MHS Beyond Assessments

ADHD in Adults: Yesterday, Today and Tomorrow

Sam Goldstein, Ph.D.
Assistant Clinical Professor
University of Utah School of Medicine

1

Sam Goldstein Ph.D.

Sam obtained his PhD in school psychology from the University of Utah and is licensed as a psychologist and certified school psychologist in the state of Utah. He is also board certified as a pediatric neuropsychologist and listed in the Council for the National Register of Health Service Providers in psychology. He is a Fellow of the American Psychological Association and the National Academy of Neuropsychology. Sam is an adjunct assistant professor in the Department of Psychiatry at the University of Utah School of Medicine. He has authored, co-edited, or co-authored over 50 clinical and trade publications, three dozen chapters, nearly three dozen peer-reviewed scientific articles, and eight psychological and neuropsychological tests. He is developing a behavioral assessment tool to evaluate disruptive mood dysregulation disorder (DMDD) and is editing a clinical volume about DMDD. Sam is the editor in chief of the *Journal of Attention Disorders*. Since 1980, he has served as the clinical director of the Neurology, Learning, and Behavior Center in Salt Lake City, Utah.

TEDx
Sam Goldstein, Ph.D.
sam@samgoldstein.com
The Power Of Resilience
https://www.youtube.com/watch?v=isfw8JJ-eWM&feature=youtube_gdata

www.samgoldstein.com
info@samgoldstein.com
@drsamgoldstein
@doctorsamgoldstein
TikTok @CommonSenseScience
TRUTH. @CommonSenseScience

2

Relevant Disclosure

- Editor in Chief, Journal of Attention Disorders
- Co-author of
  - Comprehensive Executive Functioning Inventory- Child and Adult
  - Cognitive Assessment System –2nd Edition
  - Co-author Attention Disorders in Children 1st and 2nd Editions
  - Co-author Handbook of ADHD in Adults
  - Co-Editor Handbook of Executive Functioning
  - Co-Editor Handbook of Intelligence and Achievement Testing
  - Co-author Raising a Self-Disciplined Child

3

3

Goals For Today

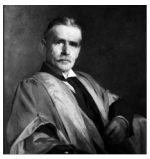
- Explain the continuity, evolution and changes in our understanding of the causes, symptom profiles, diagnostic procedures, comorbidity and treatment of ADHD.
- Provide a method for differential diagnosis of ADHD and other common childhood disorders.
- Explain the complex relationship of ADHD symptoms and neuropsychological abilities related to Executive Functioning and Impairment.
- Review current and future medical, educational and therapeutic treatments for ADHD.
- Gaze fifty years into the future by examining trends in ADHD over the past fifty years.

4

Dedication

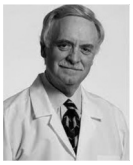






In 1932, Franz Kramer (1878-1967) and Hans Pollnow (1902-1943) published "Über eine hyperkinetische Erkrankung im Kindesalter" ("A hyperkinetic disorder in childhood") which resembled behaviorally today's ADHD. Kramer and Pollnow were medical doctors and worked both as neuropsychiatrists at the Charité University Hospital in Berlin in the 1930s. At that time, as Jews, they had to emigrate. Kramer then worked in the Netherlands where he died in 1967, while Pollnow was finally killed in the Concentration Camp of Mauthausen.





Franz Kramer Hans Pollnow

5

Scientists have long been aware of what is now known as "ADHD." The condition was initially cited by German physician Melchior Weikard in 1775. In his text book, *Der Philosophische Arzt* (The Philosophy of Medicine), he wrote of patients who "are mostly reckless, often copious considering imprudent projects, but they are also most inconstant in execution."

6

In 1798, Scottish physician Alexander Crichton wrote an early treatise on psychological disorders in which he described what he called "mental restlessness."

104 years later, British pediatrician George Still presented a series of lectures on the topic of "abnormal psychical conditions in children" who exhibited aggressive or defiant behavior and were unable to focus their attention for any length of time.

He concluded that the condition was "a defect of moral consciousness which cannot be accounted for by any fault of environment." In the late 1930s, psychologists began treating what was then known as "hyperkinesis" with amphetamines. For decades, it was described as "minimal brain dysfunction" and "hyperkinetic reaction of childhood."

7

When Keith Conners first published his findings, diagnoses of ADHD were rare and treatments were not always effective. Since then, rates of ADHD diagnoses have increased dramatically.

For example, in 1987, just a half a percent of U.S. children between the ages of 6 and 17 were being medicated for ADHD. By 2014, the figure had grown to 7.5 percent.

In a presentation before a conference of ADHD specialists in December of 2013, Conners raised serious doubts about the "alarming increase in the rates of diagnosis."

8

It is no coincidence that the skyrocketing rates of ADHD diagnoses have been happening at the same time that Big Pharma has been engaged in aggressive marketing to sell as many amphetamine-based medications as they are allowed to produce. In 2002, annual sales of prescription amphetamines were well under $2 billion. In 2015, that figure was nearly $13 billion. Total stimulant use has doubled in the last decade.

It is also estimated that a half a billion dollars is spent on the dark web for stimulants.

9

Consider:

- If you are not depressed an anti-depressant will not make you happy.
- If you are not anxious and axiolytic will not make you calmer.
- If you are not schizophrenic an anti-psychotic will not give a better grasp on reality.
- But you can have no complaints about your capacity to pay attention and yet a stimulant will enhance your performance!

10

But if our human ancestors (e.g. Homo Erectus) consumed a plant based product with a stimulant component:

- They slept less.
- They ate less.
- They were less fatigued.
- They moved more.
- And . . . . . .

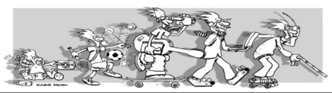
11

. . . they were more likely to survive!

12

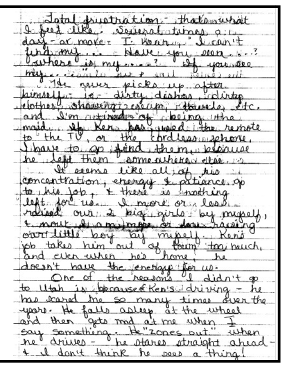
What is Attention Deficit Hyperactivity Disorder (ADHD)?

- ADHD appears to primarily involve a difference in the maturation of the the basal ganglia, cerebellum and the frontal lobes of the brain.
- Co-morbidity or co-occurrence of other developmental, emotional and behavioral conditions with ADHD often complicates our understanding of the core problem.
- The primary symptoms of ADHD (excessive impulsive, inattentive and restless behavior) leads to a nearly infinite number of consequences in every aspect of life.



13

Why must we continue to evolve our view of ADHD?



Total frustration - that's what I feel like. Several times a day - or more - I hear, "I can't find my... Have you seen...? Where is my...? If you see my... [illegible]"

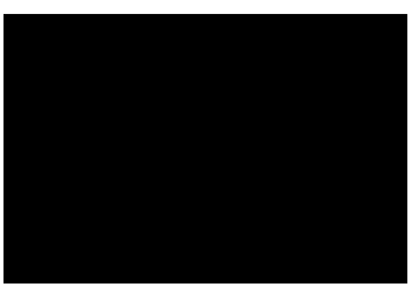
He never picks up after himself - ie - dirty dishes, dirty clothes, shaving cream, towels, etc. and I'm tired of being the maid. If Ken has used the remote to the TV, or the cordless phone, I have to go find them, because he left them somewhere else.

It seems like all of his concentration, energy & patience go to his job, & there is nothing left for us. I more or less raised our 2 big girls by myself, & now I am more or less raising our little boy by myself. Ken's job takes him out of town too much, and even when he's home, he doesn't have the energy for us.

One of the reasons I didn't go to Utah is because of Ken's driving - he has scared me so many times over the years. He falls asleep at the wheel and then gets mad at me when I say something. He "zones out" when he drives - he stares straight ahead - & I don't think he sees a thing!

14

In Their Own Words



15

Diagnosis and Treatment of ADHD in the United States: Update by Gender and Race (2008 to 2013)

- Physician office visits including: ADHD diagnosis and pharmacotherapy were measured per 1,000 population and per 1,000 office visits overall, and by demographic group. Logistic regression models controlled for demographics, psychiatric comorbidities, insurance type, and time period.
- Diagnoses of ADHD increased by 36% in adults and 18% in youth, and diagnosis + drug by 29% in female and 10% in male youths. ADHD diagnosis was 77% less likely among Black than White adults but 24% more likely among Black than White youths in 2012-2013.
- Conduct disorder (CD) in youths multiplied odds of diagnosis + drug by 3.31; interaction of Black race x CD by 3.78.

16

Conclusion: Upward trends in ADHD diagnosis and treatment have continued but vary markedly by group. Studies of undertreatment/overtreatment are needed. (J. of Att. Dis. 2020; 24(1) 10-19)

17

Update the Multimodal Treatment of ADHD (MTA): Twenty Years of Lessons

The MTA study has taught us to think long-term about ADHD, in that a treatment that may be effective now will not necessarily be effective in future years into adulthood. Hence the importance of long-term follow-up of people with ADHD and, although the multimodal approach is still the ideal strategy, medication and objectives must be personalized according to each patient's needs at important points in their development. This also highlights the importance of making an early diagnosis and prescribing an effective, personalized treatment plan based on each person's needs and circumstances in order to avoid greater risks in adulthood.

Actas Esp Psiquiatr 2019;47(1):16-22

18

ADHD reflects exaggeration of normal behavior.

19

The symptoms of ADHD lead to a nearly infinite number of consequences

20

Self-regulation

- The ability to inhibit
- The ability to delay
- The ability to separate thought from feeling
- The ability to separate experience from response
- The ability to consider an experience and change perspective
- The ability to consider alternative responses

21

Self-regulation

- The ability to choose a response and act successfully towards a goal
- The ability to change the response when confronted with new data
- The ability to negotiate life automatically
- The ability to track cues

22

Poor self-regulation is synonymous with. . .

Poor self-control

23

Poor self-regulation leads to . . .

Impulsive behavior

24

Poor self-regulation leads to:

- Knowing what to do is not the same as doing what you know
- Cue-less behavior
- Inconsistent behavior
- Unpredictable behavior
- The illusion of competence
- Riding an emotional roller coaster
- Problems with automatic behavior

25

Conditions Under Which Inattention Is Observed

- Repetitive
- Effortful
- Uninteresting
- Not chosen

26

Conditions under which problems with consequences are observed

- Delayed
- Infrequent
- Unpredictable
- Lacking saliency

27

The consequence is worse than the symptom. . . .

NEGATIVE REINFORCEMENT

28

ADHD is a developmental disability with a childhood onset that typically results in a chronic and pervasive pattern of impairment in school, social and/or work domains, and often in daily adaptive functioning.

29

DSM 5 Diagnostic Categories For ADHD

- ADHD Predominantly Inattentive Type
- ADHD Predominantly Hyperactive-Impulsive Type
- ADHD Combined Type
- ADHD Not Otherwise Specified

30

Is the Inattentive Type of ADHD a Distinct Disorder?

- Better prognosis
- Fewer adverse family variables
- Fewer problems with disruptive behavior
- Greater risk of learning disability
- Greater risk of internalizing problems
- Socially neglected
- Higher incidence in females vs. males

31

Females With ADHD

- Similar to clinic referred males for incidence of emotional and learning problems in childhood.
- Fewer disruptive behavioral problems than clinic referred males in childhood.
- Adult studies suggesting fewer anti-social personality problems than males with ADHD but likely similar emotional problems.
- Higher ratio of Inattentive to Combined Type in childhood and likely adulthood vs. males.

32

Problems With the DSM 5 ADHD Diagnosis

- Categorical models don't predict as well as dimensional models
- Too few impulsive symptoms (3)
- Polythetic system
- Symptom threshold issues
- Age of onset
- Impairment issue

33

Why is Diagnosis Complex?

- Symptoms represent excess of normal behavior
- Criteria have changed, particularly impairment requirements
- Symptoms are common to many diagnoses
- Continuum – clinical judgment critical

34

Why is Diagnosis Complex?

- Childhood data vague and often missing
- Comorbidity common
- Measuring impairment is difficult
- No litmus test

35

ADHD is NOT:

- A simple matter of symptom endorsement
- Simply the identification of certain personality traits
- Advantageous to have

36

Key Questions to Consider in the Diagnostic Process

- Are key symptoms clearly present?
- Is there objective evidence that these symptoms cause significant impairment in multiple domains of daily adaptive functioning?
- Have these symptoms been unremitting since childhood? If not, why?
- Have these symptoms been chronic and pervasive? If not, why?

37

Key Questions to Consider in the Diagnostic Process

- What evidence exists that these symptoms are not primarily or exclusively due to other factors such as lack of effort, secondary gain, etc.
- Is the individual putting forth best effort?
- Are the person's symptoms better explained by another psychiatric or medical condition?
- Is there evidence of comorbidity?

38

Diagnostic Guidelines

- Use self-report of ADHD symptoms with adults
- Use parent and teacher reports with children and teens
- For childhood recall of symptoms use DSM
- Mandatory corroboration
- Paper trail of impairment
- Onset of symptoms before age 13

39

Diagnostic Guidelines

- Chronic course, no remission
- Impairment in major life activities using average person standard
- If impairment arose late must be explained
- Rule out: low IQ, LD, anxiety, depression as primary cause of symptoms

40

Diagnostic Issues

- Under/over report of symptoms
- Poor retrospective recall of childhood
- Under reporting of symptoms by others
- Lack of corroboration
- Limited records
- Viewing all inattention as symptomatic of ADHD
- Legal advantages

41

Aids in Formulating Diagnosis

- Use of records to establish onset and chronicity
- Multiple informants
- Discrepancy between IQ, achievement and grades
- Clinical presentation

42

Assessment Dilemmas

- Questionable childhood onset
- Discrepant data
- Self-report only
- Lack of past documentation
- Differences between reporter

43

Assessment Dilemmas

- Substance abuse/dependence issues
- Questionable level of impairment
- Co-morbidity
- Interpreting test scores

44

Assessment Tools

- History
- Self-report measures
- Other report measures
- Tests of attention and inhibition
- Cognitive (memory, processing, etc.) measures
- Intellectual measures
- Neuropsychological measures
- Personality measures

45

Differential Diagnosis

- Schizophrenia
- Personality disorders
- Substances
- Brain injury
- Mood disorders
- Anxiety disorders
- Bipolar disorder
- ASD

46

Differential Diagnosis: Many of these conditions usually have:

- Later onset
- Inconsistent childhood history
- Different course and symptom constellation
- In bipolar disorder: bursts of productivity, cyclical mood swings, family history, differing symptom profile, and atypical medication response

47

Assignment of a diagnostic label does not mean the person is automatically entitled to accommodations.

48

Documentation standards are more stringent than clinical practice.

49

A disability is a physical or mental impairment that substantially limits one or more major life activities.

50

An individual is not substantially limited if the impairment does not amount to a significant restriction when compared with the abilities of the average person.

51

To be protected by the ADA, an individual must be truly disabled relative to the general population.

52

Successful compensation belies substantial impairment.

53

Five keys to successful management of ADHD

- Make tasks interesting
- Make payoffs valuable
- Adjust expectations for change
- Allow more trials to mastery
- Allow more time for change

54

Symptom relief is not synonymous with changing long term outcome

55

Psychosocial Interventions for ADHD

- Environmental manipulation of the physical plant
- Environmental manipulation of consequences
- Modification of cognitive function

56

Managing the Symptoms of ADHD With Medications

Reducing Symptoms to Improve Consequences

57

Pills Will Not Substitute for Skills

But They Will Relieve Symptoms

58

Psychosocial Interventions For Adult ADHD

- Education
- Vocational guidance
- Academic accommodations
- Cognitive counseling
- Coaching?
- Marital counseling

59

Is Counseling for ADHD Non-Traditional?

- Active role of therapist
- Cognitive behavioral model
- Similar to working with individual's with neurological conditions. Therapist takes an active even directive role.
- Involve support system
- Offer guidance and advice.

60

Key Goals of Intervention

- Instill hope and empowerment
- Educate
- Reframe
- Build self-esteem and self-acceptance

61

Key Goals of Intervention

- Form a partnership
- Reduce discouragement through setting realistic goals
- Address and rewrite negative scripts
- Focus on strengths
- Build resilience

62

We must possess the courage, integrity, patience and knowledge to help those in need regardless of the current state of scientific and political affairs.

63

My View of the Future of the ADHD Diagnosis

- An fMRI/FNCI may find a place when sufficient data exists.
- The diagnosis will shift from symptom count thresholds to an algorithm based threshold.
- Parent and Teacher reports based on well validated questionnaires will continue to be the primary path of diagnosis.
- Concepts of efficient self-regulation and executive functioning (strategy behaviors) may find their way into the diagnostic criteria.
- ADHD will continue in the USA as an ADA qualifying condition.

64

My View of the Future of the ADHD Diagnosis

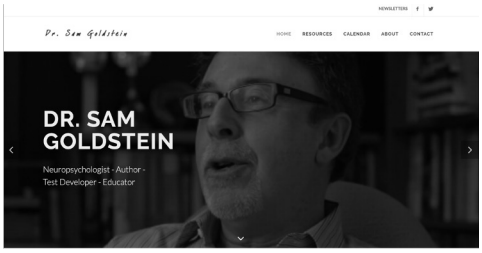
- Inattentive Type will shift to Sluggish Cognitive Tempo.
- The Hyperactive-Impulsive type will be renamed as an Impulse Control Disorder of Childhood.
- A better set of adult symptoms will be used.
- SPECT and other scanning methods will not be used.
- EEG and other quantified measures will not be used.

65

In Their Own Words

66

www.samgoldstein.com



67

68