Fact Sheet 17
Autism spectrum disorder and anxiety

What is anxiety?

Anxiety is a normal response to threats, real or perceived. It involves feelings of worry and tension, along with physical symptoms such as a racing heart, sweating or trembling. While some anxiety is normal, and can even be useful in certain situations (such as avoiding a specific danger or focusing the mind before an exam or performance), some children experience fears and worries more intensely and more frequently than others and this can interfere with everyday activities.

Children who are anxious may show a range of physical and behavioural signs, along with worrying thoughts about a range of situations. Some of the physical signs of anxiety can include:

- Muscle tension
- Difficulty concentrating, restlessness and being easily startled
- Sweating/flushing or feeling very hot or cold
- Recurring headaches, stomach aches, backaches
- Fatigue and sleeping difficulties

Anxiety can be seen in some children by a change in their behaviour and/or their response to certain situations that they are concerned about. Some behaviours that are commonly seen in children with anxiety include:

- Refusing to go to school
- Withdrawing from friends and family
- Avoidance of a particular object/situation
- Being a perfectionist
- Seeking reassurance

Children on the spectrum and with anxiety may show some or all of these signs, along with agitation or aggression, increased obsessiveness and increased rigidity.

When anxiety is excessive and interfering with an individual’s everyday activities and happiness, an anxiety disorder may be diagnosed. Types of anxiety disorders include social anxiety, selective mutism, separation anxiety, panic disorder, specific phobias, and generalised anxiety disorder (GAD). Obsessive compulsive disorder (OCD) also has strong links with anxiety. Estimates of prevalence of anxiety disorders among young Australians range from about 6% to 15% in children aged from 7 to 11 years old, and rates of about 9% to 18% in adolescents aged 12 to 18 years old. In children on the spectrum, these rates are much higher.

Autism and ASD

Anxiety has long been recognised as an additional difficulty associated with autism spectrum disorder (ASD), but the percentage of children on the spectrum who also have an anxiety disorder is not clear. Some studies report numbers of children who have anxiety symptoms or features, while others count only those who have been diagnosed with an anxiety disorder. Despite this, research has consistently found higher rates of anxiety amongst children on the spectrum than seen in typically developing children, and those with a language disorder or intellectual disability (but without ASD). Estimates of prevalence (the proportion of children on the spectrum who have anxiety) range from as low as 25% of boys and 19.5% of girls through to more than half of all children across the spectrum of autism. One study found that more than 40% of children on the spectrum with an intellectual disability also had clinically significant anxiety.
The unique characteristics of ASD may mean that children are more susceptible to higher levels of anxiety than their typically developing peers\textsuperscript{10,11}. These characteristics may include:

- Social difficulties, including difficulty understanding others’ perspectives, difficulty understanding social expectations
- Difficulties expressing feelings, needs and wants, and difficulties with receptive language
- Differences in responding to sensory information, including fear of some sounds, smells and light
- A high need for predictability, along with difficulties coping with change or new situations

As one study states, "social skill impairments, difficulty with understanding the perspectives of other people, and increased sensitivity to sensory stimuli may predispose children with ASD to experience daily social interactions as overwhelming, unpredictable, and distressing to a greater degree than it does their typically developing peers, thereby contributing to heightened feelings of anxiety"\textsuperscript{10}.

Children on the spectrum can show a range of signs of anxiety. It can be difficult to understand the differences between characteristics of autism and signs of anxiety at times, given that there is overlap and some similarities. For example, it can be difficult to distinguish between characteristics of repetitive behaviours and restricted interests, seen in many children on the spectrum, and symptoms of obsessive compulsive disorder (OCD). Anxiety may also take different forms for different children. Research suggests that children on the spectrum may experience different forms of anxiety, including simple phobias, separation anxiety disorder, social phobia and OCD\textsuperscript{5}. A child’s level of cognitive functioning can play a role in the type and severity of anxiety they experience. Some studies\textsuperscript{5,12} suggest that amongst children on the spectrum, those with higher cognitive skills experience the most severe anxiety, while those with more marked communication impairment are less affected by anxiety symptoms\textsuperscript{13}. Recent research has found that children with early sensory over-responsivity may show greater signs of anxiety as toddlers\textsuperscript{14}.

It is important to note that the impact of anxiety is significant and can often be a serious barrier to learning and participation in everyday activities.

**How is anxiety diagnosed?**

Anxiety is a normal response to real or perceived threats and it is normal for everyone to feel anxious at times. A diagnosis of an anxiety disorder is only made if there is a clinically significant impact on a person’s social, school or occupational functioning. Psychologists and school counsellors can provide assessment and information about worries, fears and anxiety disorders. Assessment normally involves interviews, history and checklists. Psychologists may be in private practice, community health centres or attached to hospitals. It is important that families select practitioners with experience in the appropriate age group and who understand both autism and anxiety.

**Treatment**

Many children on the spectrum will experience feelings of anxiety that are related to their difficulties understanding what is happening around them. For example, unexpected changes or new social situations can be stressful and anxiety provoking for some children. In these situations, feelings of anxiety can often be managed using tools that are familiar to many parents and teachers of children on the spectrum, such as visuals and social stories to prepare and forewarn about the change or event. Some children will benefit from relaxation and calming techniques such as progressive relaxation\textsuperscript{15} which may be particularly useful in reducing behaviours associated with anxiety in children on the spectrum. Other children may find spending some time engaging in their preferred interests reduces anxiety symptoms; first person accounts often describe special interests as relaxing and enjoyable\textsuperscript{16}. 


As recently as ten years ago, there were limited evidence based options for anxiety management for children on the spectrum. In 2007, a randomised control trial looking at treatment with a group of 48 children on the spectrum and with anxiety showed that modifications made to a cognitive behaviour therapy (CBT) program resulted in 20 of 28 (71.4%) children no longer meeting criteria for an anxiety disorder, compared with zero in the control (waitlist) group. Since this time, CBT has become an established treatment for those on the spectrum and with anxiety. Subsequent studies and reviews have confirmed that CBT with modifications, such as including repetition, hands on tasks, visual supports and incorporation of strengths and interests, appears to be effective in reducing anxiety and increasing independence and daily living skills, particularly in children with average cognitive skills. There is however, less information about CBT with children on the spectrum and with an intellectual disability.

A core treatment component in CBT for anxiety is the use of ‘graded exposure’. Graded exposure involves supporting the anxious person to gradually do the things that make them anxious or stressed. This is important because usually when someone is anxious about something they will avoid it, and thus miss out on the opportunity to learn that they can actually cope with their fear or stress, and that over time, it will go away by itself.

Medication may also play a role in treatment for some children and this should be discussed with a paediatrician or psychiatrist.

Summary

Anxiety is a common coexisting condition for many people on the spectrum. It can cause significant difficulties in everyday functioning, particularly in accessing and participating in school and learning activities. Useful strategies can involve identifying triggers for feelings of anxiety, followed by visual supports and other techniques to prepare and forewarn about stressful situations, along with relaxation techniques. There is evidence that modified cognitive behaviour therapy can be effective. Medication may play a role in helping some individuals.

REFERENCES


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