Childhood Anxiety Disorders

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Child Anxiety Disorders: Introduction

- Research on child anxiety disorders for many years lagged behind work on adult anxiety disorders.
- However, the decades of the 1980's and 1990’s were characterized by a dramatic increase in the number of investigations focusing on child anxiety disorders.
- This increased focus on child anxiety problems has continued to the present.

Child Anxiety Disorders: Introduction

- **This increase in research activity likely resulted from two factors.**
  - **First, DSM III (1980) and DSM III –R (1987) provided a separate category for "Anxiety Disorders of Childhood".**
  - **Specific categories were provided for Separation Anxiety Disorder, Avoidant Disorder and Overanxious Disorder of childhood.**
  - **This highlighted the fact that child/adolescent anxiety disorders were important in their own right.**
  - **Second, *specific DSM criteria* provided researchers with a way of operationalizing the diagnosis of various child anxiety disorders - Encouraged and facilitated research efforts.**

Criteria Much Better Than DSM II

DSM IV: Separation Anxiety Disorder

- Excessive anxiety concerning separation from those to whom the child is attached as manifested by at least three of the following:
  - **Unrealistic worry about possible harm befalling major attachment figures or fear that they will leave and not return,**
  - **Unrealistic worry that an untoward calamitous event will separate the child from major attachment figures (e.g., killed, kidnapped).**
  - **Persistent reluctance or refusal to go to school in order to stay with major attachment figures or at home,**
  - **Persistent reluctance or refusal to go to sleep without being next to a major attachment attachment figure or to go to sleep away from home.**

DSM IV: Separation Anxiety Disorder Criteria

- **Persistent avoidance of being alone in the home and emotional upset if unable to follow major attachment figure around the home,**
- **Repeated nightmares involving a theme of separation.**
- **Complaints of physical symptoms on school days,**
- **Signs of excessive distress upon separation, or when anticipating separation from major attachment figures.**
- **Social withdrawal, apathy, sadness, or difficulty concentrating when not with major attachment figure.**
- **Duration: 2 weeks – Not due to another disorder – If 18 or older, does not meet criteria for agoraphobia.**

DSM IV.: Avoidant Disorder

- Persistent and excessive shrinking from contact with strangers.
- Desire for affection and acceptance, and generally warm and satisfying relations with family members and other familiar figures.
- Avoidant behaviors sufficiently severe to interfere with social functioning in peer relationships.
- Age at least 2 ½ (normal before this age). If age 18 or older, does not meet criteria for avoidant personality disorder.
- Duration of at least 6 months.

DSM IV: Overanxious Disorder- Generalized Anxiety Disorders

- **Predominant disturbance:** Generalized & persistent anxiety or worry reflected in at least 4 of the following;
  - **Unrealistic worry about future events**
  - **Preoccupation with the appropriateness of past behavior,**
  - **Overly concerned about competence**
  - **Excessive need for reassurance about worries**
  - **Somatic complaints without physical basis**
  - **Marked self-consciousness or susceptibility to embarrassment or humiliation.**
  - **Marked feeling of tensions or inability to relax.**

Symptom present for 6 months - Does not meet criteria for GAD - Symptoms not attributable to another disorder.

Separation Anxiety Disorder (SAD): Clinical Presentation

- **Children with SAD show obvious distress upon separating from parents or other major attachment figures, are overly demanding of them, constantly cling to them, and may refuse to let them out of their sight.**
- **This distress associated with separation may be exaggerated to the point of a panic reaction.**
- **They may refuse to go to school or go anywhere without their parents .**
- **Discussion Topic: SAD vs School Phobia/School Refusal.**

SAD: Clinical Presentation

- Because of their anxiety these children may show a range of **physical symptoms** such as nausea, vomiting, and headaches or stomachaches.
- They frequently **have accompanying fears** of accidents, illness, monsters, fears of getting lost, of being kidnapped, or of any of a number of other things that they might view as a threat to their closeness to their parents.
- **Nightmares** related to separation are also common.
- Except for the problem of separation, the child may show little evidence of other difficulties.

SAD: Prevalence, Age of Onset, Family Characteristics

- Prevalence rate of approximately 2 to 4%.
- SAD accounts for one-half of all children and adolescents referred for treatment of anxiety disorders.
- It can occur as early as preschool age
- SAD occurs more frequently in girls.
- Tendency for SAD to run in families with a history of anxiety disorders and to be most common in "close-knit and caring" families.
- Often occurs in response to some major stressor.

SAD: Comorbid Conditions

- Children with SAD often show evidence of other problems.
- Approximately 65% of children with SAD show a lifetime history of some other type of anxiety disorder.
- Most common comorbid anxiety disorders are:
  - simple phobia (37%),
  - overanxious disorder (23%)
  - social phobia (19%).
- Approximately 30% of children with SAD display evidence of depressive disorder.
- Approximately 27% show evidence of some type of disruptive behavior disorder such as ADHD, oppositional defiant disorder or conduct disorder

SAD: Natural History

- The course of this disorder is often one marked by exacerbation and remission over a period of years.
- As many as 30 to 44% of children show evidence of psychological problems that continue into adult life.
- There is some suggestion that SAD may precede the development of conditions such as panic disorder and agoraphobia, which may become more obvious in adulthood.

SAD: Approaches to Treatment

- Treatment of separation anxiety:
  - Psychoanalytic
  - Psychopharmacological
  - Behavioral approaches.
- There is no one approach that currently qualifies as an Empirically Supported Treatment for SAD.
- While pharmacological treatments have often involved the use of tricyclic antidepressants, with some success, research has yielded mixed results in treating SAD and school refusal.

SAD: Approaches to Treatment

- Case studies and some controlled investigations provide most support for the effectiveness of **behavioral approaches** to treatment.
- These include approaches such as in vivo exposure, relaxation training, reinforced practice, and CBT which are “Probably Efficacious”.
- While this literature is generally supportive of behavioral approaches, it is currently not possible to comment definitatively on the optimal approach for the treatment of this disorder.

Avoidant Disorder: Social Phobia

- **DSM IV. criteria for avoidant disorder were based largely on clinical experience, rather than research findings.**
- **Publication of diagnostic criteria did little to stimulate research on this condition.**
- **Not surprising that it was deleted from DSM IV.**
- **An additional factor resulting in the elimination of this category was the fact that many features of this disorder were already subsumed under the broader category of Social Phobia.**

Social Phobia: Clinical Features

- The clinical picture of a child with social phobia is one where the child displays phobic responses to one or more social situations.
  - **Speaking, eating, or drinking in front of others,**
  - **Initiating or maintaining conversations,**
  - **Speaking to adult authority figures,**
  - **Other situations that may elicit concerns over being embarrassed/humiliated.**
- *In young children*, the anxiety may be reflected in signs of distress such as crying, throwing temper tantrums, or becoming mute and clinging to parents.

Social Phobia: Clinical Features

- *In older children,* it may be expressed less dramatically in terms of trembling hands, a shaky voice or other obvious signs of anxiety.
- Attempts to avoid phobic social situations are common, as are physical manifestations of anxiety such as muscle tension, heart palpitations, tremors, sweating, and gastrointestinal discomfort.
- The degree of distress and confusion which occurs in such situations can reach the level of a panic attack.

Social Phobia: Clinical Features

- Children with social phobias not only become anxious when actually confronted with socially phobic situations.
- They may also experience anticipatory anxiety well before actually confronting these situation.
- This can interfere with the child's ability to function in a wide range of areas including the development of age-appropriate social activities.

Social Phobia: Associated Features

- Children with social phobias can also show a range of associated features;
  - **Being overly sensitive to criticism,**
  - **Having low levels of self-esteem,**
  - **Having inadequate social skills.**
- School performance may be impaired due to problems such as test anxiety and the failure to participate in classroom activities ,
- Again, these social anxieties can result in school refusal which may need to be treated itself.

Social Phobia: Comorbid Features

- Comorbid conditions are common.
- Last, Perrin, Hersen, and Kazdin (1992) found that almost 87% of children with social phobia had at some time met criteria for an additional anxiety disorder.
- The anxiety disorders found most frequently were"
  - overanxious disorder (48% of the cases),
  - simple phobia (41%) and
  - separation anxiety disorder (26%).
- Approximately 56% had at some time met criteria for depressive disorder.
- Approximately 8% showed evidence of some sort of disruptive behavior disorder.

Social Phobia: How Common?

- Social phobia appears to be relatively rare in the general child/adolescent population.
- Prevalence estimates of around 1% are suggested by cross-sectional research.
- Seems to be equally prevalent in males and females.
- While relatively uncommon in the *general population*, research by Last, et al. (1992), has suggested that, among children referred to an anxiety disorders clinic, almost 20% met DSM criteria for a diagnosis of social phobia. (Likely due to its disruptive effects)
- Thus, social phobia does not seem to be uncommon among children referred for anxiety related problems.

Social Phobia: Causal Factors

- There is relatively little information available regarding the specific etiology of social phobia, although some traumatic event often seems to precede its development.
- Some studies have suggested the possible role of temperament variables such as behavioral inhibition (reflected in increased arousal and negative responses to new and novel situations) as a contributor to this disorder.
- While we know relatively little regarding the specific factors that result in social phobias, it seems likely that many of the factors assumed to contribute to other types of phobia may be of relevance.

Social Phobias: Natural History

- Typically, social phobias first appear in early to mid-adolescence, although it can occur during early childhood.
- Sometimes it appears to be an outgrowth of a history of social inhibition or shyness.
- The disorder often continues into adulthood with the expression of symptoms often fluctuating with the levels of stress experienced by the individual.
- In some cases, however, symptoms decrease or remit as the person gets older .

Social Phobias: Treatment

- At present, there is no “Empirically Supported Treatment” for Social Phobia.
- Nevertheless, it seems likely that approaches that have been found useful in treating social anxiety and phobic avoidance may be of value. These might include;
  - **CBT methods (to modify maladaptive self-statements and appraisals that can contribute to anxiety/avoidance),**
  - **Methods such as desensitization (to decrease anxiety responses in specific social situations), and**
  - **Modeling and operant approaches for teaching social skills and increasing social interactive behaviors.**
- Psychopharmacological approaches have also been used in treating children with anxiety disorders .

Overanxious Disorder: GAD

- At present, there is a lack of controlled research specifically on Generalized Anxiety Disorder with children and adolescents.
- Much of the existing research in this area has been based on DSM III or DSM III–R diagnostic criteria for Overanxious Disorder.
- It should be noted, however, that research suggests a high degree of correspondence between DSM III and DSM IV. OAD and GAD.

Overanxious Disorder: GAD

- The clinical picture in GAD is one of **excessive anxiety, unrealistic worries, and fearfulness**, not related to a specific object or situation.
- These children show a marked degree of subjective distress and worry excessively about a wide range of things including;
  - **the appropriateness of past behavior,**
  - **possible injury or illnesses (to themselves or others),**
  - **the possibility of major calamitous events,**
  - **their ability to live up to expectations,**
  - **their competencies in various areas,**
  - **being accepted by others,**
  - **other things related to concerns about the future**.

GAD: Clinical Characteristics

- Children with GAD often tend to be ***perfectionistic*****,** spending a great deal of time worrying about what others will think of them or their performance.
- This may lead to *excessive* ***approval seeking*** behaviors and *frequent* ***solicitations of reassurance*** which can become a source of irritations to others.
- Their heightened anxiety level contributes to ***physical symptoms.***
- These can include headaches, dizziness, shortness of breath, upset stomach and problems in sleeping, which may also become a source of concern and worry.
- Some children also develop "*nervous habits*" such as nail biting, and hair pulling.

Prevalence

- Strauss (1994), in a review of epidemiological studies, suggests prevalence estimates of 2.9% to 4.6% with **younger children** (below the age of 11).
- Prevalence rates for **adolescents** across studies ranged from 3.6% to 7.3%.
- These findings suggest that overanxious disorder is common in both children and adolescents, although it is somewhat more frequently seen in adolescents.
- No significant gender differences.

OAD/GAD: Comorbidity

- Last, Perrin, Hersen, and Kazdin (1992) have provided representative findings regarding comorbidity.
- They suggest that some 96 % of these children also met criteria for some other anxiety disorder.
- The most common were
  - social phobia (57%),
  - simple phobia (43%) and
  - separation anxiety disorder (37%).
- Almost half of the children with overanxious disorder also showed evidence of some sort of depressive disorder.
- Approximately 20% met diagnostic criteria for some type of disruptive behavior disorder.

Etiology

- While the precise causes of OAD/GAD in children are unknown, findings from recent research suggest several factors that may contribute to this condition.
- For example, children with overanxious disorder are more likely to have first degree relatives with an anxiety disorder - tentatively implicating the role of genetics.
- Other studies have found that children of mothers with major depressive disorders are more likely to have overanxious disorder.
- While perhaps also implicating genetics, such findings might also be related to environmental factors, or a combination of the two.

Etiology

- Other findings have provided support for the role of temperament variables such as behavioral inhibition.
- This characteristic is more common in children of parents with anxiety disorders AND it is also associated with the development of overanxious disorder in the child.
- Increased levels of life stress have also been implicated .
- While such findings provide a starting point for understanding contributors to OAD/GAD in children, a fuller understanding of etiology will require additional research .

OAD/GAD: Prognosis

- Research from longitudinal studies seem to suggest that OAD symptoms are likely to improve with time.
- Last, et al (1996) found that, of 84 children originally diagnosed with anxiety disorders, 80% of those with OAD did not meet diagnostic criteria 3 to 4 years later.
- However, approximately 1/3 had developed some other type of psychiatric disorder.
- It has also been suggested that the disorder takes longer to remit than other types of anxiety disorders.
- Here, Cowen, et al (1993) found that almost half of the OAD children he studied still met criteria at 2 ½ years following original diagnosis.

Treatment of OAD/GAD

- To date there are a variety of "Probably Efficacious" Treatments" for OAD/GAD with children.
- These include behavioral approaches such as;
  - Cognitive Behavior Therapy (CBT)
  - Modeling
  - In vivo exposure
  - Relaxation Training
  - Reinforced Practice
- Support has been found for each of these approaches in dealing with children with this type of anxiety disorder.

Cognitive Behavior Therapy

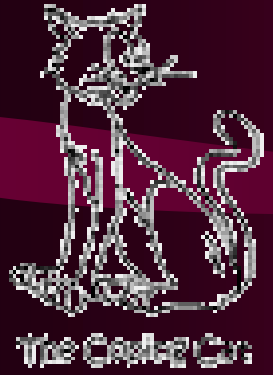
- An assumption basic to CBT is that maladaptive thoughts lead to maladaptive behavior & that more adaptive thinking will result in less maladaptive behavior.
- CBT involves the use of multiple strategies that alter, manipulate, and restructure distorted and unhealthy thoughts, images, and beliefs held by anxious children and adolescents.
- Cognitive strategies are used to help the child or adolescent recognize anxious thoughts, manage anxiety, and cope with anxiety-producing situations.
- CBT therapy uses these cognitive strategies *in combination with* strategies such as modeling, in vivo exposure, relaxation training, and reinforced practice.

Relaxation/Modeling/In Vivo Exposure

- **Relaxation Training** involves training the child to alternately tense and relax muscle groups, often combined with suggestions and deep breathing to achieve states of greater relaxation.
- **Modeling** involves demonstrating non-fearful behavior in a feared situations and showing the child/adolescent a more adaptive response for coping with a feared object or situation.
- **In vivo Exposure** involves practicing approaching and confronting a feared situation or object
- in vivo exposure is graded, beginning with situations that elicit little anxiety and gradually approaching scarier situations that elicit more anxiety..

Reinforced Practice

- **Reinforced Practice** involves in vivo exposure with a feared situation or object and rewards (e.g. praise, tokens, toys, hugs, etc.) for approaching and confronting a feared situation or object.



Treatment of OAD/GAD: A Cognitive Behavioral Approach

- An example of a successful approach for treating child Generalized Anxiety Disorder is the "*Coping Cat*" approach developed by Phil Kendall at Temple.
- It is based on basic Cognitive Behavioral Principles.
- Treatment typically takes place across 16 sessions where the child is taught;
  - how to recognize their physical reactions and anxious feelings when confronted with anxiety related stimuli,
  - to become aware of anxiety-related cognitions, and
  - to develop a coping plan for dealing with anxiety that involves positive self statements and problem solving skills.

Treating OAD/GAD: A CBT Approach

- The child is also taught to *evaluate their coping responses* and apply *self-reinforcement* for adaptive coping behaviors.
- Children are encouraged to *engage in both imaginal and in vivo exposure* to anxiety related stimuli, while using the skills they have been taught.
- Both in-session activities and out-of-session activities are employed to allow children *opportunities to use these skills*.
- Therapists also reinforce the successful use of coping skills by children in the program.

Treating GAD: A CBT Approach

- Children receiving this type of treatment have been shown to make significant gains in terms of anxiety reductions compared to wait-list controls.
- These gains have been found to be maintained at one and three-year follow up (compared to wait-list controls).
- Approaches similar to this, combined with other anxiety reducing components such as relaxation training and intense family involvement in treatment have also been shown to be useful in treating generalized anxiety in children and adolescents.

Childhood Fears and Specific Phobias

- **Childhood fears are quite common.**
- **Lapouse and Monk (I959), in a now classic survey of behavior problems displayed by 6 to 12 year-old children, found that some 43 per-cent of these children had seven or more fears.**
- **Childhood fears range from those related to very specific and concrete objects (e.g.,animals and strangers) to those which are more abstract (e.g., monsters, war, death). Some of these fears seem to be age or stage specific, occurring frequently at certain ages.**

Childhood Fears

- Age and stage specific fears would Include *fear of strangers* at age 6 to 9 months, *fear of separation* at age 1 to 2 years, and *fear of the dark* at around age 4.
- Many fears seem to resolve themselves with time and do not require treatment .
- Some fears, however, are more problematic and in these instances the term phobia is a more appropriate descriptor of the child's condition.

Childhood Phobias Defined

- Miller, Barrett and Hampe (l974) have defined a phobia as a specific type of fear that is ;
  - **out of proportion to the demands of the situation,**
  - **cannot be explained or reasoned away,**
  - **is beyond voluntary control,**
  - **leads to avoidance of the feared situation,**
  - **persists over an extended period of time,**
  - **is unadaptive and,**
  - **is not age or stage specific**

These criteria seem to reflect the essential features of the DSM IV criteria for Specific Phobia

Childhood Phobias: Prevalence

- While there is a fair amount of information pertaining to childhood fears, there is less information on the prevalence of actual child phobias .
- Taken together, figures derived from various sources, however, suggest a prevalence rate of somewhere between 2 and 4 per-cent in the general child population
- Rates on the order of 3.6 % are found for adolescents.
- Rates as high as 6 to 7 per-cent are found in clinical populations .

Childhood Phobias: Comorbidity

- Comorbidity estimates from a study of 80 children with specific phobias by Last, Perrin, Hersen, & Kazdin (1992), suggested that a large number of these children showed evidence of other anxiety-related problems.
- Indeed, *75% had, at some time, shown evidence of some anxiety disorder other than specific phobia* .

Childhood Phobias: Comorbidity

- Separation anxiety disorder was found in approximately 39%.
- Social phobias were found in 31% and overanxious disorder in almost 27%.
- Approximately 33% of children with specific phobia had a history of depressive disorder .
- Almost 23% met criteria for a diagnosis of disruptive behavior disorder.

Childhood Phobias: Prognosis

- With a literature dominated by case studies it is difficult to make clear-cut statements regarding prognosis .
- Based on the results of case reports, however, it would appear that the prognosis is relatively good in most instances .
- Indeed, it has been suggested that mild fears and phobias often represent transient developmental phenomena .

Childhood Phobias: Prognosis

- That childhood phobias often show spontaneous remission was suggested by an early study by Agras, Chapin and Oliveau (l972) who found that after a five-year follow-up of phobic individuals all of those under the age of 20 were symptom free .
- However, when data from this study were reanalyzed, it was found that in actuality only 40 % of those individuals under 20 years of age were likely to have been really free of symptoms (Ollendick, 1979).
- Although certain research findings suggest that childhood phobias may often be self-limiting, it is clear than some phobias can have a chronic course and continue into adulthood .

Phobias: Etiology

- Finally, some have postulated that phobias may be related to genetic and/or other biological factors (see Delprato, 1980).
- In general, although there is some data to support several of the "explanations" presented here, *none* appear adequate to account for all cases of phobic behavior.

Treatment of Specific Phobias

- Historically, child phobias have been treated from a variety of perspectives.
- One classic approach was taken by Freud (1909) who described the first psychoanalysis of a young child "Little Hans" who displayed a phobia of horses.
- The analysis was actually carried out by the child's father who treated the child under Freud's direction.
- Although there are numerous other case studies which describe this approach, there has been little research to assess the effectiveness of the psychoanalytic treatment of phobic children.

Treatment of Specific Phobias

- Behavioral approaches have typically been driven by a ***Tripartite Model*** or three-component model of phobic behavior (Lang, 1968, 1977) where it is assumed that phobic responses have *cognitive*, *physiologica*l, and *overt-behavioral* components.
  - **Cognitive responses such as fearful thoughts about the phobic object**
  - **Physiological responses such as changes in respiration and increased heart rate when confronted with the feared object**
  - **Overt behavioral responses, consistent with these cognitive and physiological responses, such as attempts to escape from or avoid phobic stimuli .**
  - **It is generally assumed that effective treatments must impact on the child's response in each of these areas.**

Treatment of Specific Phobias

- There are currently two approaches to treating specific phobias in children that have met criteria for an "*Empirically Supported Treatment*".
- Two other approaches can be categorized as "*Probably Efficacious*" based on the current research literature.
- <u>Empirically Supported Treatments</u>
  - Participant Modeling
  - Reinforced Practice
- <u>Probably Efficacious</u>
  - Systematic Desensitization
  - Cognitive Behavior Therapy

Obsessive Compulsive Disorder

- Childhood OCD, like OCD in adults, is characterized by recurrent obsessions and/or compulsions.
- Obsessions are recurrent, unwanted, thoughts, impulses, or images that cause increased anxiety or distress.
- Thoughts that harm may come to one's self or a loved one, contamination fears, or fears of engaging in some forbidden behavior are common.
- Compulsions are repetitive behaviors or rituals that the child feels compelled to engage in.
- These can include washing, checking, counting, hording, rearranging, saying silent prayers, etc).
- These obsessions and compulsions significantly interfere with the child's functioning.

OCD TO DO LIST

The Nature of OCD Symptoms

- Compulsions often seem intended to ward off harm to the person with OCD or others they are close to.

Note License Plate Counter

- While performing these rituals often provides a sense of relief , this relief is usually only temporary.
- **While adults with this disorder often have insight into the irrational nature and senselessness of their obsessions and compulsions, this is much less common in younger children.**
- Symptoms may become less severe over time and there may be intervals where symptoms are less problematic.
- However, for most individuals the disorder tends to be chronic in nature.

The Development of OCD

- OCD symptoms typically begin during the teenage years or in early adulthood.
- However, children can develop the disorder at earlier ages, even during the preschool years.
- Early studies suggested that at least one-third of all cases of OCD in adults began in childhood. More recent figures suggest that as many as 80% begin in childhood (Storch, 2007)
- The prevalence of OCD is approximately 2 percent in the general population.
- OCD strikes people of all ethnic groups.
- It is equally common in males and females.

OCD: Comorbidity

- Obsessive Compulsive Disorder is often accompanied by other conditions including;
  - depression,
  - other anxiety disorders
  - attention deficit hyperactive disorder,
  - Tourette's and tic disorders
  - trichotillomania (the repeated urge to pull out scalp hair, eyelashes, eyebrows or other body hair),
- Co-existing disorders can make OCD more difficult both to diagnose and to treat.

Obsessive Compulsive Disorder: Etiology

- There is growing evidence that biological factors are a primary contributor to OCD.
- The fact that individuals with OCD respond to drugs that affect the neurotransmitter serotonin seems to *suggest that* the disorder may have a neurobiological basis.
- Research also suggests that OCD seems to have a significant genetic contribution, with genetic links to both ADHD and Tourette's disorder.

Obsessive Compulsive Disorder: Etiology

- Recent research has also shown that OCD symptoms may develop or worsen after a strep infection.
- In these instances, the child may develop OCD with no previous family history.
- MRI studies have suggested that individuals with obsessive-compulsive disorder have significantly less white matter than normal control subjects.
- This may suggest a generalized brain abnormality in OCD

Obsessive Compulsive Disorder: Treatment

- Children with OCD are most commonly treated with a combination of psychotherapy and medication.
- The most common form of psychotherapeutic treatment is behavioral in nature and often takes the form of **exposure** and **response prevention**.
- With this approach, the patient is encouraged to **confront the feared object** or idea, either directly or via imagery.
- At the same time he/she is strongly encouraged to **refrain from engaging in compulsive behavior**.

Nature of Response Prevention

- Here a compulsive hand washer may be encouraged to touch an object believed to be contaminated, and then avoid washing until the anxiety that has been elicited has diminished.
- Treatment proceeds on a step-by-step basis, with the therapy being guided by the patient's ability to tolerate the anxiety and control compulsive acts.
- As treatment progresses, patients gradually experience less anxiety from obsessive thoughts and are able to resist the compulsive urges.
- While there have been more studies with adults than children, studies of response prevention have found it to be quite effective for the those who complete therapy.

Response Prevention: A Case Illustration

- An early child case example (Stanley, 1980) involved treatment of an 8 year-old girl whose ritualistic behavior and obsessional checking severely restricted her every day activities.
  - **Had to fluff pillows 3 times before undressing at night.**
  - **Bed covers had to be placed so that the fringes only just touched the floor all the way around,**
  - **At night, after removing her shoes, she banged them them on the floor upside down – the right side up three times and then placed them parallel under the bed,**
  - **She went to the toilet 3 times before going to bed,**
  - **and woke up at night to carry out these same rituals.**

Response Prevention: Case Illustration

- All dressing was done 3 times (even after going to the toilet).
- Toys had to be checked and re-checked before leaving the room where they were kept.
- Before carrying out each of these rituals she had to sing a specific nursery rhyme.
- These behaviors occurred every day and consumed a great deal of her time, making it impossible for her to engage in other activities.

Response Prevention: Approach to Treatment

- In treatment, parents and other family members were encouraged **not to reinforce** any compulsive behavior.
- Response prevention involved working with the girl and parents and arranging for her to be **prevented** from engaging in any of her ritualistic behaviors more than one time.
- This was followed by developing a **graded** series of situations that tended to elicit compulsive behavior.
- These were graded in terms of their “upset value” for the girl.

Response Prevention: Approach to Treatment

- These situations were presented in graded order, beginning with the mildest situation first.
- They then moved on to those where she might become very upset if she could not carry out her compulsions.
- In each situation, parents prevented her from carrying out the compulsive behavior –
- Hence the term “Response Prevention”.

Response Prevention: Outcome

- These procedures were quite successful.
- Symptoms disappeared after 2 weeks of treatment and there was no recurrence of compulsive behavior at 1-year follow-up.
- Extinction is probably largely responsible for the decrease in compulsive behavior and the reduction in anxiety associated with this procedure.
- While seemingly effective for dealing with compulsions, it may be more difficult to apply it to obsessional behavior.

Behavioral Treatment

- There is evidence that the effects of behavior therapy endure after treatment has ended.
- For example, an early review of outcome studies by Foa & Kozak (1996) found that, of 300+ patients treated by exposure and response prevention, approximately 76 % showed clinically significant relief from symptoms 3 months to 6 years after treatment.
- Studies have also found that incorporating follow-up sessions after the completion of therapy contributes to the maintenance of treatment effects (Hiss, Foa, and Kozak, 1994).

Cognitive Behavioral Treatment

- Cognitive behavior therapy involves a structured approach for teaching family members how to respond to symptoms.
- Major elements of CBT are exposure and response prevention.
- Another major element is teaching objective thinking strategies.
- Here the child is trained to identify and correct anxiety provoking cognitions.

Cognitive Behavioral Treatment

- Cognitive behavior strategies are most useful with somewhat older children.
- Here these strategies are designed to provide children with objective ways to “talk back” to anxiety provoking obsessions that relate to compulsive behavior.
- A major focus is on helping the child reframe their thoughts and learn coping statements to deal with the cognitive aspects of this anxiety-related disorder.

OCD: Drug Treatments

- Clinical trials have shown that drugs that impact on serotonin can significantly decrease OCD symptoms.
- Examples of these SRIs include the following;
  - **clomipramine (Anafranil)**
  - **flouxetine (Prozac),**
  - **fluvoxamine (Luvox),**
  - **Paroxetine (Paxil)**
  - **sertraline (Zoloft).**
- Studies have shown that more than 3/4 of patients are helped by these medications to some degree.
- In more than ½, medications relieve symptoms by diminishing the frequency and intensity of the obsessions and compulsions.
- Side effects can be an issue (Weight gain, dry mouth, nausea, diarrhea)

OCD Treatment

- Antibiotic therapy can also be useful in cases where OCD is linked to streptococcal infection.
- Again, it should be emphasized that the most effective treatment is likely to be one that involves both pharmacological and behavioral approaches to intervention.