Strategies for Managing Anxiety Disorders in Youth with ASD: It’s All About Interprofessional Collaboration

The Intersection of ASD & Anxiety
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ABOUT US

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OBJECTIVES

1. Attendees will be able to identify the benefits of interprofessional collaboration when working with individuals with autism and anxiety disorders and other brain health concerns.

2. Attendees will be able to describe tools for effective collaboration in decision making as part of an interprofessional team when working with individuals with autism and anxiety disorders and other brain health concerns.

3. Attendees will be able to identify potential medications, the effects, and side effects of those medications to treat anxiety disorders in individuals with autism and anxiety disorders.

4. Attendees will be able to identify potential effects of drug and behavior interactions when working with individuals with autism and anxiety disorders.
THE AGENDA

1. Background: ASD and co-occurring mental health disorders
2. Defining and deconstructing anxiety
3. Anxiety disorder subtypes
4. Interprofessional assessment of anxiety
5. Assessment and treatment of anxiety disorders
6. Case example
7. Concluding thoughts
Autism Spectrum Disorder (ASD)

- According to the National Institute of Mental Health, ASD is:
  - Ongoing social problems that include difficulty communicating and interacting with others
  - Repetitive behaviors as well as limited interests or activities
  - Symptoms that typically are recognized in the first two years of life
  - Symptoms that hurt the individual’s ability to function socially, at school or work, or other areas of life

- Prevalence is currently 1 in every 44
  - 4.2 times as prevalent among boys (3.7%) as among girls (0.9%)
  - ASD is reported to occur in all racial and ethnic groups
Autism Spectrum Disorder and Co-occurring Mental Health Conditions

- 78% of children with ASD had at least one mental health condition
  - nearly half had two or more

- The most common mental health conditions seen in children with ASD
  - Behavior/Conduct problems (60.8%),
  - Anxiety (39.5%),
  - ADD or ADHD (48.4%)
  - Depression (15.7%)
**So what is Anxiety?**

- A complex pattern of reactions to a perceived threat
  - **Cognitive**
    - Forgetfulness, rumination, poor judgment, decreased attention
  - **Behavioral**
    - Running away, anxious tapping, restless leg, aggression, trembling, or closing eyes
  - **Physiologic**
    - Tachycardia, tachypnea, diaphoresis, increased blood pressure, palpitations, chest tightness, muscle tension, GI upset
  - **Subjective**
    - Irritability, helplessness, hopelessness, anger, decreased motivation, fear, images of bodily harm
How is anxiety different than fear?

anxiety

decomposition the syndrome...

fear
- panic
- phobia

worry
- anxious misery
- apprehensive expectation
- obsessions

...into symptoms
WHEN DOES ANXIETY BECOME A SYMPTOM OR DISORDER?

○ Anxiety disorders involve intense and persistent fear/worry

○ These feelings:
  ■ Are **extreme** for the developmental stage
  ■ **Interfere** with daily functioning/attainment of milestones
  ■ And no matter how much you try to reassure or reason with the person, these feelings are not dispelled
ANXIETY AND AUTISM

WHAT IS ANXIETY?
Anxiety refers to a group of disorders that cause nervousness, fear, apprehension, and worry. Most people experience anxiety at some time and a little anxiety may even aid performance. But severe anxiety can impact on physical, cognitive and behavioural functioning and well-being.

ANXIETY IN AUTISM
Many children with autism are anxious. About 40% will receive a clinical diagnosis of an anxiety disorder, but another 20-30% will experience heightened anxiety. One of the most common types of anxiety in autism is an intolerance of uncertainty.

This may mean children ask a lot of questions, need routine and predictability and get very worried before going to new places or trying new things.

SPOTTING SIGNS
Anxiety may look different in some children with autism. Signs of anxiety in autism can be difficult to spot because they look similar to characteristics of autism. Some of the signs of anxiety that we have found in our research that you might not expect to see as signs of anxiety include crying, hiding or running away, a change in the volume or speed of speech, becoming angry, becoming sensitive to lights or noise, noncompliance, touching objects and self-harm. Many children with autism also tell us that when they get worried they try to “act normal”.

SIGNS TO LOOK FOR
ANGER  CRYING  TRYING TO ACT NORMAL
HIDING  SCARED

BE AWARE OF THE POSSIBILITY THAT A CHILD’S BEHAVIOURS RATHER THAN THEIR WORDS MAY BE YOUR BEST INDICATOR OF THEIR ANXIETY. BEHAVIOUR MAY BE THEIR LOUDEST VOICE.

www.facebook.com/autismcentreexcellence
Research undertaken with the assistance of a Queensland Government Education Horizon grant
Graeme Adams, Bob Kavan and Kate Simpson, Autism Centre of Excellence

ST JOHN FISHER COLLEGE
GOLISANO INSTITUTE for Developmental Disability Nursing
Anxiety Disorder Subtypes
Anxiety Diagnoses in Youth with ASD:

- Specific phobia (30%)
- Social phobia (17%)
- Obsessive compulsive disorder (17%)
- Generalized anxiety disorder (15%)
- Separation anxiety disorder (9%)
- Panic disorder (2%)
- Acute stress disorder
- Posttraumatic stress disorder
Specific Phobia:

Persistent fear cued by the presence or anticipation of a specific object or situation

Fear may create physical symptoms that approach panic level

The symptoms interfere significantly with the child/adolescent’s functioning

Symptoms must be present for > 6 months
SPECIFIC PHOBIAS - TRIGGERS

Someone with a specific phobia (e.g., Arachnophobia) could be triggered in a variety of ways.

**SIGHT**
Someone with Arachnophobia sees a spider.
The spider, and possibly the spider's web, trigger the Arachnophobic fears.
The person experiences anxiety, racing heart, fright, is shaky and wants to leave the situation as soon as possible.

**SMELL**
Someone with a fear of cheese (Turophobia) smells cheese.
The smell of cheese is very repulsive and produces cheese-related thoughts and memories.
The person experiences disgust, anxiety, starts sweating and shaking, and wants to leave the situation.

**IMAGINATION**
Someone with a fear of snakes (Ophidiophobia) thinks of a snake.
Imagining how an encounter with a snake would be like, immediately affects the person.
The person experiences hot and cold flashes, trembling, fright, shortness of breath and trouble relaxing.

**SOUND**
Someone with a fear of loud sounds (Phonophobia) sees how someone blowing up a balloon.
Watching the balloon blow up beyond its normal capacity is very unsettling.
The popping of the balloon can produce a panic attack and trouble breathing.

**TASTE**
Someone with a fear of sourness (Acephobia) has to attend a dinner party and sees lemons in a fruit basket.
The idea that the lemons will be used in the dishes is very unsettling.
Seeing the lemon causes him to experience trouble breathing, racing heart, sweatiness. He feels like going home before dinner.
SOCIAL PHOBIA:

- Persistent fear of social or performance situations which the child/adolescent may be under the scrutiny of others
- Fear of acting in a humiliating or embarrassing way
- May reach panic levels when in the social situation
- School/age-appropriate social activities avoided
Autism

- Social-Emotional Reciprocity
- Conversation: Reduced Interest
- Poor Nonverbal Skills
- Lack of Facial Expressions
- Misinterpret Social Cues
- Difficulty Adjusting to Different Social Environments
- Difficulty Understanding, Developing and Maintaining

Obsessive Compulsive Disorder

- Repetitive Behaviors, Objects, Speech
- Urges
- Inflexibility with Routines
- Sensitivity to the Environment
- Fixed Interests

- Unwanted Thoughts, Urges, Images
- Normal Thought Perceived as Illogical
- Attempts to Ignore, Suppress Thoughts and Urges
- Compulsions Aim to Reduce Anxiety/Distress
- Level of Insight
Separation Anxiety Disorder:

- Recurrent excessive fears about separation
- Developmentally inappropriate
- Avoidance of situations that require separation
- Causes clinically significant distress or impairment in social, academic, or other important areas of functioning
- Duration must be at least 4 weeks
**GENERALIZED ANXIETY DISORDER:**

- Excessive anxiety or worry that is difficult to control
- Must have at least 3 of the following symptoms:
  - Restlessness
  - Muscle tension
  - Easily fatigued
  - Sleep disturbance
  - Difficulty concentrating
  - Irritability
- Symptoms present more days than not for > 6-months
Panic Disorder:

- Sudden and intense
- Uncontrollable attacks of anxiety
- Occurs in a variety of situations
- Time-limited
INTERPROFESSIONAL ASSESSMENT OF ANXIETY DISORDERS IN YOUTH WITH ASD
Interprofessional Collaboration…
What’s it all about?
WHAT IS INTERPROFESSIONAL COLLABORATION?

A process of developing and maintaining effective interpersonal working relationships with practitioners, clients, families and communities to enable optimal health

What is Interprofessional Collaboration?

“...respectful, meaningful, and effective team behavior”  
(Kiddo & Grant, 2009)

- **Interdependent professionals** taking collective action towards patients’ care needs
- **Voluntary**
- **Implies negotiation**
  - Leave the competition at the door!

WHAT IS INTERPROFESSIONAL COLLABORATION?

• The team shares the responsibility for making the ultimate decision about a patient’s care
  – Opinions are equally valued
• The plan is developed by the whole team
• Assessment and care plan reflect the integration of expertise from individual disciplines

“The whole is greater than the sum of its parts”
-Aristotle
When it comes to interprofessional collaboration, know your lane!

It is critical that we recognize the limits of our knowledge and experience, plan for situations beyond our expertise, and provide appropriate referral to other health care providers as needed.

WHO IS ON OUR INTERPROFESSIONAL TEAM?

• Youth & Caregiver
• Medical
  • Primary care provider
  • Neurologist*
• Psychiatric
  • Psychiatric Nurse Practitioner
  • Psychiatrist
• Behavioral services
  • Psychologist*
  • Behavior analyst
  • Behavior specialist
• Care/Clinical Coordination
• Mental Health Therapists
  • Psychologist
  • Social worker
  • Art therapist
  • Licensed Mental Health Counselor
• Education
  • Administrators
  • Teachers
  • OT/PT*
  • SLP*
  • School Nurse
• Nutrition/Dietician
ASSESSMENT OF ANXIETY
Vasa et al. (2016)
ASSESSMENT OF ANXIETY

1. Perform a developmentally appropriate multi-informant and multi-method assessment
   a. Utilize multiple assessment modalities and informants
      i. Clinical interviews
      ii. Rating scales
      iii. Behavioral observations and assessments

ASSESSMENT OF ANXIETY

Challenges to assessment may be related to:

1. Language
2. Cognitive abilities
3. Complexity: comorbid conditions that overlap with ASD
4. Consider child and family stressors
5. Contribution of trauma

ASSESSMENT OF ANXIETY

► Clinical Interview:
  ▪ Child self report:
    • Several factors such as age, verbal fluency and cognitive ability
    • Child’s ability to understand their internal experience and express emotions
    • Consider open-ended questions, forced choice responses (yes/no) or visual analog scales
  ▪ Caregiver report:
    • Observations about symptoms and behaviors across settings
    • Understand family history of anxiety disorders
      • Heritability
      • Perceptions of anxiety

Assessment of Anxiety

► Rating Scales:
  • Screen for Child Anxiety Related Emotional Disorders (SCARED)
  • Multidimensional Anxiety Scale for Children (MASC)
  • Spence Children’s Anxiety Scale (SCAS)

ASSESSMENT OF ANXIETY

- Physical exam
  - Vital signs and lab work

- Mental status exam
  - Physical appearance
    - Tremors, hair twirling/pulling, bald spots, nail biting, skin picking/lesions secondary to picking, pacing, manner of dress, relatability, comfort with caregiver
  - Eye contact
  - Mood and affect
  - Manner of speaking
  - Thought processes and content

Rule out other medical or psychiatric explanations for the youth’s presentation

ASSESSMENT OF ANXIETY

► Are the there psychosocial stressors that need consideration?
► Are the educational and behavioral supports adequate?
► What is the degree of anxiety related impairment?
  • How much does anxiety interfere with the child’s daily functioning across settings?

Assessment of Anxiety

Behavioral Observations

1. Observe for fearful affect, clinginess, and increased repetitive behaviors, Irritability (Aberrant Behavior Checklist), disruptive behavior, aggression, worsening sleep problems, and self-injury (McGuire et al. 2016)

2. Avoidance may be because of fear of phobia, worry or rigid/repetitive behaviors. All can result in social avoidance of stimuli.

3. Fear and worry can be shaped and begin with rigid or repetitive behaviors. An unexpected change in routine (rigidity) results in taking a test that the person was unaware of (worry), now they are paired.

4. Ritualistic behavior may reduce anxiety or they also may be a preferred activity unrelated to negative affect (positive reinforcement).

5. Understanding function is very important and referral to a behavior analyst for assessment (FBA or FA) can be very important. (Vasa et al., 2016)
1. Anxiety Relief or Automatic Negative Reinforcement.
   a. The reinforcer is the avoidance or removal of a distressing stimulus in the individual’s internal environment.
   b. Is it necessary to understand the difference between fear, phobia, and OCD in a behavioral assessment?
   c. maybe....
2. Direct observation, using Antecedent, Behavior, and Consequence data
3. Functional analysis
RFT approach to provide a more comprehensive behavioral theoretical basis for understanding OCBs. (Vause, et al., 2020), (Guertin, E. L., et al. 2022)

**Figure 1**
*Proposed Possible Learning Mechanisms for a Clinical Case Example Typical of the Processes Described by OCD (i.e., Automatic Negative Reinforcement) Based on the Mowrer’s (1951) Two-Process Theory of Avoidance Behaviors (A and C) and RFT (B) Based on Diagrams by Törneke (2010)*

**A. RESPONDENT (PAVLOVIAN) CONDITIONING**

- **High-order Conditioned Stimulus 2**
  - ‘Contaminated’ car seat
  - **Higher-order Conditioned Response 2**
  - Physiological, emotional and cognitive (thoughts) indices of distress/anxiety

- **High-order Conditioned Stimulus 1**
  - ‘Contaminated’ shoe
  - **Higher-order Conditioned Response 1**
  - Physiological, emotional and cognitive (thoughts) indices of distress/anxiety
(Guertin, E. L., et al. 2022)
TREATMENT OF ANXIETY
DOMAINS OF TREATMENT OF ANXIETY

1. Psychoeducation and coordination of care
2. Modified Cognitive Behavioral Therapy (CBT)
3. Behavioral Interventions
4. Medication Considerations
“The comprehensive care or medical home model for the care of ASD includes management of mental health and behavioral problems, which are far more prevalent in children with ASD” (Gurney JG, McPheeters ML, Davis MM, 2006)
Evidence-based Treatment Models

1. Behavior therapy: There is some evidence of the efficacy of behavior therapy such as CBT in reducing anxiety symptoms
   a. CBT
   b. Dialectical Behavioral Therapy (DBT)
   c. Trauma Focused-CBT (TF-CBT)
   d. ACT

1. Often communication response is a barrier

2. Behavioral therapy with exposure may help when communication interferes with cognitive components (Hagopian & Jennett, 2016)

1. Used in combination with behavioral intervention, behavior therapy (possibly modified) may be effective for individuals with language barriers (Lange et al., 2011).
Functional Communication Training (FCT): Teaching to tell us how to get their needs met - what they need - what is causing them concern.
BEHAVIORAL INTERVENTIONS

Self-Management

Behavioral Relaxation
## Psychopharmacological Considerations

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Medication</th>
<th>Considerations</th>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Anxiety Symptoms</td>
<td>Selective Serotonin Reuptake Inhibitors (SSRIs)</td>
<td>Titration; Behavior activation, tolerability; drug interactions; Suicidal ideation</td>
<td>Weekly the first 4 weeks of treatment, every 2 weeks for 1 month then monthly</td>
</tr>
<tr>
<td>Sleep Disturbance</td>
<td>Melatonin, Clonidine, Trazodone</td>
<td>Blood pressure monitoring; excess sedation</td>
<td>No more than 3 mg of melatonin; clonidine loses sedation effect over time</td>
</tr>
<tr>
<td>Fight or Flight Autonomic NS</td>
<td>Clonidine/Guanfacine (ER); Propranolol</td>
<td>Orthostatic hypotension; Hx of asthma?</td>
<td>Blood pressure monitoring</td>
</tr>
<tr>
<td>Behavioral Dysregulation</td>
<td>Clonidine/Guanfacine; Propranolol; Risperdal/Abilify</td>
<td>Orthostatic hypotension; Hx of asthma?; Metabolic considerations</td>
<td>Blood pressure monitoring; metabolic monitoring; weight management</td>
</tr>
<tr>
<td>Situational Anxiety: procedures, blood draws</td>
<td>Benzodiazepines: Lorazepam or Propranolol</td>
<td>Sedation; addictive; disinhibition; blood pressure</td>
<td>Small supply</td>
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COMBINED BEHAVIORAL AND PHARMACOLOGICAL TREATMENT

Despite not enough research, we do know that in some cases the combination of medication and behavioral intervention (both therapy and direct intervention) can be critical.

When considering medication in persons with autism and individuals with developmental disabilities, the best indirect assessment might be the Aberrant Behavior Checklist - 2.

Five Subscales

1. Irritability
2. Social Withdrawal
3. Stereotypic Behavior
4. Hyperactivity/Noncompliance
5. Inappropriate Speech
BCBA CEU
Word for this Presentation
Grapefruit
CASE EXAMPLE: ANDREW

- 18 year old male
- Primary target behavior: Physical Aggression
  - Low Frequency, High Intensity
  - precursor behavior - multiple questioning
- Diagnoses:
  - ADHD, Generalized Anxiety with Obsessive Compulsive Tendencies, Conduct Disorder, Reactive Attachment Disorder, PDD, MR
- History of placements in highly restrictive programs
WHAT WOULD YOU DO?

- How can you get the information you need from assessment?
- How can the interprofessional team help?
FUNCTIONAL ASSESSMENT AND INTERVENTION

- Results of both an FBA and functional analysis identified function of all target behavior, and multiple questioning (FA) as attention and access to tangible items/activities
- Intervention developed included social scripts, DRO/DRA, extinction
- Interventions resulted in a reduction in frequency of verbal and physical aggression
  - *Reduction was not socially significant enough due to severity of problem behavior when it occurred*
- The team thought that a concurrent operant assessment might provide some helpful information
Identified Attention as high preference
Results indicated both tangible and attention were high preference.

One staff member helping with the COA pointed out that during the attention condition, Andrew’s conversation (repetitive) revolved around tangible items.

When given the choice between actually using the tangible item or talking about the item, he chose to talk about it.

IPT hypothesized that anticipation of obtaining the item was more reinforcing than actually getting it (anxiety/anticipation).
Further analysis indicated significant anxiety-related behaviors when asked to choose between two highly preferred or two non-preferred activities. This led to an intervention that emphasized preference, but de-emphasized choice.

This case example demonstrates the utility of an interprofessional approach.

The interprofessional team contributed to the discussion and opportunities for consideration of important variables that may otherwise have been missed.

Thoughts and Questions?
SUMMARY

People with IDD can and do experience anxiety (and other psychiatric) symptoms often presenting with challenging behavior

Careful assessment is required to determine the presence of symptoms, diagnosis, level of impairment and the function of the challenging behavior and its relationship with psychiatric symptoms

Treatment focused on non-pharmacological interventions supported by psychopharmacology is best. Skill building that is integrated into a kids behavioral repertoire is with them for a lifetime

Use of medication should be determined by systematic assessment in the context of and in conjunction with non-pharmacological interventions, particularly behavior analysis

*The whole is greater than the sum of its parts*: Interprofessionalism can be a potent vehicle for optimizing treatment outcomes for youth (all people) with ASD and co-occurring psychiatric conditions
Psychiatric Symptoms and Behaviours Screen from Surrey Place:  https://ddprimarycare.surreyplace.ca/tools-2/mental-health/psychiatric-symptoms-and-behaviour-screen/

Cognitive Behaviour Therapy (CBT) for People with Mild Intellectual Disability and Mood Disorders from Hassiotis and colleagues

https://www.ucl.ac.uk/psychiatry/research/epidemiology-and-applied-clinical-research-department/principal-investigators/hassiotis-0

AFIRM
Autism Focused Intervention Resources & Modules

https://afirm.fpg.unc.edu/afirm-modules
REFERENCES


