that a person's cognitions (i.e., thoughts), emotions, and behaviors are connected and how they affect one another. Because emotions, thoughts, and behaviors are all linked, CBT approaches allow for therapists to intervene at different points in the cycle. However, this approach goes through several steps, such as:

- the therapist and child develop goals for therapy together, often in close collaboration with parents, and track progress toward goals throughout the course of treatment;
- the therapist and child work together with a mutual understanding that the therapist has theoretical and technical expertise, but the child is the expert on him or herself;
- the therapist seeks to help the child discover that he/she is powerful and capable of choosing positive thoughts and behaviors;
- treatment is often short-term. Children are actively participating in treatment in and out of session. Homework assignments often are included in therapy. The skills that are taught in these therapies require practice and
- treatment is goal-oriented to resolve present-day problems. Therapy involves working step-by-step to achieve goals.

Empirically supported *parenting interventions* generally target child noncompliance. Specifically, parenting practices that are thought to negatively reinforce child noncompliance (e.g., withdrawing a request/command after re-

peated refusals by the child) are replaced by clear commands and immediate negative consequences for noncompliance. Still, increasingly harsh parenting strategies are used as child noncompliance increases, and such strategies are positively reinforced by the child's eventual compliance in the face of harsh parenting or threat thereof. Specific parenting techniques may be discussed didactically, practiced and modeled in vivo.

Individual-based treatments tend to emphasize cognitive and behavioral strategies to reduce the frequency of problem behaviors and to improve the youth's positive coping responses to anger-provoking situations. The treatment may be geared toward increasing cognitive activity (i.e., impulse control) or altering maladaptive cognitive strategies (i.e., hostile attributional biases) that may contribute to conduct problem, including aggressive behaviors. These treatment also typically includes social skills training given the social skills deficits that are often part of the clinical picture for children with conduct problems as well as social problem-solving skills so that an individual can employ effective and prosocial behaviors in difficult peer contexts.

Multisystemic Therapy is particularly oriented toward adolescents and comprises multiple levels of treatment that include the individual, family, school, and peers. Treatment is actually conducted in each of these contexts as appropriate and feasible, promotes parent-teacher communication and encourages parents to become involved in monitoring the child's performance and behavior in school. In this multifaceted program, parents are still exposed to traditional parent-training techniques, and although the presumed cause of the youth's problems is thought to be reciprocal between the youth and his or her contexts, the parent may still be seen as the primary agent of change.

Several additional treatment models involve *removal of the child* from the home environment at least for some period of time and in that sense, are considered residential. These placements include short term hospitalization, and institutionalization. It should also be kept in mind that children may be placed in residential settings primarily because of significant problems and/or safety concerns in their home environments and not necessarily because they themselves are exhibiting significant emotional or behavioral problems.

Perhaps the clearest conclusion on the developmental trajectories of children with conduct disorders and the treatment of these problems is the need for early prevention/intervention. In light of the existing evidence-based interventions, sound efforts in this regard can reduce the likelihood of the poor outcomes for which children with an early onset of conduct problems are at risk. Early treatment also has broader societal implications given the cost of juvenile delinquency and adult antisocial behavior in the form of intensive residential treatments, incarceration, and the impact on victims.

Anxiety disorders

The treatment of childhood anxiety disorders is one of the most interesting and gratifying experiences in clinical psychology. Clinically significant anxiety among children can be described as an extreme response to a situation or event that a young person perceives as threatening and is out of proportion to the actual danger. This anxious response frequently includes thoughts of impending harm or danger, heightened arousal such as increased heart rate and rapid breathing, and often the avoidance of situations or events that cause discomfort. The experience of a child suffering from clinically significant anxiety can lead to considerable distress and interference with his/her daily activities at school, at home, or with his/her peers. While deciding whether or not a child needs help with anxiety, it is important to interpret child's behavior in light of his/her developmental level. In other words, is a child's anxiety response more severe, more intense, or longer lasting than would be age-appropriate? Based upon a recent review, it has been estimated that between 2.4% and 23.9% of preadolescent children have anxiety disorders depending on the disorder (s), sample, time period, and methodologies used (13). Moreover, results of at least one study indicate that by 16 years of age 36.7% of children will meet diagnostic criteria for at least one DSM-IV disorder and that 9.9% will meet criteria for an anxiety disorder (14).

Even though anxiety disorders are among the most prevalent mental health concerns in children, the various paths leading to their acquisition have not been completely determined yet. There are many ways to treat anxiety and not all of them will be suitable for everybody. CBT and exposure therapy or systematic desensitization is two effective anxiety disorder treatments. Both are types of behavioral therapy, meaning they focus on behavior rather than on underlying psychological conflicts or issues from the past. Behavioral therapy for anxiety usually takes between 5 and 20 weekly sessions.

CBT focuses on thoughts or cognitions in addition to behaviors. When used in anxiety disorder treatment, CBT helps to identify and challenge the negative thinking patterns and irrational beliefs that are fueling the anxiety.

Exposure therapy for anxiety disorder treatment, confronts the child's fears in a safe, controlled environment. Through repeated exposures, either in imagination or in reality, to the feared object or situation, the child will gain a greater sense of control. As the child faces own fear without being harmed, the anxiety gradually diminishes. There are two main variants of exposure therapy that have been used to treat fears and anxiety in children: *in vivo* desensitization, which has confrontation with the actual feared stimuli as the principal feature, and *in vitro* which uses symbolic representations (e.g., imagination or modeling) in place of the actual feared stimuli. Exposure therapy can be difficult to

apply with children because relaxation training can be fairly demanding and tedious for the average child. Given the difficulty of applying the procedure to normally developing children, this renders the application of exposure therapy even more problematic for developmentally disabled children. As a result, treatment of anxiety in children with autism and intellectual difficulties has focused on related techniques such as emotive imagery, graduated exposure, counter conditioning, and modeling, and usually includes operant components such as providing tangible rewards for tolerating the feared object.

Applied relaxation is an alternative type of psychological treatment. Applied relaxation focuses on muscles relaxing in a particular way in situations that usually cause the anxiety. The technique needs to be taught by a trained therapist, involves learning how to relax the muscles quickly and in response to a trigger and practicing relaxation in situations that make the anxious. This therapy requires 12 to 15 sessions to learn how to use applied relaxation correctly. It has been found to be as effective as CBT. Relaxation techniques that decrease anxiety are biofeedback, and techniques of deep breathing.

In sum, treatments of childhood anxiety disorders has blossomed over recent years with CBT at the forefront. Future research should focus on the mechanisms of change and moderators of outcome i.e. for what individuals does treatment work or is treatment most effective.

Attention Deficit Hyperactivity Disorder

Attention-Deficit/Hyperactivity Disorder (ADHD) is the most common neurobehavioral disorder affecting school-age children. Studies suggest that approximately 8-12% of children meet diagnostic criteria for the clinical disorder of ADHD (15). Approximately 40-70% of those diagnosed with ADHD will have persistent symptoms into adolescence and adulthood with substantial risk of job instability, mood and anxiety disorder, motor vehicle accidents and substance abuse. ADHD is characterized by various symptoms of inattention, and/or impulsivity and is conceptualized as a spectrum, with a range of severity from mild variation of normal behavior to a chronic and severe condition. Children with the disorder often suffer from impaired interpersonal relationships with family and peers, academic underachievement and poor self-esteem. In addition, children with ADHD commonly exhibit other comorbid developmental and psychiatric disorders that may complicate the intervention plan.

Diagnosis and treatment of children with ADHD should develop a comprehensive treatment plan that recognizes the complexity and chronic nature of the disorder. It is important to set individualized treatment goals i. e. decrease disruptive behaviors, improve academic performance, improve relation-

ship with family, teachers, and peers and improve self-esteem. It is advisable to choose measurable goals that can assess progress from a baseline state.

Behavior parent training (BPT) for children and adolescent with AD/HD has the most research evidence to date. BPT improves parental child management skills, reduces overall child symptoms of ADHD, improves other disruptive behavior problems, increases parental confidence, reduced parent's stress, and improve family relationships. BPT has three main goals. The first goal is to improve parental management skills in dealing with behavior problems. The second is to increase parental knowledge about the causes of childhood misbehavior. The last goal is to improve commands and rules given by the parent to increase child compliance. In BPT, parent-child interactions are modified in ways that are designed to promote prosocial child behavior and to decrease antisocial or oppositional behavior. A typical BPT program teaches the child's parent how to effectively modify antecedents (e.g., rules, commands) and consequences (e.g., time-out, rewards) for target behaviors (e.g., noncompliance) in the child's environment. Parents then implement these strategies in the home setting to target the reduction of problematic behaviors and increase appropriate behaviors. This treatment can be administered in the variety of formats. Treatment sessions include instruction in social learning principles and techniques. The therapist provides a brief overview of underlying concepts, models the techniques for the parents, and coaches parents in implementing the procedures. Procedures and interaction patterns practiced in the sessions are then used in the home. Parents usually are taught how to define, observe, and record behavior at the beginning of treatment because once behaviors (e.g. fighting, engaging in tantrums) are defined concretely, reinforcement and punishment techniques can be applied. The therapist details the concepts and procedures derived from positive reinforcement (e.g., contingent delivery of attention, praise, points) and punishment (e.g., time out from reinforcement, loss of privileges, and reprimands). Reinforcement for prosocial and nondeviant behavior is central to treatment. Parents are taught how to use reinforcement and punishment techniques contingent on the child's behavior, to provide consequences consistently, to attend to appropriate behaviors and to ignore inappropriate behaviors, to apply skills in prompting, shaping, and fading, and to use these techniques to manage future problems. Because the immediate goal of treatment is to develop parenting skills, the therapist begins by having parents apply new skills to relatively simple problems (e.g., compliance, completion of chores, oppositional behavior). As parents become proficient using the initial techniques, the child's most serious problem behaviors at home and in school are addressed (e.g., fighting, poor school performance, truancy, stealing,). In most behavior treatments, the therapist maintains close telephone contact with the parents in-between sessions. These contacts are used to encourage parents to

ask questions about the home programs, to provide an opportunity for the therapist to prompt compliance with the behavior-change programs and reinforce parents' use of the skills, to strengthen the therapeutic alliance, and to allow the therapist to problem-solve when programs are not modifying child behavior effectively. In the school, similar classroom behavior management strategies are introduced which is including token economies, contingency contracting, response cost, and time out.

Peer tutoring is an instructional strategy that can be helpful for children diagnosed with ADHD. This consists of two students working together on an academic activity, with one student providing assistance, feedback, and/or instruction. For this strategy to be successful, it is important for there to be a one-to-one ratio, that the instruction remain self-paced by the learner, that there is continuous prompting, and that there is frequent and immediate feedback about the quality of performance.

Self-evaluation is also a strategy that has some efficacy in improving behavior among children diagnosed with ADHD. In addition, other instructional strategies are often effective like social skills training and task modification.

There have been many methods and procedures highly touted as effective treatments for ADHD but only a handful have stood the test of randomized and well-controlled clinical trials and replication. These are the evidence-based approaches like parent behavioral training, classroom management strategies, and intensive peer-based interventions that incorporate all of these approaches in a comprehensive package.

Summary

Psychotherapy addresses the emotional response to childhood disorders. Coping with life's stressful events is especially difficult for children with mental or emotional illness. Psychotherapists help children understand their emotions and deal with their problems in a more confident, healthy way. When children develop mental or emotional disorders, parents often blame themselves. But childhood disorders are likely caused by a combination of many factors. It is important to recognize the problem and seek treatment as soon as possible. Often these conditions can be treated effectively, allowing our children to grow into happy, productive adults.

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