Integrating Interventions for Clients with Autism Spectrum Disorders in a Residential Treatment Setting

PRESENTED BY:
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Autism Spectrum Disorder In DSM

- **DSM-IV-TR**
  - Pervasive Developmental Disorders
    - Autistic Disorder
    - Pervasive Developmental Disorder – NOS
    - Asperger’s Disorder
    - Rett’s Disorder
    - Childhood Disintegrative Disorder
- **DSM-V**
  - Autism Spectrum Disorder

American Psychiatric Association DSM-5 Development; www.dsm5.org
What is Autism Spectrum Disorder (ASD)?

**Social**
- Impairment in use of nonverbal behaviors (e.g., eye contact, facial expression)
- Unable to develop peer relationships that are appropriate to developmental level
- Lack of shared enjoyment with others
- Lack of social or emotional reciprocity

**Communication**
- Delayed or no development of spoken language
- Impairment in ability to carry or initiate conversation
- Stereotyped or repetitive use of language
- Lack of spontaneous make-believe play or developmentally appropriate imitative play

**Behavior**
- Preoccupation with restricted pattern of interest
- Strict adherence to routines
- Body movements that are stereotyped and repetitive (e.g., hand flapping)
- Preoccupation with parts of objects

DSM-IV-TR
Autism Spectrum Disorder

Cognitive Impairment

Severe to Profound Mental Retardation

Moderate to mild Mental Retardation

Borderline to Above Average Intelligence
Autism Spectrum Disorder

Social Impairment

- Impervious to social interaction, unaware of social cues, lack of interest in people, uses others to meet needs only, absorbed in own activity, no pretend play
- Some awareness of social expectations, can take turns, reply when addressed, makes simple requests, be attached to someone, social behavior quite inappropriate
- Inappropriate behavior more subtle, seems rigid, obsessive, pedantic, narrow, may be aware of disability, may feel anxious
Autism Spectrum Disorder

Repetitive, Stereotyped Behaviors

Simple: e.g., rocking
Flapping, spinning

More complex: e.g.,
arranging objects in
in rows, following
routines.

Idiosyncratic
“obsessional”
interests, such as
train schedules, or
specific fantasies.
<table>
<thead>
<tr>
<th>Low Language Impairment</th>
<th>Medium Language Impairment</th>
<th>High Language Impairment</th>
</tr>
</thead>
<tbody>
<tr>
<td>No language and/or gesture, or very minimal</td>
<td>Language present but signif. delayed, vocab. and grammar reduced, echoes, uses language in odd ways, some limited gesture</td>
<td>Highly developed language, fluent, reads and writes, converses, may be literal, perseverative, a poor communicator</td>
</tr>
</tbody>
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Prevalence

- Current Estimated Prevalence: 1 in 88 (CDC, March 30, 2012)
  Early 1990’s: 1 in 2500, Late 1990’s: 1 in 1000
  In 1980’s: 1 in 10,000

- Hard to compare autism rates as the diagnostic criteria changed with each revision of DSM (e.g., in 1983, DSM did not recognize PDD-NOS or Asperger’s Syndrome and criteria for Autistic Disorder were more restrictive)

- Proportion of children with ASD with IQ > 70 is close to 60% (Center for Disease Control and Prevention, 2009)

- ASD 5 times more common among boys (1 in 54) than among girls (1 in 252). A ratio of 9 to 1 in Asperger Syndrome (Wing, 1981)
Comorbidity

- 62.8% -- Estimate of occurrence of psychopathology in children and adolescents with ASD (6% in general pediatric population)

- ADHD: 50-78%
- Intellectual Disability: 25-70%
- Social Anxiety Disorder: 29.2%
- Oppositional Defiant Disorder: 28%
- Depression: 2-30%
- Generalized Anxiety Disorder: 13.4%
- Obsessive Compulsive Disorder: 8.2%
- Tourette Syndrome: 4.8%

Simonoff et al., 2008
Referral of Children with ASD for Residential Treatment

- Typical profile of children with ASD who are referred to residential treatment:
  - Children exhibiting mild symptoms of ASD in conjunction with severe behavior problems and/or psychiatric diagnoses
  - Children who have verbal language abilities
- Higher referral rate
- Individualized programming is implemented for clients with ASD
Outline

- Applied Behavior Analysis
- Positive Behavior Support (PBS)/Environmental Considerations
- Skill Building
- Sensory Integration
- Communication/Collaboration with Families and Agencies
- Teaching/Advocacy
Many behavior intervention techniques are based on the principles of Applied Behavior Analysis (ABA).

Applied Behavior Analysis is the process of systematically applying interventions based upon the principles of learning theory to improve socially significant behaviors; and to demonstrate that the interventions are responsible for the improvement in behavior (Baer, Wolf & Risley, 1968).
Applied Behavior Analysis Overview

- Screening – identifying *antecedents*, *behaviors*, and *consequences*
- Baseline data collection
- Design of intervention (development of BSP)
- Implement intervention and collect data for progress monitoring
- Analyze results

Kearney, 2008
### ABC Data Collection

#### Baseline Data Collection Sheet

**Client:** Jordan  
**Targeted behavior:** Physical aggression, including hitting and kicking others  
**Date:** _______  
**Shift:** _______

<table>
<thead>
<tr>
<th>Time/Activity</th>
<th>Antecedent</th>
<th>Major Behavior</th>
<th>Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/10/11 8:45AM</td>
<td>What happened before the major behavior occurred? Be specific, ex: Peer called them a name, staff gave a direction, asked for a specific item/activity and was denied access, etc.</td>
<td>Physically aggressive towards staff by swinging fists and kicking.</td>
<td>Client was sent to refocus. Received ZTB for physical aggression.</td>
</tr>
<tr>
<td>Permanent</td>
<td>Staff instructed Jordan to make his bed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/12/11 1:35PM</td>
<td>Teacher prompted Jordan to start taking test.</td>
<td>Jordan kicked at teacher from under desk.</td>
<td>Sent to refocus. Remained in refocus for 10 minutes after calm.</td>
</tr>
<tr>
<td>Classroom</td>
<td>Jordan wanted to write a letter during class. Teacher directed him to do school work.</td>
<td>Hitting and cursing staff, attempted to AWOL.</td>
<td>Sent to refocus. Received ZT's for aggression and AWOL attempt.</td>
</tr>
<tr>
<td>1/14/11 12:24p-12:30p</td>
<td>Jordan upset because there was no salad available in dining hall. Staff directed Jordan to get tray of food.</td>
<td>Jordan started yelling and screaming at peers, then staff. When staff redirected, Jordan attempted to hit staff.</td>
<td>Jordan was taken back to school refocus room. Placed on dining hall restriction. ZT's for physical aggression.</td>
</tr>
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A Functional Behavior Assessment (FBA) may be conducted if further investigation is needed in order to determine the motivation or purpose of a behavior.

Carr, 1977; Iwata, Dorsey, Slifer, Bauman, & Richman, 1982

**Process**
- Identify and define behavior
- Determine if there are any medical or psychiatric issues
- Identify antecedents and consequences of the behavior
- Collect data (e.g., interviews, observations)
- Analyze data; look for patterns
Development of Intervention
Behavior Support Plan

- BSP is developed after data collection
- Handout: Proactive and Reactive Strategies to Decrease the Probability of Aggressive and Sexualized Behavior
Progress Monitoring

- For progress to be monitored effectively:
  - Staff should understand the meaning of the plan for the client
  - Consistent implementation is critical
  - Continuous collection of data
  - Assess the outcomes of the intervention

- Socially Meaningful Changes
  - Outcomes based on skills, problem behaviors, and development should be compared against socially meaningful changes.
    - Assessment of outcomes may result in statistically significant change but this may not make a significant difference socially.
    - Quality of life
Positive Behavior Support

ABA versus Positive Behavior Support (PBS)

- Like ABA, Positive Behavior Support (PBS) utilizes strategies including functional behavior assessment (FBA) and positive reinforcement or alternative behaviors to replace the problem behavior.
- The focus of PBS is on remediation of *environmental factors* as well as problematic behavioral patterns through examination of antecedents and consequences.
Positive Behavior Support (PBS) cont.

- **Additional components of PBS**
  - Focus on skill-building
  - Sustainable interventions in real-life and throughout the lifespan
  - Collaboration with individuals in the child’s life (e.g., family, teachers, friends)
  - Improved quality of life
  - Ongoing intervention when problem behaviors are not present

Dunlap, 2004
Devereux PBS Model

D-PBIS:
A Multi-tiered Ecological-Behavioral Treatment Model

~5% of Clients

~15% of Clients

~80% of Clients

**INDICATED INDIVIDUAL SUPPORT**
- Comprehensive FBA with BSP
- Trauma-focused CBT
- One-to-one

**TARGETED-GROUP SUPPORT**
- Informal (brief) FBA with BSP
- Check-in/Check-out, Mentoring
- Targeted skills training (examples):
  - Aggression Replacement Training (ART) (Glick & Gibbs, 2010)
  - Coping with Depression in Adolescence (CWDA) (Clarke et al., 1995)
  - Life Skills Training (LST) (Botvin et al., 1995)

**UNIVERSAL SUPPORT (FOR ALL)**
- Clear expectations
- Procedures for teaching expectations
- Procedures for encouraging expectations with high rates of praise
- Procedures for discouraging infractions
- Individual, group, family therapy
  - Cognitive Behavior Therapy (CBT):
    - Problem-solving skills training (PSST) (Kazdin, 2010)
  - Parent management training (PMT) (Kazdin, 2008)
- Group contingencies
- Effective academic instruction (school)
- Data-based decision-making
Environmental Variables: Use of Reinforcement

- Reinforcement
  - A stimulus that increases the probability of recurring behavior
  - **Positive**
    - Method of increasing a target response by introducing a consequence
  - **Negative**
    - Method of increasing a target response by eliminating a consequence
- Categories of reinforcement
  - Food/drink, sensory, activities/toys, social
- The client should have a choice of the reinforcement
  - For example: Prior to use, client *chooses* reinforcement from a visual menu
- Reinforcement should be delivered only when earned and based on successful completion of the desired response.
Positive Reinforcement

- http://www.youtube.com/watch?v=JA96Fba-WHk
Environmental Variables: Use of Visual Aids/Strategies

- Incorporate the use of visual mediation strategies because:
  - Children and adolescents with ASD are usually more visual than verbal
  - Visuals serve as reminders of daily routines
  - Makes daily routines more predictable
  - Help the client clarify expectations and relieve stress of not knowing what comes next
Types of Visual Mediation Strategies

- **Visual schedule**
  - Visual checklist of daily tasks, visual daily schedule, calendar of the week or month with special events marked
  - Provide clients with information about sequence of activities, help teach skills and routines, incorporate choices, and facilitate independence

- **Visual mediation used with reinforcement**
  - Helps the client know what they are working for
  - Helps the client know what and how much of a task needs to be completed before they can earn a reinforcer
  - Helps the client keep track of their progress toward earning reinforcements
Visual Daily Schedule
Visual Morning Routine Schedule
Environmental Variables: Prepare for Changes in Events

- Incorporate changes into the visual schedule
- Tell the client about the changes
- Remind the client of the changes before they happen
  - Example: On Tuesday, Anna will walk to the cafeteria to see a talent show at 1:00. She will not be eating in the cafeteria as per her usual routine.
    - Actions:
      - Incorporate this change into the visual schedules for the day and month and talk about the change with Anna (e.g., What will Anna need to do differently on that day? Will the schedule go back to normal the next day?)
      - Remind Anna of the change
        - The amount and depth (e.g., discussion of the change) of the reminder is dependent on the client’s individual needs
        - Reminders might be given early in the day and then immediately prior to the walk to the cafeteria

- Ongoing communication is critical
Other Critical Environmental Factors

- Consistency
- Predictability
- Structure
- Well established and communicated tasks and routines
  - Example: What is the routine that will be followed for morning hygiene?
Skill Building

- Various skills are taught through:
  - Individualized programs
  - Social skills training is taught through small group with prosocial peer involvement
  - Apps: Social Skill Builder; AutismXpress; Livingsafely; Emotions (Alligator App)
  - Continued practice and implementation provided day-to-day under direction of staff
Skill Building

- Stop and Think Social Skills Program (early to middle elementary level)
  - Listening
  - Following Directions
  - Asking for Help
  - Ignoring Distractions
  - Dealing with Teasing
  - Contributing to Discussions/Answering Classroom Questions
  - How to Interrupt
  - Dealing with Losing
  - Apologizing
  - Accepting Consequences
Skill Building

- Skillstreaming the Adolescent (middle school level)
  - Beginning Social Skills
    - Examples: listening, starting a conversation
  - Advanced Social Skills
    - Examples: joining in, apologizing
  - Skills for Dealing with Feelings
    - Examples: knowing your feelings, expressing your feelings
  - Skill Alternatives to Aggression
    - Examples: asking permission, negotiating
  - Skills for Dealing with Stress
    - Examples: making a complaint, dealing with being left out
  - Planning Skills
    - Examples: setting a goal, concentrating on a task
Skill Building

- Communication skills:
  - Learning to listen
  - Developing oral comprehension
  - Developing oral expression
  - Developing conversation skills
Social Stories

- I Am Mad Plus What To Do
Skill Building

- **Teach Skills in their Natural Settings**
  - Example: teach table manners in the cafeteria; teach joining-in on the swing-set outside on the playground

- **Maintain a high degree of structure**
  - Many children diagnosed with autism have difficulty with what to do in their down time, so it is important to make their daily routines as predictable as possible.
Sensory Integration

- When working with children who have been diagnosed with autism, it is important to keep in mind any sensitivities to sight, hearing, taste, and smell.
- Consider the environment and to the extent possible, prepare the child for changes in advance.
- Manipulate the environment.
A sensory treatment approach may assist children with stress reduction, relaxation, emotion regulation, cognition, symptoms of mental illness, and restraint reduction (Moore, 2010).

Sensory treatments available for all clients include:
- Sensory room
- Sensory bags
- Sensory carts
Sensory Items

- Weighted stuffed animal
- Weighted blanket
Sensory Room
Sensory Bags
Sensory Cart
Staff Training

- Care providers (e.g., direct care staff, therapist, teachers) must work together – consistent implementation of the intervention strategies is imperative!
- Education of providers during weekly staff meetings
- For training for therapists and direct care staff, contact your local education center (e.g., Region 4 – Houston Regional Education Center)
Staff Training

- Skills checks
- Give staff opportunity to provide input into programs
- Supervisors and staff must have clear understanding of roles
Family/Agency Collaboration

- Family/casework and staff partnerships are critical
- Ongoing communication starts before admission
- Involvement of caseworkers, CASA workers, attorney ad litem, families
- Provide parents/involved individuals with a greater understanding of child’s diagnosis, the impact on the family unit, and methods for seeking help and treatment
- Quality of life for the immediate family is shown to improve through parent training initiatives
Advocacy

- Our role as advocates
- autismspeaks.org
Helpful Resources


(Contents: How to Conduct Assessment, How to Teach Skills, How to Reduce Problem Behavior)