History And Medication History Of ADHD

What is ADHD:

ADHD stands for attention deficit hyperactivity disorder (ADHD) it is a common neurodevelopment disorder which is most commonly diagnosed in children ADHD effects a Childs success at school, the neurodevelopment disorder effects the child way they act in certain environments and how they understand certain situations. ADHD is associated with abnormally low levels of the neurotransmitters transmitting between the prefrontal cortical area and the basal ganglia and it effects the frontal lobe of the brain which is the part of the brain that is responsible for organising and helps people make decisions. According to Hedy Marks the author of an Add article published on WebMD the youngest age of a child to get diagnosed with ADHD is 4 years old. The individual symptoms of ADHD can be seen in children without ADHD so it if advised that your doctor should diagnose children who might suffer from ADHD using several criteria. Boys are twice as likely to develop ADHD than girls, adults can have symptoms and be diagnosed as well.

For a child who has ADHD here are some of the following symptoms seen in ADHD patients

- Self focused behaviour: is the inability recognise other emotions and need above there own
- Interrupting: interrupting people when there talking or butting into conversations
- Trouble waiting there turn: less patience and the inability to wait periods of time for there turn
- Emotional turmoil: keeping there emotions in check this include that they might have random outbursts of anger or throw a temper tantrum
- Fidgetiness: the inability to sit for long periods of time without getting out of there seat fidgeting or squirming
- Unfinished tasks: is showing interests in lots of activities or different things but have problems finishing the task, for example they might half complete a task but move onto the next task without finishing the first task
- Lack of focus: children with ADHD will have a lack of paying attention even when someone is speaking directly to them, they will doze off and their mind will be preoccupied with other tasks.
- Avoidance of task that will need extended mental effort: this lack of focus will cause a child to avoid activities due to mental effort, these task include paying attention in class and doing homework
- Mistakes: children with ADHD are known to have trouble following instructions that require planning or making a plan, this tends to lead to careless mistakes. This doesn’t mean that the child is lazy or that they lack intelligence
- Daydreaming: children that suffer from ADHD tend to be loud and rambunctious, but another sign of ADHD is quietness and being less involved in tasks than other kids, Children that suffer from ADHD tend to daydream and not know what happening around them.
- Trouble getting organised: Children with Add may have trouble keeping track and prioritising different tasks, this can lead to problems in school.

- Forgetfulness: children with ADHD may be forgetful in daily activities, they might forget to do chores or their school work, they could also lose things often such as toys.
- Symptoms in multiple settings: A child with ADHD will show the symptoms of ADHD in more than one setting, for instance they might show luck of focus in the school environment as well as in the Home environment.

To determine if your child has ADHD it is best to see your psychologist or paediatrician, even then it is very hard to diagnose ADHD. For a child younger than the age of four ti is extremely difficult to diagnose ADHD as younger children behaviour change very rapidly and could show multiple symptoms of ADHD but might not have the disease, it is also extremely difficult to diagnose ADHD in teenagers as hormonal changes could impact the child's behaviour and the child could show symptoms of ADHD. There is no single test that determines ADHD, the process requires several steps and gathering multiple information from different sources. To diagnose ADHD psychologists look at behavioural traits of inattention, hyper activity d impulsivity. Show in figure one is the table that psychologists use to determine if a child has ADHD.

History of ADHD:

This Time line of the history of ADHD is by Janice Rodden from the history of ADHD, ADDitude.

1902: The core symptoms of ADHD are first described by Sir George Frederick Still, a paediatrician, in a lecture series at the Royal College of Physicians. He observed that a group of twenty “behaviourally disturbed” children were easily distractible, inattentive, and unable to focus for long. He noted that the symptoms were more common in boys, and seemed unrelated to intelligence or home environment.

1922: Alfred F. Tredgold, Britain’s leading expert on mental impairment, suggests behaviour patterns are from physiology – likely a difference in the brain, or brain damage – rather than character flaws or lack of discipline. This is a step toward “medicalising” symptoms of ADHD as a result of brain activity instead of considering them simply bad behaviour.

1923: Researcher Franklin Ebaugh provides evidence that ADHD can arise from a brain injury by studying children who survived encephalitis lethargic.

1936: Benzedrine (amphetamine) is approved by U.S. Food and Drug Administration (FDA).

1937: Dr. Charles Bradley, a psychiatrist at a home for children with emotional problems, gives Benzedrine to his patients to treat severe headaches. He discovers an unexpected side effect. The stimulant medication improves interest in school, helps academic performance, and decreases disruptive behaviour for certain children.

1952: The first edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) is published4. The DSM and the symptoms it includes are widely considered the authoritative reference for clinicians; it guides which conditions are diagnosed, and how. There is no mention of a condition like attention deficit disorder or its symptoms, only a condition called “minimal brain dysfunction,” which suggests that a child showing hyperactive behaviour had brain damage, even if no physical signs of it appeared.

1955: New drugs become available to treat adults with mental illness, and a new phase of experimentation with tranquillisers and stimulants for mental health begins. This renews interest in treating hyperactive and emotionally disturbed children with pharmaceuticals. Chlorpromazine is suggested as a potential treatment for hyperactive children, but it does not become a serious competitor to Benzedrine and Dexedrine.

1956: The National Institute of Mental Health (NIMH) creates the Psychopharmacological Research Branch (PRB) to develop new psychiatric drugs.

1957: The condition we know today as ADHD is named hyperkinetic impulse disorder by three medical researchers: Maurice Laufer, Eric Denhoff, and Gerald Solomons. Ritalin is first mentioned as a potential treatment for the condition by Laufer and Denhoff.

1958: The PRB hosts the first-ever conference on the use of psychoactive drugs to treat children5.

1961: Ritalin is FDA-approved for use in children with behavioural problems.

1967: The NIMH awards the first grant to study the therapeutic effect of stimulants in children with behavioural problems.

1968: The second edition of the DSM goes into print. It includes “hyperkinetic impulse disorder,” the first time symptoms now known as ADHD are recognised by the American Psychiatric Association (APA).

1970: There’s a growing public concern over abuse of drugs – particularly stimulants. Congress passes the Comprehensive Drug Abuse Prevention and Control Act, classifying amphetamines and methylphenidate as Schedule III substances – limiting the number of refills a patient can receive, and the length an individual prescription can run.

1971: Amid widespread stimulant abuse across the United States, amphetamines and methylphenidate are reclassified as Schedule II drugs2,6. Dr. Paul Wender publishes a book that mentions how ADHD runs in families, setting the stage for genetic studies of ADHD. Dr. Leon Eisenberg and Keith Conners, Ph.D. receive a grant from the NIMH to study methylphenidate.

1975: A widespread media blitz claims that stimulants are dangerous and shouldn’t be used to treat a “dubious diagnosis.” Benjamin Feingold advances claims that hyperactivity is caused by diet, not a brain based condition. There is public backlash against treating ADHD with stimulant medication, especially Ritalin.

1978: For decades, a positive response to stimulant medication was considered evidence that a child had a mental disorder. Judith Rappaport, a researcher for the NIMH discovered that stimulants have similar effects on children with or without hyperactivity or behaviour problems – adding to the controversy around stimulant medication.

1980: The third edition of the DSM is released. The APA changes the name of hyperkinetic impulse disorder to attention deficit disorder (ADD) — with hyperactivity and ADD without hyperactivity. It’s the first time this group of symptoms is called by its most commonly known

modern name.

1987: A revised version of the DSM-III, the DSM-III-R, is released. The subtypes are removed, and the condition is renamed attention deficit hyperactivity disorder (ADHD). What was previously called ADD without hyperactivity is now referred to as undifferentiated ADD.

1991: In the 1990s, diagnoses of ADHD begin to increase. It’s not possible to know if this is a change in the number of children who have the condition, or a change in awareness that leads to increased diagnosis3. By 1991, methylphenidate prescriptions reach 4 million, and amphetamine prescriptions reach 1.3 million.

1994: The DSM-III-R divides ADHD into three subtypes: predominantly inattentive type, predominantly hyperactive type, and a combined type3 attention deficit hyperactivity disorder.

2000: The American Academy of Paediatrics (AAP) publishes clinical guidelines for the diagnosis of ADHD in children.

2001: The AAP publishes treatment guidelines for children with ADHD, and recommends stimulant medication alongside behaviour therapy as the best course to alleviate symptoms.

2002: The first non-stimulant medication, Strattera (atomoxetine), is approved by the FDA to treat ADHD.

2011: The AAP releases updated diagnosis and treatment guidelines, expanding age range for diagnosis, scope of behavioural interventions, and new guidelines for clinical processes.

2013: The DSM-V is published, and includes language changes for each of the diagnostic criteria for ADHD. The subtypes of ADHD are now referred to as “presentations,” and the condition can be described as mild, moderate, or severe. The descriptions are more applicable to adolescents and adults than previous versions, but new symptom sets were not created for these groups.

Medication History of ADHD

1937 - Benzedrine was given to patients (racemic amphetamine)

1943 - Desoxyn was given to patients (methamphetamine hydrochloride)

1955 - Ritalin was given to patients (methylphenidate)

1955 - 1983 - Biphetamine was given to patients (mixed amphetamine/dextroamphetamine resin)

1960 - Adderall was given to patients (mixed amphetamine/dextroamphetamine salts)

1975 - 2003 - Cylert was given to patients (pemoline)

1976 - Dextrostat was given to patients (dextroamphetamine)

1976 - Dexedrine was given to patients (dextroamphetamine)

1982 - Ritalin SR was given to patients

1999 - Metadate ER was given to patients (methylphenidate)

2000 - Concerta was given to patients (methylphenidate)

2000 - Methylin ER was given to patients (methylphenidate)

2001 - Metadate CD was given to patients (methylphenidate)

2001 - Focalin was given to patients (dexmethylphenidate)

2001 - Adderall XR was given to patients (mixed amphetamine salts)

2002 - Ritalin LA was given to patients

2002 - Methylin was given to patients (methylphenidate) oral solution and chewable tablet

2002 - Strattera was given to patients (atomoxetine)

2005 - Focalin XR was given to patients (dexmethylphenidate)

2006 - Daytrana was given to patients (methylphenidate patch)

2007 - Vyvanse was given to patients (lisdexamfetamine dimesylate)

2008 - Procentra was given to patients (liquid dextroamphetamine)

2009 - Intuniv was given to patients (guanfacine hydrochloride)

2010 - Kapvay was given to patients (clonidine hydrochloride)

2012 - Quillivant XR was given to patients (liquid methylphenidate)

2016 - Adzenys XR-ODT was given to patients (amphetamine oral disintegrating tablet)

2016 - Quillichew ER was given to patients (chewable methylphenidate)

2017 - Cotempla XR-ODT was given to patients (methylphenidate orally disintegrating tablet)

2017 - Mydayis was given to patients (mixed amphetamine salts)

2018 - Jornay PM was given to patients (methylphenidate)

2019 - Adhansia XR was given to patients (methylphenidate)

2019 - Evekeo ODT was given to patients (amphetamine orally disintegrating tablet)

This is the medical timeline of throughout the years for ADHD, these are the different medications used to treat ADHD over the year, many o these ADHD medication, even the extended relapse versions are available as generics.