DSM-5: Medical and Educational Perspectives on ASDs

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2013 TASN Webinar
October 23, 2013

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Presenters

Dr. Kathryn Ellerbeck is a developmental pediatrician at the University of Kansas' Center for Child Health and Development (CCHD) in Kansas City, Kansas where she works on interdisciplinary diagnostic teams. Dr. Ellerbeck completed her fellowship in Developmental-Behavioral Pediatrics in 1995, and has been involved in the diagnosis and treatment of autism spectrum disorders for nearly 20 years. She is a member of the American Academy of Pediatrics' Autism Subcommittee, and is currently the President of the Kansas Chapter of the American Academy of Pediatrics.

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Presenters

Dr. Smith is a Licensed Psychologist and Clinical Associate Professor at the University of Kansas Medical Center in the Center for Child Health and Development (CCHD). Dr. Smith earned a doctorate degree in Developmental and Child Psychology from the University of Kansas. She has worked with children with autism spectrum disorders for the past 20 years. Currently, she participates in autism diagnostic evaluations and is also involved in research, teaching and community outreach activities.

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Objectives - The learner will:

1. Be able to discuss the changes in the diagnostic criteria for autism spectrum disorder as outlined in the DSM-5.
2. Discuss some of the concerns and some of the proposed benefits of the changes to the DSM-5.

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Overview

1. Development of the DSM-5..Why?
2. Changes between the DSM-IV-TR and DSM-5
3. Potential impact of the changes on individuals with autism
4. Potential impact of the changes on professionals working with individuals with autism

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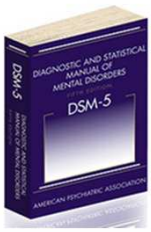

The DSM-5

Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, (DSM-5), American Psychiatric Association, 2013

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DSM-5: Why the Change?

Emerging Research

1999: APA began evaluation of DSM's strengths and weakness

- World Health Organization (WHO), Division of Mental Health
- World Psychiatric Association
- National Institute of Mental Health

2002: published *A Research Agenda for DSM-5*

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And so it began…….

…….The Revision Process

2003-2008: 13 international research planning conferences

- National Institute on Drug Abuse (NIDA)
- National Institute on Alcoholism and Alcohol Abuse (NIAAA)

2006: Chairs for 13 diagnostic work groups

2007: Task force of 28 members

2008: 130 work group members, 400 advisors

2010: Launched website for public comment

2012: Board approved DSM-5

2013: May publication

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DSM-5: A New Vision

Goals:

- Harmonization between DSM and ICD classification systems
- Diagnostic Flexibility and Comorbidity
- Continued revisions and modifications are anticipated

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Key Changes to the Diagnosis of ASD

1. Category of Pervasive Developmental Disorders changed to Autism Spectrum Disorders
2. Reorganization of core symptom groups
3. Elimination of Autism Subtypes
4. Use of specifies for symptom severity and co-occurring conditions

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DSM-IV-TR versus DSM-5

Table 1 – Proposed changes to the diagnostic criteria for autism spectrum disorder

DSM-IV-TR	DSM-V
Rett disorder or syndrome was in the spectrum	Rett disorder is eliminated because it is considered a genetic disease.
Named disorders: •Pervasive developmental disorder-not otherwise specified •Asperger disorder •Childhood disintegrative disorder •Autistic disorder	These disorders will be consolidated within the category of autism spectrum disorder.
Unusual sensory behaviors were not part of the criteria.	Unusual sensory behaviors will be added to the criteria.
3 Symptom categories: •Impairment in social interaction •Impairment in communication •Repetitive and restrictive behaviors	2 Symptom categories, with more criteria per category: •Deficits in social communication and social interaction •Repetitive and restrictive behaviors

DSM-IV-TR, Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition, Text Revision); *DSM-V, Diagnostic and Statistical Manual of Mental Disorders* (Fifth Edition).

www.PediatricsConsultant360.com. January, 2013

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Autism Spectrum Disorders in DSM-5

Must meet criteria A, B, C, D, & E

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifest by the following, currently or by history (examples illustrative, not exhaustive):

1. Deficits in social-emotional reciprocity
2. Deficits in nonverbal communicative behaviors used for social interaction
3. Deficits in developing, maintaining, and understanding relationships

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A. Deficits in social communication/interaction

1. *Deficits in social-emotional reciprocity*; ranging from abnormal social approach and failure of normal back and forth conversation through reduced sharing of interests, emotions, and affect and response to total lack of initiation of social interaction.
2. *Deficits in nonverbal communicative behaviors used for social interaction;* ranging from poorly integrated- verbal and nonverbal communication, through abnormalities in eye contact and body-language, or deficits in understanding and use of nonverbal communication, to total lack of facial expression or gestures.
3. *Deficits in developing and maintaining relationships, appropriate to developmental level (beyond those with caregivers);* ranging from difficulties adjusting behavior to suit different social contexts through difficulties in sharing imaginative play and in making friends to an apparent absence of interest in people.

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Autism Spectrum Disorder in DSM-5

B. Restricted, repetitive patterns of behavior, interests, or activities as manifested by at least two of the following, currently or by history (examples illustrative, not exhaustive):

1. Stereotyped or repetitive motor movements, use of objects, or speech
2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior
3. Highly restricted, fixated interests that are abnormal in intensity or focus
4. Hyper-or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment

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B. Restricted, repetitive patterns of behavior

Restricted, repetitive patterns of behavior, interests, or activities as manifested by at least two of the following:

1. *Stereotyped or repetitive speech, motor movements, or use of objects;* (such as simple motor stereotypies, echolalia, repetitive use of objects, or idiosyncratic phrases).
2. *Excessive adherence to routines, ritualized patterns of verbal or nonverbal behavior, or excessive resistance to change;* (such as motoric rituals, insistence on same route or food, repetitive questioning or extreme distress at small changes).
3. *Highly restricted, fixated interests that are abnormal in intensity or focus;* (such as strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests).
4. *Hyper-or hypo-reactivity to sensory input or unusual interest in sensory aspects of environment;* (such as apparent indifference to pain/heat/cold, adverse response to specific sounds or textures, excessive smelling or touching of objects, fascination with lights or spinning objects).

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Autism Spectrum Disorder in DSM-5

C. Symptoms must be present in early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life)

D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning

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Autism Spectrum Disorder in DSM-5

E. These disturbances not better explained by intellectual disability or global developmental delays. Intellectual disabilities and autism spectrum disorder frequently co-occur, to make comorbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.

Autism Spectrum Disorder in DSM-5

Specify:

- With or without loss of established skills
- Age of first concern
- *With or without intellectual impairment*
  (Advise verbal and nonverbal due to unevenness)
- With or without structural language impairment
- Associated with medical/genetic/environmental
- Associated with developmental/mental/behavioral disorder
- Current severity

Dimensional Ratings for DSM V ASD	Social Communication	Fixated Interests and Repetitive Behaviors
Requires very substantial support	Severe deficits in verbal and nonverbal. Very limited initiation of social interactions and minimal response to overtures.	Inflexibility of behavior, extreme difficulty coping with change, RRBs that markedly interfere in all spheres. Great Distress
Requires substantial support	Marked deficits with limited initiations and reduced or atypical responses. Impairment apparent even with supports in place.	Inflexible in behavior, difficulty coping with change, frequent RRBs and interfere in a variety of contexts. Some distress.
Requires support	With or without supports, noticeable impairments. Difficulty initiating social interactions and clear atypical responses. Maybe decrease social interest.	Behavioral inflexibility causes significant interference in one or more contexts. Trouble switching. Problems organizing and planning.

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Autism Spectrum Disorders:
DSM-5 Notes on Specifiers

- Use severity specifiers to describe succinctly current symptoms
- *Recognition that severity may vary by context and fluctuate over time.*
- Severity of social communication difficulties and restricted, repetitive behaviors should be separately rated.
- *Descriptive severity ratings should not be used to determine eligibility for services; these need to be determined at an individual level.*

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Autism Spectrum Disorders:
DSM-5 Notes on Associated Features

- Often see uneven cognitive profile
- Gap between intellectual and adaptive functional skills often large
- Motor deficits often present
- Challenging behaviors more common than in other disorders, including ID
- Adolescents and adults prone to anxiety and depression
- Some individuals develop catatonic-like motor behavior (risk period for comorbid catatonia greatest in adolescence)

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Autism Spectrum Disorders:
Prevalence

- Reported frequencies for ASD across U.S. and non-U.S. countries approximately 1% (or even higher 1/88).

- Unclear if higher rates due to: expansion of diagnostic criteria in the DSM-IV-to include subthreshold cases, increased awareness, differences in study methodology or true increase in frequency.

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Autism Spectrum Disorders:
Development and Course

- Symptoms typically recognized in 2nd year of life – but can be earlier or later.
- Some children experience developmental plateau or regression – rare in other disorders and a useful "red flag" for ASD.
- Rarer are loses beyond social communication or those occurring after second birthday.
- In preschoolers, some behavioral rigidity normal; somewhat difficult to differentiate; do based on type, frequency, and intensity.
- Symptoms often most marked in early childhood

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Autism Spectrum Disorders:
Risk/Prognostic Factors

- Best established prognostic factors of individual outcomes are presence or absence of associated ID and language impairment (functional language by age 5 a favorable prognostic sign)
- Additional mental health problems also associated with a poorer outcome.
- Epilepsy is associated with greater intellectual disability and lower verbal ability
- Environmental risk factors – nonspecific (advanced paternal age, LBW, prenatal exposure to valproate,

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Differential Diagnosis of ASDs

Challenge: Teasing apart symptoms of ASD from common mental health conditions

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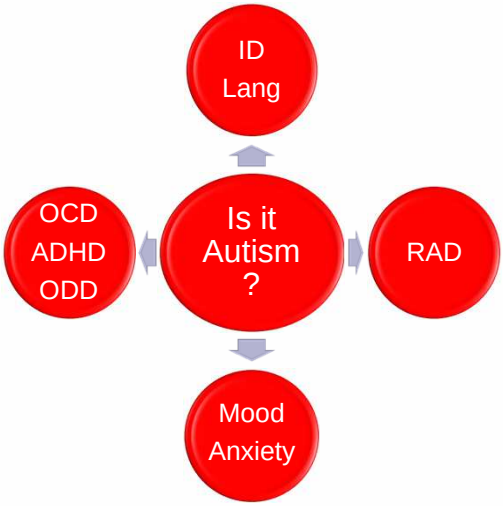
Is it Autism?



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Is it *just* ASD?

- *Symptom Overlap:* Behaviors are part of the core impairment in ASD
- *Co-occurring Conditions:* The existence of two or more conditions in the same individual at the same time

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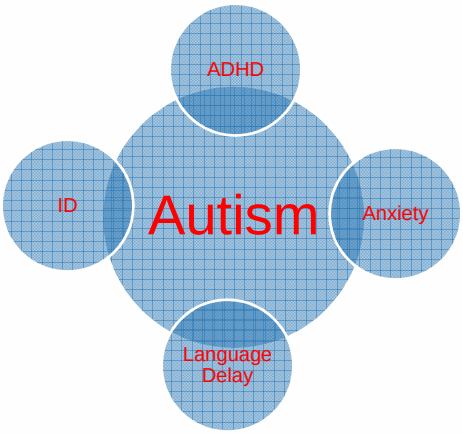
Symptom Overlap



Diagnostic threshold ?

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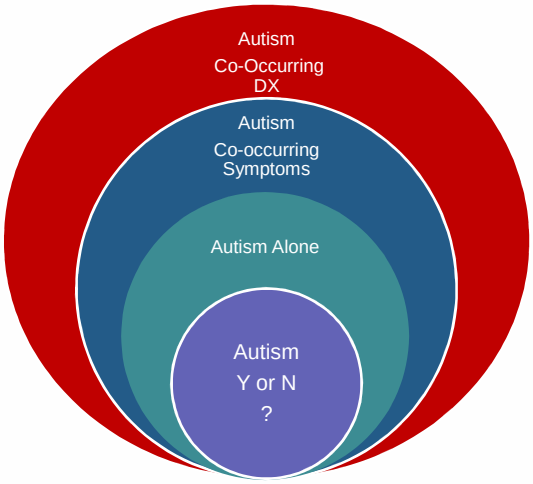
Diagnostic Decision-Making



Co-Occurring Diagnosis? Why Bother?

- Understanding the individual and their behaviors
- Directions for treatment and learning
- Behavioral, medical and pharmacological implications
- Access to services
- Families moving forward

Autism Spectrum Disorders:
Developmental and Mental Health Comorbidity

- ASD frequently associated with intellectual impairment
- ASD frequently associated with structural language disorder
- 70% of individuals with ASD have one comorbid mental disorder
- 40% have at least two comorbid mental disorders
- When criteria for other mental health disorders are met (e.g. ADHD, anxiety, depressive disorders) – both ASD and mental health disorders should be diagnosed.

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Autism Spectrum Disorders:
Medical Comorbidity

- *Associated:* Medical conditions commonly associated with ASD should be recorded under the "associated with a known medical/genetic or environmental/acquired condition" specifier.
- *Complicating:* Common medical conditions include: epilepsy, sleep problems, and constipation as well as avoidant-restrictive food intake disorder.

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Implications for Educators

What will change for you?

Autism is still Autism

Core areas of development that are impacted are the same, symptoms are just re-organized.

Continue to treat the symptoms that interfere with functioning

More information provided:

- co-occurring symptoms or diagnoses
- level of support needed

Common Questions

- If a student was diagnosed using the DSM-IV-TR do they need a re-evaluation?
- If a student has a diagnoses of one of the ASD subtypes that are no longer identified, will they lose their services?
- Other questions?

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Potential Roles for Educators

1. Screening … "play a critical role in screening and early detection of individuals at risk for ASD…"
2. Diagnosis… "as part of a diagnostic team or in other multidisciplinary collaborations…."
3. Assessment and Intervention … "in those aspects of development that are critical to the achievement of social communication competence…"

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Case Clip

Medical History

- Medically healthy 10 yr. old boy
- Current Meds: Adderall
- No family history of mental illness, DD or ASD

Developmental History

- Difficult temperament as a baby
- Dx speech delay at age 3
- No regression of skills
- Dx ADHD at 6 yrs.
- Average cognitive skills and academics
- **Suspected** autism at age 4-6 years

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Case Clip

Parent concerns:

- Poor eye contact
- Difficulty with peer relationships at home and at school
- Naïve
- What is the correct diagnosis for our son?

"Smart, happy and humble child who is good at math, science and history"

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DSM-5 criteria for Case Clip

- Does he meet the criteria in the area of social communication?
- Restricted, repetitive behaviors?
- Any co-occurring conditions?
- Levels of support needed?

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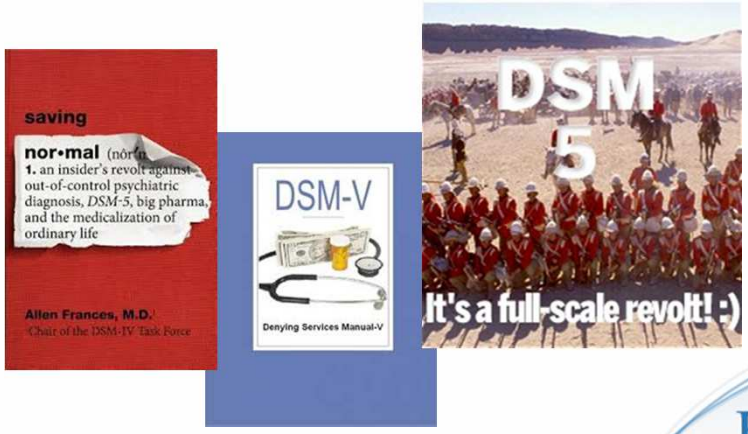
IN THE NEWS:

Response to the DSM5?



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Thoughts on potential impacts..

PROS

1. Modification of requirement for onset of symptoms
2. No more exclusions for co-occurring conditions
3. Use of specifiers to identify ASD subtypes
4. More emphasis on understanding developmental level

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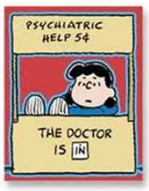
Thoughts on potential impacts..



CONS

1. **Study (Shulman): only 35% of young children meeting DSM-IV criteria for ASD would meet DSM-5 criteria.**
2. **Difficulty meeting all social/communication criteria**
3. **Wording in DSM-5 regarding ASD**
4. Does emphasis on cultural differences and variations increase risk for missing young children
5. Will there be services for the new category of children with social communication disorder?

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Autism in DSM-5: progress and challenges

Fred Volkmar, MD: Primary author of the DSM-IV autism and pervasive developmental disorders section

Cons:

1. DSM-5 will make it difficult for ongoing longitudinal research studies to compare like with like.
2. There is some evidence that some high-functioning individuals will no longer meet diagnostic criteria for ASD and will become ineligible for services and treatment
3. Removal of the subgroup of Asperger syndrome is too extreme a move and could have been handled differently.
4. We do not know what the broader impact of the DSM-5 changes will be.

Ref: Volkmar and Reichow *Molecular Autism* 2013, 4:13.

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DSM-5 and ASDs: an opportunity

Catherine Lord, PhD. Leader in autism and autism phenotype. Involved with the Neurodevelopmental Disorders Workgroup of DSM-5.

Pros:

1. DSM-5 has merged 5 subgroups with low inter-rater reliability into a single group with high inter-rater reliability
2. DSM-5 has reduced the autism spectrum from three factors down to two, in recognition that social and communication skills are inextricably intertwined
3. DSM-5 has introduced a severity scale in recognition of the diversity of the spectrum.
4. Approach to sample characterization will help researchers to increase the homogeneity of their research samples to help understand biological mechanisms, clinical outcomes, and treatment responses.

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Summary

" We simply cannot predict how changing diagnostic criteria impact the real world"

Ref: Buxbaum and Baron-Cohen *Molecular Autism* 2013, 4:11.

ASDs in a Nut Shell

- Symptoms of autism are the same, just reorganized + sensory differences added.
- Specifiers and levels of support added.
- Previous diagnosis of subtypes of ASDs are still recognized and do not require re-evaluation.

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