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# **Paediatric Anxiety Disorders**

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#### **Abstract**

Anxiety disorders are highly prevalent among children and are associated with serious morbidity. Lifetime prevalence of paediatric anxiety disorders is about fifteen percent. Social phobia, generalized anxiety disorder and separation anxiety disorder are included in the triad of paediatric anxiety disorders. Specific phobia, obsessive compulsive disorder and post-traumatic stress disorder are also commonly seen in children. Overprotection by parents, parental death or separation, female sex, low educational status, family history of anxiety disorder, financial stress in family and adverse childhood experiences are risk factors for the development of anxiety disorders. If not diagnosed and managed at the earliest, paediatric anxiety disorders can cause life threatening problems in the future. Hence early and scientific management of anxiety disorders is essential. Cognitive behavioural therapy is the effective evidence based treatment for paediatric anxiety disorders.

**Keywords:** Pediatric anxiety disorders, risk factors, cognitive behavioural therapy.

#### Introduction

Anxiety is a basic emotion and it is present from infancy. It is the response of the brain to danger and is an alerting signal. Symptoms of anxiety in children can range from mild to severe. The difference between normal and pathological anxiety should be understood. Normal anxiety is the response to any threatening situation. For example, separation anxiety usually occurs at about one year of age and fears of thunder or lightning occurs at about two years of age. Such anxiety occurs in many children. But it does not persist and do not cause much distress. Hence intelligence, language skills and emotional state of the child must be considered while diagnosing anxiety disorders in children [1]. Pathological anxiety is an inappropriate response to a stimulus and is identified by virtue of its severity and duration. Anxiety becomes pathological, when it interferes with the normal functioning of the individual, leading to avoidance of the anxiety provoking situations and causing significant distress.

Anxiety disorders are the most prevalent emotional disorders and the onset is during childhood [2]. Anxiety disorders are more prevalent in girls compared to boys. Although there is high prevalence of childhood anxiety disorders, the treatment utilization is very low [3]. If not diagnosed and managed at the earliest, paediatric anxiety disorders can lead to significant morbidity during adolescence and adulthood. It can lead to depression and deliberate self-harm [4]. Hence, early diagnosis and early

intervention is necessary for paediatric anxiety disorders.

# Paediatric Anxiety Disorders

The "paediatric anxiety disorders triad" include social phobia, separation anxiety disorder and generalized anxiety disorder. They usually co-occur in children [5]. Common paediatric anxiety disorders include specific phobias, separation anxiety disorder, generalized anxiety disorder, social phobia and obsessive-compulsive disorder [6]. Post-traumatic stress disorder and panic disorder can also occur in childhood.

# Specific Phobia

Children with specific phobia have excessive fear related to a particular object or situation. This irrational fear leads to conscious avoidance of the feared object or situation. The distress in such situations significantly interferes with the academic functioning and even the normal daily routines of the child. The usual feared objects and situations in specific phobia include animals, insects, blood-injection-injury, illness, darkness, heights, thunder and lightening.

#### Social Phobia

These children have excessive and persistent anxiety in one or more social situations in which they are exposed to unfamiliar people. They have worry about negative evaluations or scrutiny by others. They feel very uncomfortable in such social situations and situationally provoked tantrums or crying can occur. Children with social phobia will avoid the anxiety provoking social situations.

# Separation Anxiety Disorder

Fear occur for children related to anticipated or actual separation from the parents or caregivers. These children usually have school refusal. They have excessive anxiety and exhibit somatic symptoms upon separation from parents or caregivers.

# Generalized Anxiety Disorder

It is characterized by excessive anxiety and uncontrollable worry about several events or activities. Generalized anxiety disorder is associated with symptoms such as, being easily fatigued, difficulty in concentration, irritability, restlessness, muscle tension or sleep disturbance. Symptoms cause marked distress and interfere with social, emotional, and academic functioning. Common comorbid conditions are separation anxiety disorder and social phobia.

# Obsessive Compulsive Disorder

Children with obsessive compulsive disorder will have recurring obsessions and compulsions which cause marked distress and significant impairment in academic functioning and social activities. Obsessions are recurrent, persistent and intrusive thoughts, impulses or images which interfere with the normal routines of the child. Common obsessions in children include thoughts about contaminations, religious thoughts, desire for symmetry, doubts regarding completion of activities and unwanted thoughts related to numbers or letters. Compulsions are recurring patterns of behaviours or rituals done by children like handwashing, avoiding, counting or checking. The child feels driven to perform these behaviours in response to an obsession.

#### Post Taumatic Stress Disorder

Children with past exposure to a stressful event of exceptionally threatening nature, respond with intense fear, difficulty in concentrating, irritability, sleep disturbance or disorganised behaviour.

They re-experience the traumatic events through deams or thoughts and experence intense psychological distress. These children try to avoid the stimuli associated with the trauma.

#### Panic disorder

Panic disorder is also seen in children. Recurrent unexpected panic attacks occur, in which there is sudden onset of various symptoms like tachycardia, sweating, tremor, chest pain, nausea, paresthesias, derealization, dizziness, breathing difficulty, fear of losing control, hot flushes or fear of dying. Children with panic disorder avoid the situations which trigger panic attacks.

#### Prevalence and Onset

All anxiety disorders occur more in females compared to males. The mean age of onset of anxiety disorders is 11 years [7]. The earliest age of onset is seen for separation anxiety disorder and specific phobias, especially the animal, blood injection injury, and environmental types. Onset of social phobia is usually in late childhood and during adolescence [8]. Onset of obsessive compulsive disorder can be in early childhood or adolescence. Generalized anxiety disorder has an average age of onset of 8 years.

The prevalence of anxiety disorders in children vary from 6 to 20% [9]. Lifetime prevalence of paediatric anxiety disorders is about 15%. The prevalence of separation anxiety disorder is about 2.8 to 8% and that of specific and social phobias is about 10% [10]. Generalized anxiety disorder is prevalent in about 8% of children. Obsessive compulsive disorder occurs in about 3% of children. The prevalence of post traumatic stress disorder is about 2%. Panic disorder has a prevalence of 1% or lower, during childhood.

#### Risk factors

Female sex, low educational status and unsatisfactory financial situations are risk factors for the development of anxiety disorders. Children of parents with anxiety disorder have significantly higher risk of developing anxiety disorder. The risk increases when both parents are affected. Overprotection by parents can contribute to the development of phobia, generalised anxiety disorder and panic disorder. Adverse experiences in early childhood are strong predictors of anxiety disorders. Parental death and parental separation are also risk factors for anxiety disorders in children.

#### Natural Course and Longitudinal Outcome

Anxiety disorders usually have a chronic course. These disorders wax and wane over time.

In children inter-anxiety comorbidity is common. The severity of anxiety contributes to the development of depression, deliberate self harm and substance abuse in the future. If not managed at the earliest, paediatric anxiety disorders can lead to significant impairment in academic performance and personality development of children [9]. This in turn cause long term impairment in the life of the individual [11].

# Role of Cognitive Behavioural Therapy (CBT)

CBT is very effective in reducing the sypmptoms of anxiety [12-14]. The recommended first line treatment of pediatric anxiety disorders is CBT [7]. Cognitive-behavioral therapy is found to be effective in the treatment of anxiety disorders such as obsessive-compulsive disorder and posttraumatic stress disorder [15].

CBT for paediatric anxiety disorders has the following components:

- 1. Psychoeducation to the child and caregivers regarding the nature of anxiety.
- 2. Relaxation techniques for managing somatic symptoms.
- 3. Cognitive restructuring for the thoughts which provoke anxiety.
- 4. Problem-solving skills for coping with the stressors.
- 5. Systematic exposure to the fearful situations.
- 6. Desensitization of the feared stimuli and prevention of relapses.

Several studies have shown the effectiveness of CBT for pediatric anxiety disorders [9,16-19]. Cognitive behavioral therapy is effective in treating even preschool children with anxiety. Randomized control trial has proved the effectiveness of CBT in four to seven year old children with anxiety disorders [20].

# Conclusion

Paediatric anxiety disorders are common conditions associated with significant developmental and social complications. Many children having anxiety disorder will develop depressive disorders or substance use disorders in future. Paediatric anxiety disorders are associated with significant functional impairment and can lead to poor scholastic performance as well as school refusal. Hence the early vulnerability and risk factors for anxiety disorders should be identified at the earliest which is important for the development of preventive strategies as well as early intervention programs. Early diagnosis and scientific management of paediatric anxiety disorders is essential. There is substantial evidence for the effectiveness of cognitive-behavioral therapy in the management of paediatric anxiety disorders.

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