Learning Developmental-Behavioral Pediatrics in Residency Training

- DBP problems are common in the general pediatric setting (25-30% of all complaints).
- DBP training is disproportionately limited during residency.
- ACGME mandates a 1-month DBP rotation for all pediatric residency training programs in 1997.
- Pediatricians' comfort level with DBP problems unchanged (1995 v. 2001)

(Boreman et al., 2007)

Comfort Level with Common DBP Problems

<table>
<thead>
<tr>
<th>Somewhat Comfortable or Better</th>
<th>Less Than Comfortable</th>
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| Normal Development             | Behavior Problems
| 1.1                           | 2.0                   |
| Tourette/Asperger              | Child at Risk         |
| 1.4                           | 2.1                   |
| ADHD                          | Childhood Bullying    |
| 1.7                           | 2.1                   |
| Down Syndrome                 | Mental Retardation    |
| 1.7                           | 2.1                   |
| Language Delay                | Club Foot/Palm        |
| 1.9                           | 2.2                   |
| Vision/Motor Problems         | International Adoption|
| 1.9                           | 2.2                   |
| Foster Care Issues            | Autism                |
| 1.9                           | 2.2                   |
| Motor Delay                   | Sleep Problems        |
| 1.9                           | 2.2                   |
| ADHD                           | Depression/Suicide    |
| 2.0                           | 2.3                   |
| Hypertonic Fever              | Hypertonic Infarct    |
| 2.3                           | 2.3                   |
| Social/Emotional Delay        | Learning Disabilities |
| 2.4                           | 2.4                   |
| School Rejection              | Attentional Deficit   |
| 2.4                           | 2.0                   |
| Cognitive/Behavioral Disorders| Conduct Disorder      |
| 3.1                           | 3.1                   |

(Boreman et al., 2007)

The CDC AUTISM CASE TRAINING CURRICULUM

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Developmental Disabilities: Update for Health Professionals
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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Timeline

In Summary

• 7 cases
• Written by 23 authors
• Reviewed by 17 expert developmental-behavioral pediatricians
• Featuring:
  – 33 handouts
  – 27 videos

Curriculum Modules

1. Early Warning Signs of Autism
2. Screening for Autism
3. Communicating Concerns: Screening and Diagnosis Results
4. Making an Autism Diagnosis
5. Early Intervention and Education
6. Treatments for Autism
7. Autism-Specific Anticipatory Guidance

At a Glance
Facilitator Guide

- Designed for in-class, resident-driven learning
- Facilitator Kit includes:
  - Facilitator’s guide
  - Case narratives
  - Discussion questions
  - Tips to engage learners
  - Handouts and post-learning exercises
  - PowerPoint slides

Guide Format

### Printed
1. Upfront instruction on using the curriculum
2. Facilitator’s guides

### Compact Disc
1. Full curriculum
2. Handouts
   - PowerPoint presentations
   - Video Library

Case Narrative

Kull is an overweight 8-year-old boy who was diagnosed with autism and borderline intellectual functioning at the age of 5 years. He presented with stereotyped rocking and eye-watching. He spoke in simple sentences, but never initiated or responded to social contact. He showed interest in the physical environment, with repetitive actions such as rocking and eye-watching. He sat still and followed simple commands. He had difficulty understanding reciprocal language and showed little interest in nonverbal communication. His mother noticed that he was not playing with other children, that he refused to make eye contact, and that he was often alone. He had a history of self-injurious behavior, such as biting and pulling his hair. His mother noted that he was often sad, that he did not want to go to school, and that he was often angry. He had a history of self-injurious behavior, such as biting and pulling his hair. His mother noticed that he was often sad, that he did not want to go to school, and that he was often angry.

Discussion Questions

**Case Study Part I: Discussion Question**

*After reading the case, ask participants, “What stands out to you about the mother’s concerns?”*

Designed to spur open-ended discussion based on learners existing knowledge
Potential Prompts

Case Study Part I: Potential Prompts
1.1 What are some strengths of this child and family?
1.2 How would you respond to Kofi’s mother?
1.3 What further information would you like following the mother’s disclosure?
1.4 How would you prioritize this mother’s concerns and questions?

Supporting Information for Potential Prompts

1.1. What are some strengths of this child and family?

It is always important to explore the strengths of a child with an autism spectrum disorder or developmental delays. Parents and clinicians may become so focused on the deficits, and in some cases the behavioral issues that a child is having, that they aren’t able to notice what the child does well. By asking a family about what a child is good at, and what their positive traits are, one is able to frame recommendations for intervention and treatment in the context of these strengths. In addition, asking about what a child likes can be used when discussing next steps. Finally, in addition to exploring the strengths of the child, it is helpful to think about the strengths of the family and how these can be used when discussing options and next steps for treatment. If parents are unable to offer strengths and positive attributes of the child, it is important to acknowledge how difficult and stressful things seem for them at this time. It is always helpful for clinicians to take the time to note changes and improvements in functioning and positive features of the child and narrate these observations to parents.

* The child is complying with urinating on the toilet when prompted.

Facilitator Guide Icons

• POST-IT NOTE - Gives tips and clarification
• CALL-OUT - Gives step-by-step teaching instructions
• :30 – Indicates a handout, question, or video that could be included if only 30 minutes to teach

Supporting Information for Potential Prompts

I. Hallmark Dev. Milestones

• PAPER - Indicates when a handout could be introduced
• SLIDE - Directs the optional slide presentation order and pace
• FILMSTRIP – Indicates a slide with a video

Learn the Signs. Act Early.
www.cdc.gov/actearly
Sample Case from Facilitator Guide

Preparing to Teach a Case

- Review the case descriptions
- Think about learners/audience
- Identify the case and key materials
- Read through the case Facilitator’s Guide
- Prepare slides
- Make copies of handouts and Learner Worksheet to distribute

Factors to Consider

- Knowledge level of learners
- Available time
- Your familiarity with the subject

Factors to Consider

- Familiarity/comfort with case-based teaching
- Time required to prepare
  - 15 to 30 minute/case
- Who is the teacher?
  - Trainees as teachers can be an effective method of learning

“To teach is to learn twice”
Cases are Highly Customizable

- Select and prepare the teaching tools to use
  - Handouts: select and make copies
  - PowerPoint: use template slides as stand alone or incorporate with other slides.
  - Video: review videos, decide if possible to use (confirm equipment)
- It is not possible to use all the materials in any case
- Teaching typical development is built into the curriculum

Facilitating Case Discussion

- Use open-ended questions to stimulate learner thinking and participation
- Listen actively, integrate information
- Wait for a response!!
- Guide learners to explore the case
- Facilitate interaction among learners
- Be flexible to meet learner’s needs
- Balance input from all involved

Sample Case

A Curriculum for Many Learners

- Community Physicians
- Faculty
- Fellows
- Medical Students
- Paraprofessionals
- Allied Health Professionals
- Graduate Students
- LEND Trainees
- Family Support Groups
A Curriculum for Many Settings

- Small group discussion
- Large group discussion/Lecture style
- “In the moment” – using pieces of the curriculum as teaching pearls
  - e.g. Showing video clip of ABA therapy when describing it to residents during clinic.

Next Steps

- CDs available soon (sign up today!)
- Creation of CME self-paced online version available this summer
- View the curriculum at www.cdc.gov/AutismCaseTraining
Outcomes

- Feedback instrument in process
- Plan to get feedback from all people who receive a CD
- Will also measure how many people are using, where, how often, etc.
- Revision process scheduled at the end of 2012
- Impact evaluation led by Carol Weitzman at Yale. Preliminary pre/post test showed the curriculum is effective in achieving the learning objectives