Mastering DSM-5: ADHD

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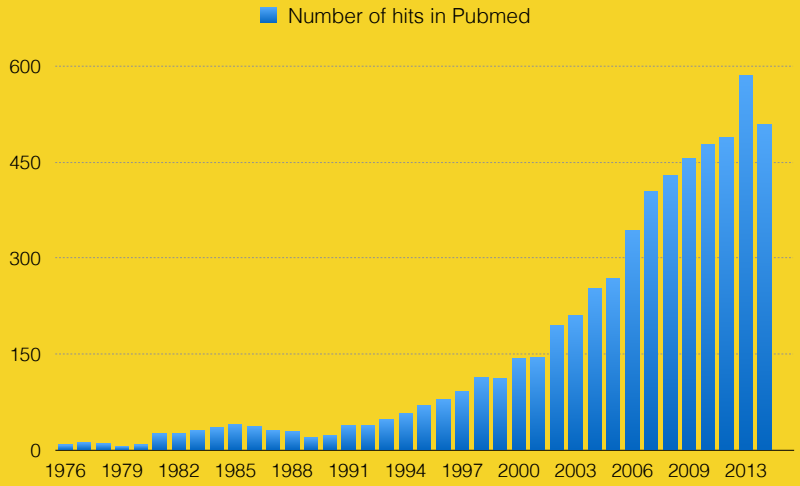
Introduction

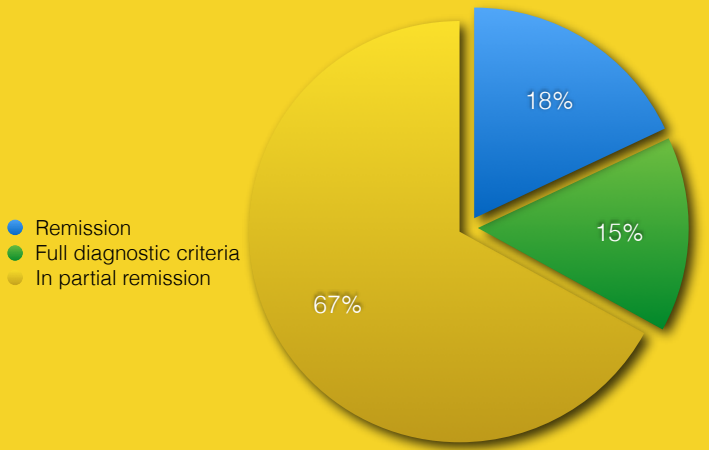
- 1798' - Dr. Alexander first described "Mental restlessness", which most closely matches DSM-IV-TR Diagnosis of ADHD
- 1976' - 2 reports of ADHD symptoms and psychosocial impairments in adults with past history of childhood ADHD

Introduction



Introduction

Meta-analysis of all published follow-up studies by Faraone (2006)



• Jan B.,Cornelis K., Philip A.. ADHD in adults: Characterization, Diagnosis, and Treatment. Cambridge University Press. 2011.
• Russell B., Kevin M., Mariellen F. ADHD in adults: What the science says. The Guildford Press. 2008.

Introduction

- Adult ADHD survey WHO
  10 Countries
  11,422 Adults
  18-44 yrs
- “Prevalence 3.4 %”

Introduction

$19.5 billion lost annually

ADHD Diagnosis

Threshold symptoms

- DSM-IV-TR
  - Six (or more) of the following symptoms of inattention and/or hyperactive/impulsive have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:
- DSM-5
  - Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:
  - Note: The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required.

Supportive evidences

- 6 symptoms VS 4 symptoms
  - Kooji et al. (2005) → 4 symptoms enough to identify ADHD people with significant impairments
  - Solanto et al. (2011)
    → 88 patients presenting clinical diagnosis of ADHD
    → 52% met cutoff of 6 symptoms
    → 81% met cutoff of 4 symptoms

• Kooji JJ, Buitelaar JK, et al. (2005) Internal and external validity of attentiondeficit hyperactivity disorder in a population-based sample of adults. Psychol Med 35:817–827
• Solanto MV, Marks DJ, Wasserstein J, Mitchell KJ (2011) Diagnosis of ADHD in adults: what Is the appropriate DSM-5 symptom threshold for hyperactivity-impulsivity? J Atten Disord.

Symptoms criterias

- DSM-IV-TR
- b. Often has difficulty sustaining attention in tasks or play activities
- DSM-5
- b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).

Symptoms criterias

- DSM-IV-TR
- f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)
- DSM-5
- f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).

Supportive evidences

- Change is based on a recognition of the chronic nature of ADHD and its varying manifestations across the lifespan.

• Volkow ND, Swanson JM. Clinical practice: Adult attention deficit-hyperactivity disorder. N Engl J Med. 2013 Nov 14;369(20):1935-44.

Age at onset

- DSM-IV-TR

  B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7.

- DSM-5

  B. Several inattentive or hyperactive-impulsive symptoms were present prior to age 12.

Supportive evidences

- Extending the age-of-onset criterion to 12
  - not present correlates or risk factors that were significantly different from children who manifested symptoms before age 7
  - negligible increase in ADHD prevalence

• Guilherme P. et al., Implications of Extending the ADHD Age of-Onset Criterion to Age 12: Results from a Prospectively Studied Birth Cohort, JAACAP, VOLUME 49 NUMBER 3 MARCH 2010, 210-216

Exclusion criterias

- DSM-IV-TR
  - E. The symptoms do not occur exclusively during the course of a pervasive developmental disorder, schizophrenia, or other psychotic disorder and are not better accounted for by another mental disorder (e.g., mood disorder, anxiety disorder, dissociative disorder, or a personality disorder).
- DSM-5
  - E. The symptoms do not occur exclusively during the course of schizophrenia or another psychotic disorder and are not better explained by another mental disorder (e.g., mood disorder, anxiety disorder)

Supportive evidences

- Reported increased prevalence of both ADHD ASD.
- 30-50% of individuals with ASD manifest ADHD symptoms
- 2/3 of individuals with ADHD show features of ASD

• Davis,N.O.,and Kollins,S.H.(2012). Treatment for co-occurring attention deficit/hyperactivity disorder and autism spectrum disorder. Neurotherapeutics 9, 518–530.doi:10.1007/s13311-012-0126-9
• Leitner Y. The co-occurrence of autism and attention deficit hyperactivity disorder in children - what do we know? Front Hum Neurosci. 2014; 8:268.

Subtypes

- DSM-IV-TR
  - 314.01 Attention deficit hyperactivity disorder, combined type
  - 314.00 Attention deficit/hyperactivity disorder, predominantly inattentive type
  - 314.01 Attention deficit hyperactivity disorder, predominantly hyperactive-impulsive type
- DSM-5
  - 314.01 (F90.2) Combined presentation
  - 314.00 (F90.0) Predominantly inattentive presentation
  - 314.01 (F90.1) Predominantly hyperactive/impulsive presentation

Self-report/others report

- Past symptoms
  - Retrospective report of childhood ADHD, which may not be accurate.
- Current symptoms
  - Self-report can also be problematic, since it is less predictive than reports from others
  - Problems with employment, domestic life, and social activities

• Barkley RA et al.. The persistence of attentiondeficit/hyperactivity disorder into young adulthood as a function of reporting source and definition of disorder. J Abnorm Psychol 2002;111:279-89.
• Sibley MH, Pelham WE Jr, Molina BS, et al. Diagnosing ADHD in adolescence. J Consult Clin Psychol 2012;80:139-50.

Comorbid

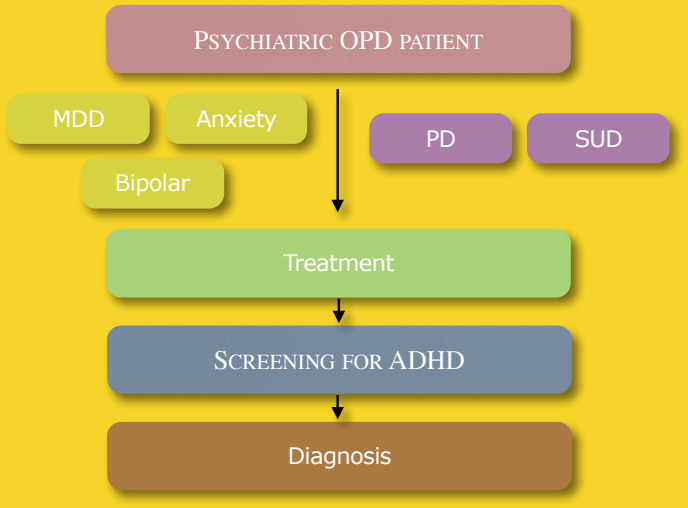
CHILDHOOD

- LD → 46% (5% in other children)
- ODD → 54-84%
- CD → 27% (2%)
- Anxiety disorder → 18% (2%)
- Smoking & other SUD → 19%
- MDD → 14% (1%)

ADULTHOOD

- LD → ?
- ODD → 30%
- CD → 20%
- Anxiety disorder → 24-52%
- PD → 7-44% (ASPD 7-17%)
- Alcohol → 21-53%
- Others SUD → 8-32%
- MDD → 16-31%

Clinical implications



Clinical implications

- Developmentally appropriate ADHD symptoms
- 12 years - Decrease recall bias
- Functional impairments
- Information from a friend or family member
- Comorbid psychiatric/physical conditions
- Obtain family history for ADHD

Finally

- Stimulant Medications most effective medications for the treatment of adult ADHD
- Risk of abuse, adverse effect (esp. cardiovascular)
- Nonpharmacologic Treatments

END