Autism Case Training: Web-based Continuing Education Course

October 24, 2012
Webinar Overview

Introduction

Walter Jenner, MS, CAS: Act Early Ambassador, Education and Outreach Officer for the South Carolina Autism and Developmental Monitoring (ADDM) Program, Medical University of South Carolina, Division of Genetics and Developmental Pediatrics

Presentation

Georgina Peacock, MD, MPH: Medical Officer, DBP, National Center on Birth Defects and Developmental Disabilities/Centers for Disease Control and Prevention

Q & A

Submit questions throughout the webinar via the ‘questions box’ on your webinar dashboard.

Please take a few minutes to complete our short survey!
Autism Case Training
Web –based Continuing Education Course

Walter Jenner MS CAS
Autism and Developmental Disabilities Monitoring
Act Early Ambassador
Thank you

• Twelve ADDM sites;
  Alabama, Arizona, Arkansas, Colorado, Georgia, Maryland, Missouri, New Jersey, North Carolina, South Carolina, Utah, Wisconsin

• Act Early Ambassadors
  Arizona, Colorado, North Carolina, South Carolina, Utah and Wisconsin and others

• Cathy Rice, Tory Christensen, and Cheryl Rhodes

• Act Early Summit Team Leaders/AMCHP Grantees/LEND Coordinators
Prevalence of ASD
Concerns Over Increases of Autism...

- **Low Incidence Disorder?**
  - Past estimates of 4-5 per 10,000 children with autism

- **Service Provider Data - Numbers**

- **Epidemiologic Data - Prevalence Studies**

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**Quarterly Trends in Number of Persons with Autism Added to the System (1994-2004)**

- Fourth Qtr
- Third Qtr
- Second Qtr
- First Qtr

**Number of Children with Autism Served under IDEA, Part B, 1992-93 to 2000-01, 6-21 years**

- School Year (# states reporting) *includes DC & PR*
Children’s Health Act of 2000

- Congress passed PL 106-310 in October 2000
- Efforts by parents
- A pediatric autism research act
Impact of the Children’s Health Act of 2000

- Creation of *National Center on Birth Defects and Developmental Disabilities (NCBDDDD)*
  - Provides a “home base” for CDC’s existing programs in birth defects, developmental disabilities, and disability and health
  - Increases visibility of health issues of people with disabilities
  - Directed NCBDDDD of CDC to fund state programs to determine the prevalence of autism
Autism and Developmental Disabilities Monitoring Network
Autism and Developmental Disabilities Monitoring (ADDM) Network Sites

Map of the United States showing states with surveillance year 2008 sites. The states highlighted are: Utah, Colorado, Arizona, Missouri, Wisconsin, Pennsylvania, Virginia, South Carolina, and Georgia.

CDC
Surveillance Year 2008 Sites
ADDM Network Methods

- Multisite, multisource, records-based surveillance methodology

  Screening and abstraction of records at multiple data sources in community

  All abstracted evaluations reviewed by trained clinicians to determine ASD case status
## ADDM Network 2000-2008
### Identified Prevalence of ASDs
#### Combining Data from All Sites

<table>
<thead>
<tr>
<th>Surveillance Year</th>
<th>Birth Year</th>
<th>Number of ADDM Sites Reporting</th>
<th>8-year-old Population</th>
<th>Number of children identified with ASDs</th>
<th>Prevalence per 1,000 Children (Range)</th>
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</thead>
<tbody>
<tr>
<td>2000</td>
<td>1992</td>
<td>6</td>
<td>187,761</td>
<td>1,252</td>
<td>6.7 (4.5-9.9)</td>
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<tr>
<td>2002</td>
<td>1994</td>
<td>14</td>
<td>407,578</td>
<td>2,685</td>
<td>6.6 (3.3-10.6)</td>
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<td>2004</td>
<td>1996</td>
<td>8</td>
<td>172,335</td>
<td>1,376</td>
<td>8.0 (4.6-9.8)</td>
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<tr>
<td>2006</td>
<td>1998</td>
<td>11</td>
<td>308,038</td>
<td>2,757</td>
<td>9.0 (4.2-12.1)</td>
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<tr>
<td>2008</td>
<td>2000</td>
<td>14</td>
<td>337,093</td>
<td>3,820</td>
<td>11.3 (4.8-21.2)</td>
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</table>
ADDM Network ASD Prevalence Reports

2007: First reports in MMWR SS representing 8 year olds born in 2000 & 2002

1 in 150 8-year-old children in these communities identified with ASD

• 2009: Second reports in MMWR SS representing 8 year olds born in 2004 & 2006 surveillance years

1 in 110 8-year-old children in these communities identified with ASD

– Autism prevalence increased 57% between 2002 and 2006
Autism Prevalence

• March 30 2012

• **1 in 88** children have and ASD

• Boys 4-5 times more prevalent

  • **1 in 54 boys**
78% increase over the previous 5 years
Other research suggests that the true prevalence of Autism is still higher than our ADDM numbers.

Our ADDM estimate is based on a review of records, chart reviews.

A recent study in South Korea by a Yale University research team using direct assessment found

1 in 38 children had an ASD.
South Carolina Children's Educational Surveillance Study

- **$825,000 grant**
  - awarded by *Autism Speaks* in January 2012

- This project will evaluate the prevalence of autism spectrum disorders in a tri-county region of South Carolina for children born in 2004 using screening and direct assessment

- **Investigators:**
  - Lydia King, PhD
  - Laura Carpenter, PhD
  - Jane Charles, MD
  - Joyce Nicholas, PhD
  - Catherine Cheely, PhD
  - Walter Jenner, MS
  - Katie Pietris MS
  - Haley Specter BS
  - Amy Wahlquist MS
Returning to the most recent ADDM report......
Earliest Known ASD Diagnosis
Median Age and Proportion by Diagnostic Subtype
ADDM Network, SY 2008

(Combining data from 14 sites)

<table>
<thead>
<tr>
<th>Subtype of Earliest Diagnosis:</th>
<th>Autistic Disorder</th>
<th>ASD/PDD</th>
<th>Asperger Disorder</th>
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<tbody>
<tr>
<td>Distribution of Subtypes:</td>
<td>44%</td>
<td>47%</td>
<td>9%</td>
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<tr>
<td>Median Age of Earliest Diagnosis:</td>
<td>48 Months</td>
<td>53 Months</td>
<td>75 Months</td>
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</table>
In early 2000 the CDC began to develop the Learn the Signs/Act Early Campaign
Autism Case Training (ACT)
A Continuing Education and Facilitated Curriculum

Georgina Peacock, MD, MPH, FAAP
From Vision to Collaboration

CDC and MCHB Developmental-Behavioral Pediatrics

- Yale
- Boston Medical Center
- U of Arkansas
- Children's Hosp of Penn
- Children's Hosp of Boston
- Rhode Island Hospital
- Case Western
- Albert Einstein
- U. Of Oklahoma
- Stanford

Learn the Signs. Act Early. www.cdc.gov/actearly
Autism Case Training Curriculum

- 7 cases
- Written by 23 authors
- Reviewed by 17 expert developmental-behavioral pediatricians
- Endorsed by AAP
- Featuring:
  - 33 handouts
  - 27 videos
Curriculum Modules

Early Identification and Screening
- Early Warning Signs of Autism
- Screening for Autism

Diagnosis
- Communicating Concerns: Screening and Diagnosis Results
- Making an Autism Diagnosis

Caring for Children with ASD
- Early Intervention and Education
- Treatment for ASDs
- Autism-Specific Anticipatory Guidance
# Content At a Glance

<table>
<thead>
<tr>
<th>Section</th>
<th>Autism Screening and Diagnosis</th>
<th>CAM approach</th>
<th>Genetics Family history</th>
<th>Referral</th>
<th>Early Intervention/IFSP</th>
<th>Pre-school/IEP</th>
<th>Family concerns</th>
<th>Medication</th>
<th>Behavior, Sleep, Eating Disorders</th>
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<td>Screening for Autism</td>
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<td>Communicating Abnormal Results</td>
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<tr>
<td>Making an Autism Diagnosis</td>
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<tr>
<td>Early Intervention and Education</td>
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<td>Treatments for Autism</td>
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<td>Anticipatory Guidance</td>
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Available Two Ways

- **Free continuing education for individual learning**
  - Online training course

- **Classroom-based facilitated curriculum for group learning**
  - Online slides, handouts, videos for downloading/printing
Find Them at the Same URL: Online CE

Autism Case Training: A Developmental-Behavioral Pediatrics Curriculum

The Autism Case Training (ACT): A Developmental-Behavioral Pediatrics Curriculum is designed to educate future healthcare providers on fundamental components of identifying, diagnosing, and managing autism spectrum disorders through real-life scenarios.

www.cdc.gov/AutismCaseTraining
Find Them at the Same URL: Classroom

Autism Case Training: A Developmental-Behavioral Pediatrics Curriculum

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In-Class Curriculum Content
Introduction & Directory
• Introduction
  • Welcome, quick look at materials, preparation, using facilitator guides, about cultural competence  (Updated 7/05/2011)
  • Special thanks to our authors and reviewers  (Updated 7/05/2011)
• Curriculum Overview
  • Case Descriptions
Autism Case Training: Early Warning Signs of Autism Spectrum Disorders

Authors:

- Liz Harstad, MD, Children’s Hospital Boston, Harvard Medical School
- Carol Baum, MD, Warren Alpert Medical School of Brown University
- Yvette Yatchmink, MD, PhD, Warren Alpert Medical School of Brown University

Start Course >
Case Study Part I

You are attending a family reunion and during a quiet moment, your cousin Elizabeth takes you aside and asks you what you think about the development of her son, Mark.

She tears up as she tells you how worried she is about him. Mark will be 2 years old next month, and he seems so different from the other children on the playground.

Although he is an affectionate and happy little boy, his behaviors can be so unpredictable. He is very shy and has terrible temper tantrums. It is usually impossible to reason with him.

Small changes in his routine throw Mark off, and Elizabeth is worried that he won’t be able to handle the crowd at this family gathering without causing a scene.

You ask her what her pediatrician thinks.
Continuing Education

Autism Case Training: Early Warning Signs of Autism Spectrum Disorders

A Closer Look

What are some key developmental milestones for ages 6 months to 4 years?

Basic Developmental Milestones: 6 Months

- Respond to own name
- Respond to other people's emotions and often seem happy
- Copy sounds
- Like to play with others, especially parents

All children develop at their own pace, and many reach particular milestones slightly late or early.

*Please be sure to tab through all content.
Identifying

Case Study A: Early Warning Signs of Autism

Early warning signs alert providers to the risk of a possible autism spectrum disorder (ASD). Recognizing these warning signs is necessary in order to know when to screen or further evaluate children for ASDs and how to appropriately counsel families.

Case Study B: Screening for Autism Spectrum Disorders

Early identification of ASDs and referral for specialized treatment greatly improves long-term outcomes for children with ASDs. The American Academy of Pediatrics recommends ongoing developmental surveillance at every visit, developmental screening at 9, 18, and 24 or 30 months, and autism-specific screening at 18 and 24 months.

Continuing Education

This module has been approved for the following:

<table>
<thead>
<tr>
<th>Type</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CME</td>
<td>1.5</td>
</tr>
<tr>
<td>CNE</td>
<td>1.2</td>
</tr>
<tr>
<td>CEU</td>
<td>0.2</td>
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</tbody>
</table>

Following completion of all case studies in a module, please go to www.cdc.gov/TCEDOnline to evaluate the course and receive a certificate of completion. You can also print an ongoing
ACT Facilitated Curriculum

- Designed for in-class, learner-driven learning

- Facilitator Kit includes:
  - Facilitator’s guide
  - Case narratives
  - Handouts
  - PowerPoint presentations
Sample from Facilitator Guide

Early Warning Signs of Autism

Case Study Part I

You are attending a family reunion and during a quiet moment, your cousin Elizabeth takes you aside and asks you what you think about the development of her son, Mark. She tears up as she tells you how worried she is about him. Mark will be 2 years next month, and he seems so different from the other children on the playground. Although he is an affectionate and happy little boy, his behaviors can be so unpredictable. He is very shy and has terrible temper tantrums. It is usually impossible to reason with him. Small changes in his routine throw Mark off, and Elizabeth is worried that he won’t be able to handle the crowd at the family gathering without causing a scene. You ask her what her pediatrician thinks.

Elizabeth tells you that Mark has been seen by his pediatrician, and she has expressed her concerns about his temper tantrums on a few visits. The doctor has told her to “give him some time; he is still young and will likely grow out of this phase.” Mark enjoys going to the doctor’s office because they have a large tropical fish tank, and he has generally been calm in that setting. Mark’s doctors have all been very reassuring, and think he has a bad case of the “terrible twos.”

You have been pre-occupied by your relatives, and you honestly haven’t been paying too much attention to Mark. You know that your cousin is a loving and caring mother. Elizabeth and her husband, Sam, had fertility struggles, and she was thrilled to give birth to Mark after a grueling course of in-vitro fertilization treatments. You know that Mark was born full term without any complications. You heard that he was a baby girl, but that he was otherwise healthy.

Case Study Part I: Discussion Question

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

Case Study Part I: Potential Prompts

1.1 It is evident that Elizabeth is concerned about Mark’s “shy” manner. What are typical social skills that most children obtain by 12 months? By 18 months? By 24 months?

1.2 How can you determine the difference between a child with a shy temperament and a child with an autism spectrum disorder?

1.3 As you begin to ask Elizabeth about her son, what other developmental milestones do you want to consider?

1.4 How could you address Elizabeth’s concern about Mark’s temper tantrums?

1.5 What are the strengths of this child and family?

Autism Case Training: A Developmental-Behavioral Pediatrics Curriculum
Facilitator Guide Icons

**POST-IT NOTE** - Gives tips and clarification

This case does not take place in a clinical setting. This unique setting and the role of the physician in addressing family medical concerns may provide an interesting line of discussion.

**CALL-OUT** - Gives step-by-step teaching instructions

Distribute “Case Study Part II”

**:30** – Indicates a handout, question, or video that could be included if only 30 minutes to teach
Facilitator Guide Icons, cont.

PAPER - Indicates when a handout could be introduced

SLIDE - Directs the optional slide presentation order and pace

FILMSTRIP – Indicates a slide with a video
Discussion Questions

Designed to spur discussion based on learners

Case Study Part I: Discussion Question

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Case Study Part I: Potential Prompts

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1.5 What are the strengths of this child and family?

Follow up with student responses to encourage more discussion:
- What in the case supports that?
- Why do you think that?
- What makes you say that?
Potential Prompts

Case Study Part I: Discussion Question

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- 12 months: point and respond to name
- 18 months: joint attention (expresses an enjoyment in sharing an object or event with another person by looking back and forth between object and caregiver)
- 24 months: imitation, excitement/interest in other children, desire for attention
Online Video Library

Learn the Signs. Act Early.

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- Case Descriptions

www.cdc.gov/AutismCaseTraining
ACT – Online Video Library

Autism Case Training Videos:
A Developmental Behavioral Pediatrics Curriculum

To watch a video please select one from the list below and click on “Watch this Video.” Once you have viewed a video and wish to go back to the playlist, just click on the playlist icon in the video menu bar at the bottom of the player screen.

More Videos from CDC

Introduction

Observation: Boy, Screaming, Sunny

Observation: Difficulty with Transitions

Observation: Drawing and Sorting

Contact Us:

Centers for Disease Control and Prevention
Thank you!

Contact us!
ActEarly@cdc.gov
Contact me!
gpeacock@cdc.gov

For more information please contact Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov  Web: www.cdc.gov

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.
Question & Answer

To ask a question:

Type your question into the ‘question’ box on your Webinar dashboard and the moderator will read it to the presenter.
THANK YOU

Please take a few minutes to complete our survey!