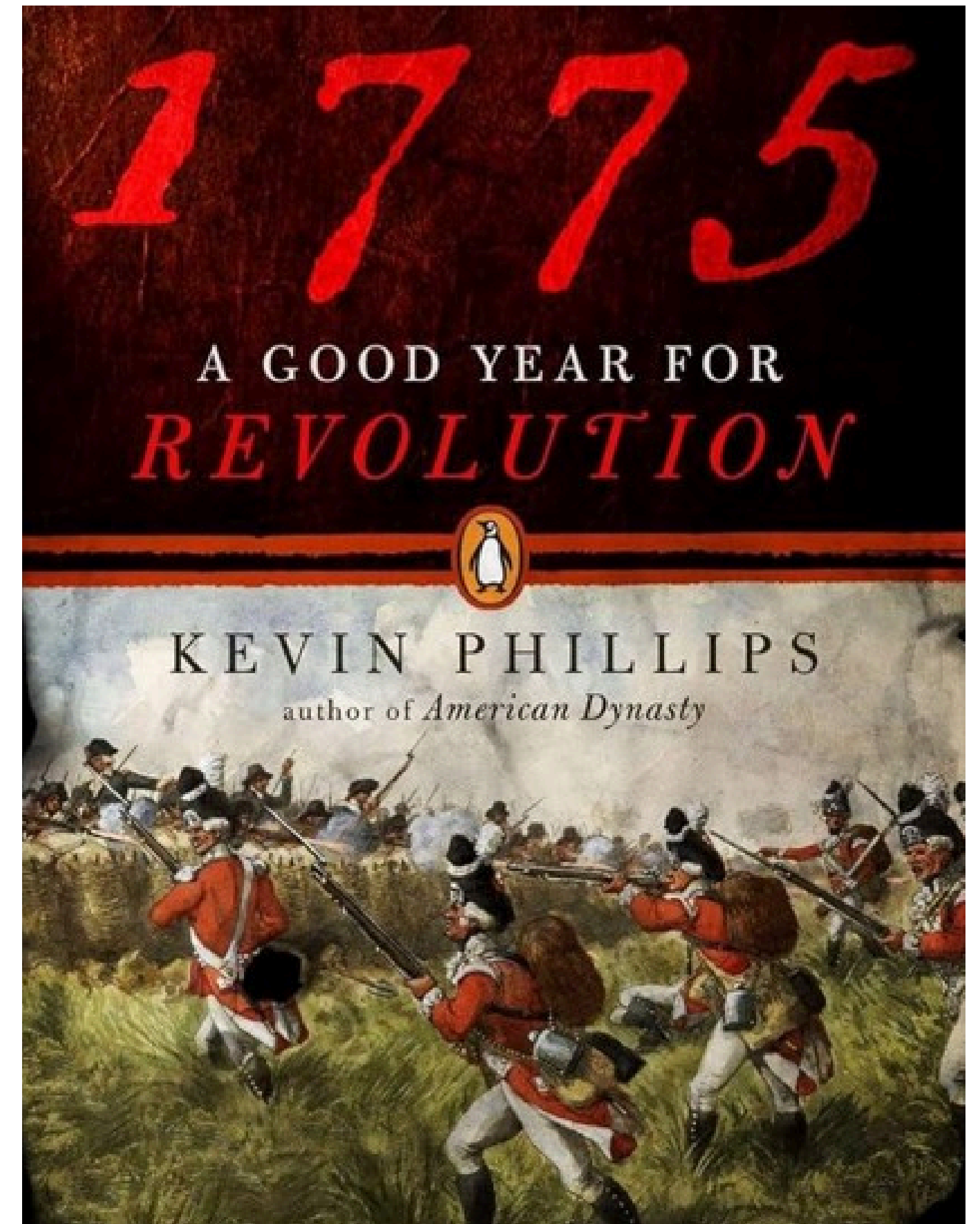


ADHD since 1775

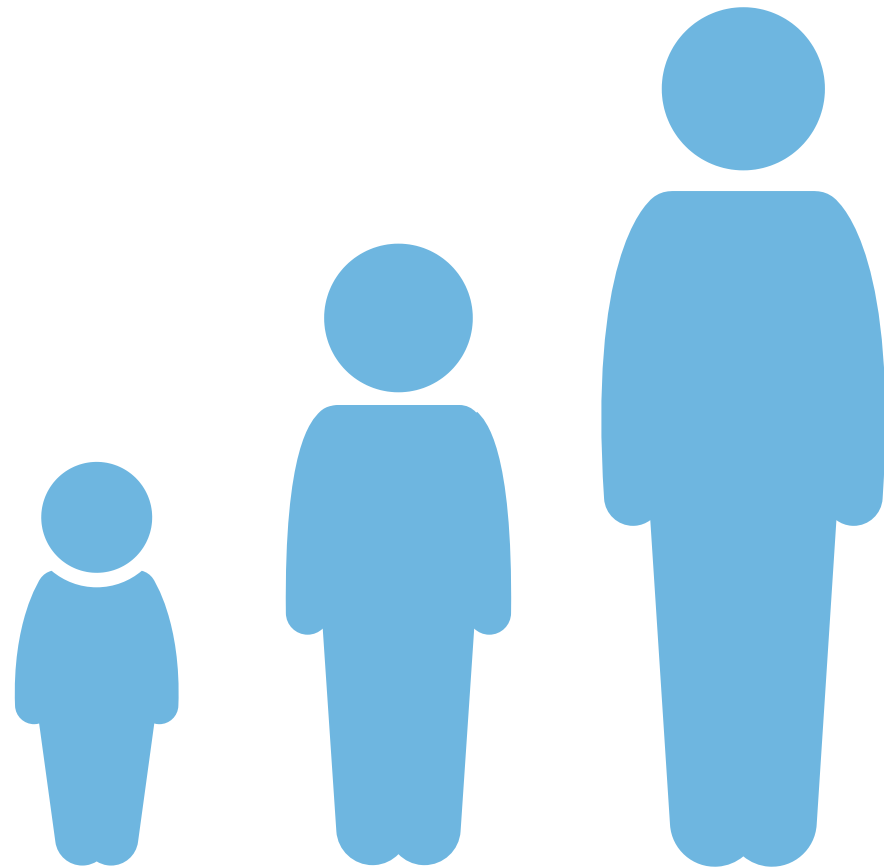
The syndrome we now call ADHD has been described in the medical literature since 1775

When made by a licensed clinician, the diagnosis of ADHD is well-defined and valid at all ages, even in the presence of other psychiatric disorders, which is common



ADHD - Lifelong Trait Condition

50 – 66% Childhood ADHD persist into adulthood ²⁻⁵



Predictors may include: ^{5,6}

- Severity of childhood symptoms
- Psychiatric comorbidities
- Psychosocial adversity

Adult ADHD - under diagnosis ⁷

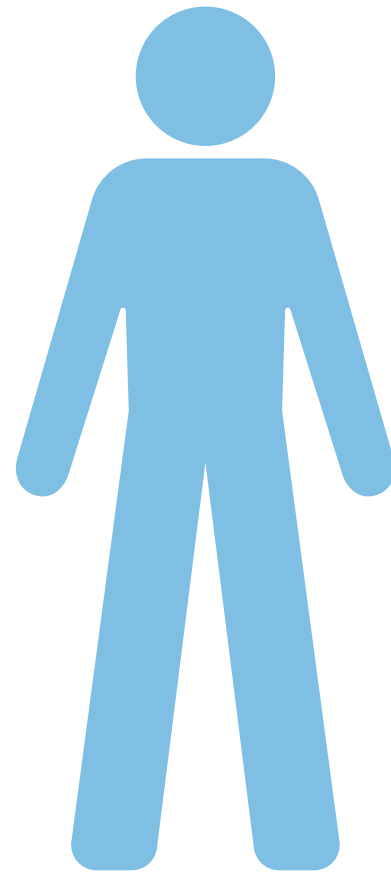
- Lack of recognition of adult ADHD ⁷
- Age-related changes in presentation ⁸
- Developing coping strategies / adjust behaviour ⁹
- Comorbidities masking symptoms (un/misdiagnosis)⁷⁻¹⁰

Adult ADHD - Prevalence

2.5 % of adults (5.9 % of youth)

- WHO: multi-country analyses **2.8%**¹¹
- Simon V, *et al.* 2009 : **2.5%** ¹²
- Dobrosavljevic M, *et al.* 2020 : **2.18%** ¹³

Adult ADHD - Gender differences



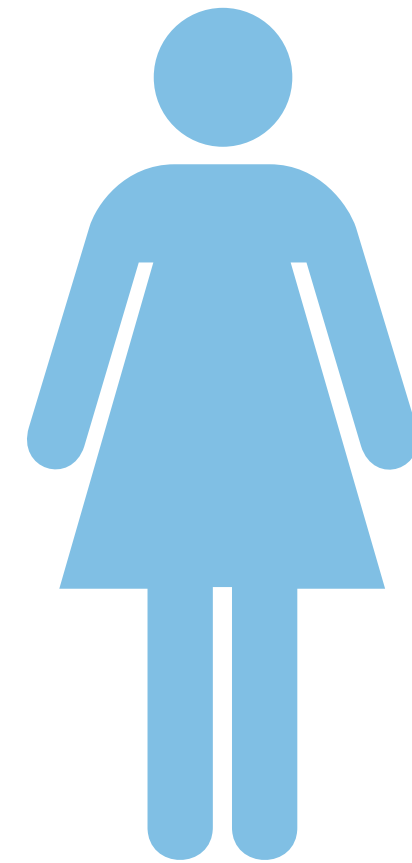
More common in males ¹⁶

Male

Female

1.6

1



Similar symptoms:

- Inattention
- Impulsivity
- Hyperactivity ¹⁷

Adult ADHD - Classification systems

DSM-5 Diagnostic criteria

5 or more symptoms of inattention or hyperactivity-impulsivity

- Several symptoms present **before age 12**
- Clear evidence that symptoms interfere with social or occupational **functioning**
- Several symptoms present in at least 2 relevant **settings** (e.g. home and work)
- Symptoms **not better explained** by another mental disorder (mood/anxiety, psychotic, dissociative, personality disorders, or substance intoxication or withdrawal)

ICD-11 Diagnostic criteria

Persistent pattern (at least 6 months) of inattention symptoms and/or hyperactivity and impulsivity symptoms outside the limits of normal variation expected for age and level of intellectual development

- Evidence of significant symptoms **prior to age 12**
- Several symptoms severe to have a direct negative impact on academic, occupational, or social **functioning**
- Manifestations evident across multiple situations or **settings**
- Symptoms **not better accounted for** by another mental disorder or due to effects of a substance on CNS

Adult ADHD

Clinical Presentation

Adult ADHD Presentation I ¹⁹

- Difficulty getting to sleep - not able to switch off
- Easily overwhelmed, esp when entering new stages (high school, uni, job)
- Mood fluctuations throughout the day (easily frustrated, loses temper)
- Emotional Dysregulation (increasingly accepted as common in ADHD)
- Poor impulse control (not think of consequences properly)
- Rec depressive presentations (situational) - unresponsive to treatment
- Anxiety (performance)
- Chronic low self-esteem
- Feelings of failure - not living up to one's potential / family expectations

Adult ADHD Presentation II ¹⁹

- Disorganised (lack of planning, messy)
- Forgetful (misses appointments, loses things)
- Chronic procrastination (inefficient, works through the night to meet a deadline)
- Poor time management
- Starts things but gets easily distracted - unfinished tasks
- Impulsive decisions (spending (debt), walking out of jobs, ending relationships)
- Frustration through procrastination and / or distraction affecting education or work
- Struggling to complete further education degrees - requiring re-sits / extra years
- Difficulty maintaining employment (underachievement/conflict with colleagues)
- Use of alcohol or substances to relax or calm the mind
- Criminal offences

DSM-5 ADHD symptoms of attention

- Makes careless mistakes/lacks attention to detail
- Difficulty sustaining attention
- Does not seem to listen when spoken to directly
- Fails to follow through on tasks and instructions
- Exhibits poor organisation
- Avoids/dislikes tasks requiring sustained mental effort
- Loses things necessary for tasks/activities
- Easily distracted (including unrelated thoughts)
- Is forgetful in daily activities



DSM-5 ADHD symptoms of hyperactivity/impulsivity

- Fidgets with or taps hands or feet, squirms in seat
- Leaves seat in situations when remaining seated is expected
- Experiences feelings of restlessness
- Has difficulty engaging in quiet leisurely activities
- Is “on-the-go” or acts as if “driven by a motor”
- Talks excessively
- Blurts out answers
- Has difficulty waiting their turn
- Interrupts or intrudes on others

Adult ADHD - increased prevalence ²⁰

Individuals with increased prevalence of ADHD

- Mental health conditions
- Epilepsy
- Substance misuse
- Neurodevelopmental disorders (ASD - Tourette's)
- Family history of ADHD
- Known to youth justice system
- Known to adult criminal justice system

Adult ADHD - girls & women ²⁰

ADHD may be **under-recognised in girls / women**

- Less likely to be referred for assessment
- More likely to have undiagnosed ADHD
- More likely to receive incorrect diagnosis of another mental health



Adult ADHD - Multifactorial Aetiology

Interaction Genetic / Environmental ¹⁻³

Combined effects of many genetic and environmental risks
each having a small effect

Adult ADHD - Neurobiology

1 Structural

2 Functional

3 Chemical



Impact of untreated adult ADHD

- **Education**
- **Employment**
- **Finance**
- **Comorbidities**
- **Substance Misuse**
- **Relationships**
- **Quality of Life**
- **Risk taking behaviours (reckless driving, Criminal behaviours)**
- **Mortality risk**

Impact of ADHD - Education

- Less likely to have obtained a college degree¹
- Less likely to have completed secondary school^{2,3}

More likely to have had the following during childhood:

- Fight with peers
- More ADHD symptoms
- More severe ADHD symptoms
- Assessment by educational psychology



Impact of ADHD - Employment

Difficulties impacting productivity/reputation as employees^{1, 4-7}

- Disorganised job hunting
- Difficulty completing application forms
- Negative impression in interviews
- Difficulty doing office-based work
- Time management issues / procrastination
- Poor social/communication/interpersonal skills, difficulties working collaboratively
- Poor appraisals

(Creative work/workaholism may compensate)

Adjustments:

Written instructions, private working areas, structured breaks (meetings)
incentives for task completion

Impact of ADHD - Family and relationships

Difficulty maintaining relationships ^{1,4,9}

- Irritability
- Temper
- Inattention
- Distraction
- Impulsive behaviours and decisions
- Excessive talking
- Forgetfulness

All may impair communications, interactions & relationships ³

1. Biederman J, et al. 2006; 4. Brod M, et al. 2012; 9. Pitts M, et al. 2015.

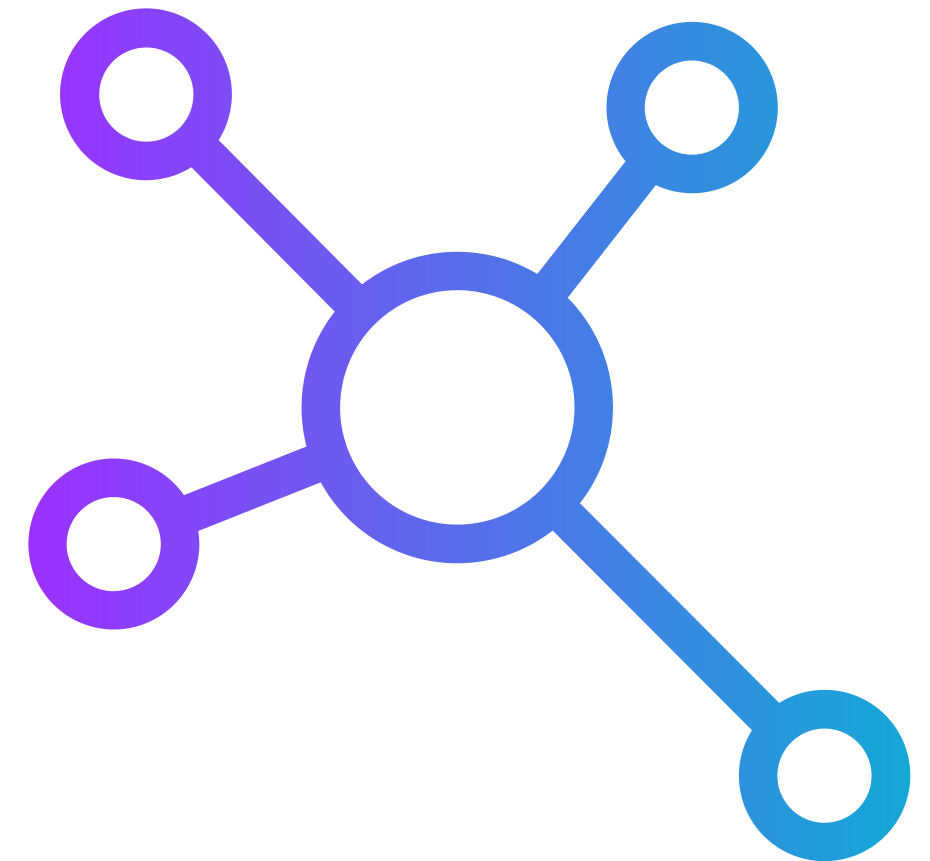


Adult ADHD - Comorbidities

Many adults with ADHD have comorbid disorders
(The norm, not the exception)

Key comorbid disorders in adults with ADHD:¹³

- Depression
- Anxiety
- Bipolar
- Autistic Spectrum Disorder ASD
- Personality dis (Impulse control / emotional dysregulation)
- Learning disabilities
- Sleep disorders
- Substance misuse



Neurobiology of ADHD and psychiatric comorbidities

Neurological processes hypothesised to be linked with adult ADHD and various frequently occurring comorbid psychiatric disorders

Hedonic tone

- Capacity to experience pleasure ⁵
- Low hedonic tone has been associated with ADHD and psychiatric comorbidities like major depressive disorder and substance use disorder ⁵

Default mode network

- Brain activation during specific internally focussed tasks ⁶
- Implicated in ADHD and psychiatric comorbidities like borderline personality disorder ⁶

Emotional regulation

- Handling of emotionally arousing stimuli ⁷
- Implicated in ADHD and emotionally unstable psychiatric comorbidities like borderline personality disorder and antisocial personality disorder ⁸

Adult ADHD - Risk-taking behaviours

- Aggressive/reckless driving ^{4, 23}
- Driving offences – road rage, traffic violations ²³ suspension of driving licence ²³
- Aggressive incidents ³¹
- Sexual risk-taking behaviour ³⁸
- Antisocial behaviour, offending ^{24,25}, Criminality, recidivism ²⁷⁻³⁰
- Substance abuse ^{4, 12, 32-34}
- Non-suicidal self-harming ³⁵⁻³⁶
- Suicide ³⁷
- Mortality ²⁶

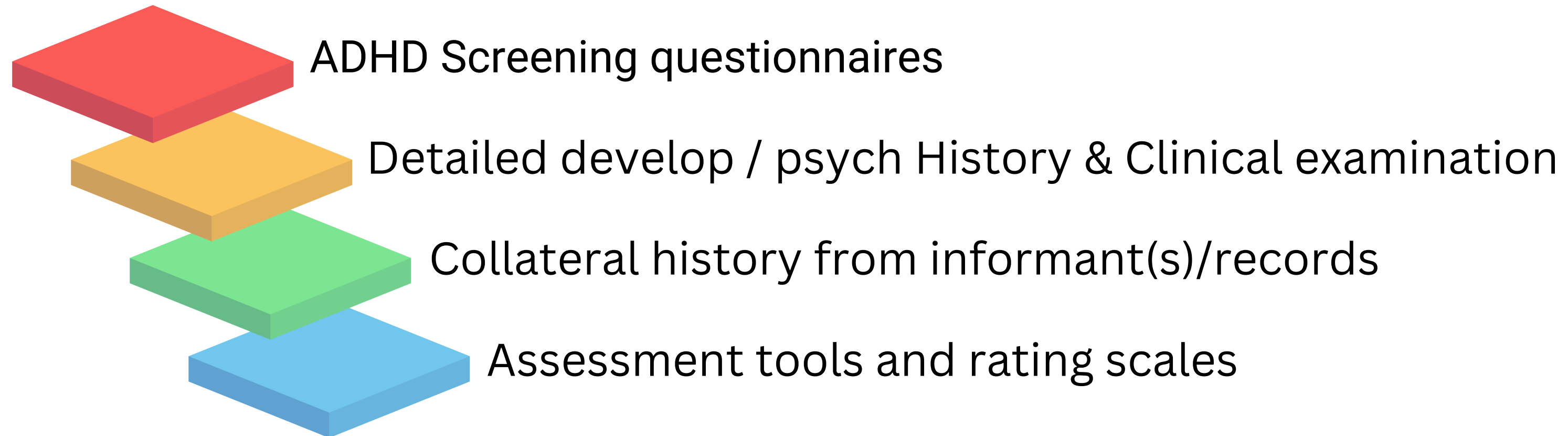


Adult ADHD - UK clinical guidelines (*NICE*)

- Medication first-line if symptoms causing significant impairment in ≥ 1 functional domain after environmental modification
- Care by multidisciplinary teams / clinics with expertise in ADHD
- Before starting medication, full assessment including mental & physical health, social circumstances etc, to formulate a comprehensive/holistic plan to addresses needs (psychological, behavioural and occupational, educational etc)

ADHD - Assessment Process

Multiple-stage:



Adult ADHD - 3 Clinical presentations

- **Primarily inattentive**
- **Primarily hyperactive-impulsive**
- **Combined**

Inattention more strongly associated with:

- Academic impairment
- Low self-esteem
- Negative occupational outcomes
- Lower overall adaptive functioning

Hyperactivity-impulsivity more strongly assoc with:

- Peer rejection
- Aggression
- Risky driving behaviours
- Accidental injuries

Adult ADHD - scales

- **ASRS-5 Adult ADHD Self-Report Screening Scale for DSM-5**

The ASRS-5 screening scale - Primary care

- **DIVA-5 Diagnostic Interview for ADHD in Adults-5**

18 symptom criteria based on DSM-5 criteria

- **CAARS (Conners' Adult ADHD Rating Scales Long Version)**

66-item questionnaire (DSM-IV criteria).

Adult ADHD - Management I

ADHD symptoms and the negative consequences associated with ADHD can be significantly diminished by appropriate treatment

i.e. traffic accidents, mortality, criminality, depression, suicide, substance abuse⁴⁶



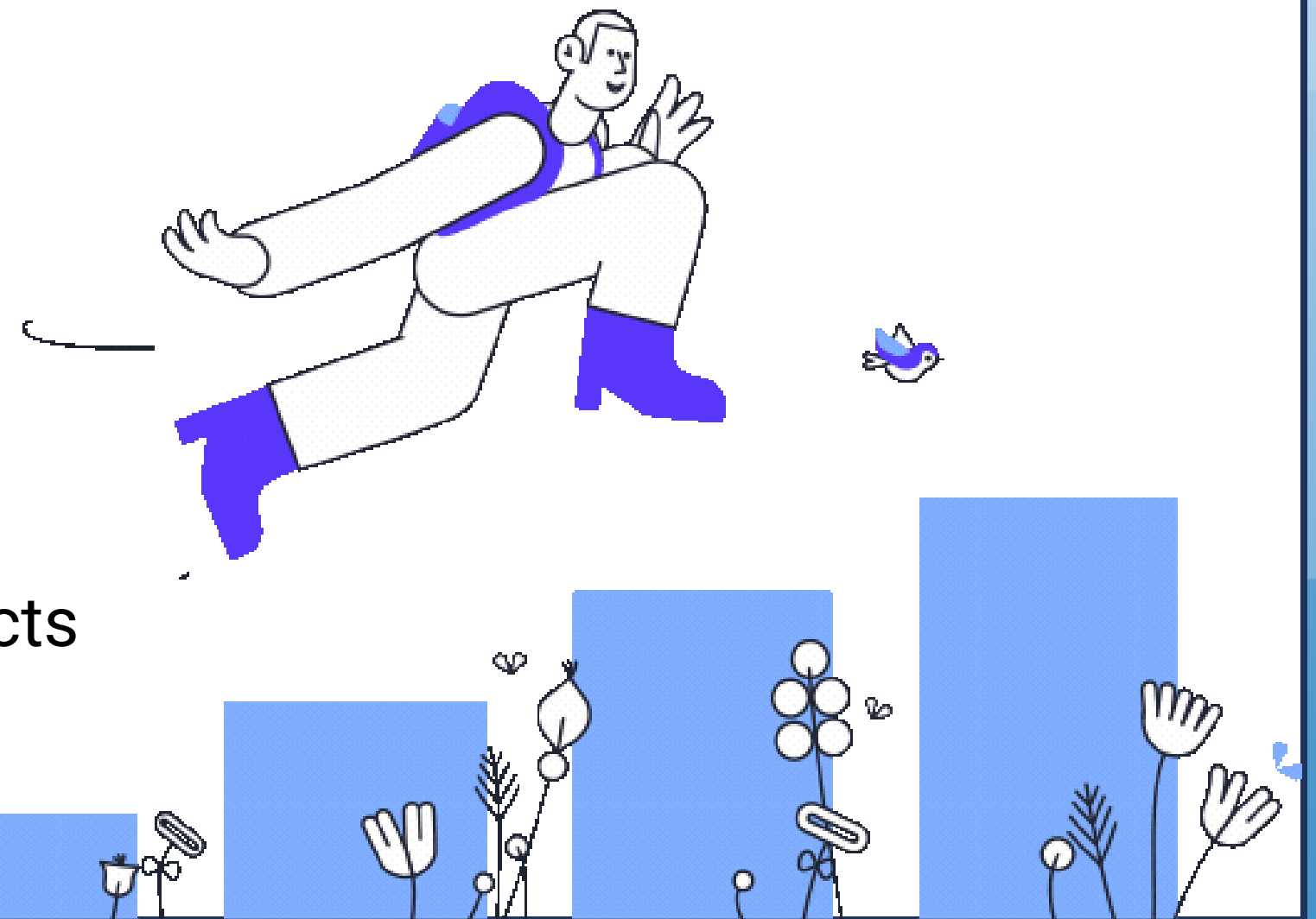
Adult ADHD - Management II

Optimal management aim:

- Reduced symptoms
- Reduced functional impairment
- Improved quality of life
- Minimise side effects
- Reduce secondary co-morbidity

Patient / family satisfaction

Benefits outweigh unwanted adverse effects



Adult ADHD - Pharmacological treatment

Stimulants

Treatment of choice (first line)

- Short acting
(initial titration, more flexible dosing regimens)
- Long acting
(single dose, cover throughout the day, better adherence, avoid rebound/crash, protect against abuse, safer for driving)

Non-stimulants

If risk of diversion with stimulants for cognitive enhancement/appetite suppression

ADHD - Legal contexts

- **Family law** (ADHD impacts parenting, relationships - child custody cases)
- **Criminal law** (impulsive behaviour leads into legal difficulties)
- **Employment disputes** (workplace discrimination - reasonable adjustments NOT provided)
- **Contractual agreements** (cognitive challenges
®misunderstandings - contractual obligations)
- **Personal injuries**

ADHD - Legal contexts

- Understanding how ADHD impacts clients' behaviour, communication, decision-making and interactions with the legal system can ensure effective legal representation, fair legal outcomes & helps uphold justice.
- Lack of awareness can lead to misunderstandings, miscommunication, frustrations & potential injustice

ADHD - Cognitive challenges 1

Attention, concentration & memory (working, long-term retrieval and contextual memory)

- Missing key details due to inattention during meetings
inability to maintain focus
- Problems remembering prior legal interactions or agreements
- Difficulty remembering/managing appointments and deadlines

ADHD - Cognitive challenges 2

- Inconsistent recall of events causing difficulties in testimony
- Filling in memory gaps with inaccurate details may be mistaken for dishonesty
- Missing deadlines, court dates, or probation requirements
- Difficulty following instructions

ADHD - Cognitive challenges 3

- **Contextual Memory Weakness** – ability to link memories with relevant contextual details, causing difficulty remembering when or why something happened
- **Prospective Memory Challenges** – Remembering to complete future tasks (submitting something on time) can be difficult
- **Emotional and Stress Interference** – High emotional reactivity and stress further disrupt memory encoding and recall

ADHD - Executive Functioning

- Difficulty to assess risks
- Difficulty to plan effectively, Difficulty Organizing
- Difficulty organizing documents, contracts, or evidence
- Difficulty understanding complex legal language
- Difficulty processing information efficiently

ADHD - Impulsivity

Acting without thinking & not considering consequences

- May affect plea agreements or responses under interrogation
- Impulsive actions may be misinterpreted as intentional misconduct

In criminal cases, impulsivity or lack of foresight could be a mitigating factor - Understanding its impact helps in advocating for appropriate sentencing, rehabilitation, or diversion programs.

ADHD - Restlessness/mental hyperactivity

Restlessness or inattentiveness in court may be perceived negatively by judges or juries.

ADHD - Emotional challenges

Emotional Dysregulation

Difficult to regulate emotions and increased emotional reactivity

- May affect interactions with law enforcement, the court, or opposing parties
- May affect ability to present oneself appropriately in legal settings

ADHD - Tips re management 1

- Provide additional guidance to ensure they fully understand their legal options
- Use Clear and Concise Communication - simplified explanations.
- Avoid legal jargon
- Provide written summaries
- Provide reminders for deadlines.

ADHD - Tips re management 2

- Keep meetings brief and structured with key points outlined.
- Allow extra time for case preparation
- Ensure courts and opposing parties recognize ADHD-related challenges and consider reasonable adjustments in legal settings, such as extended time for processing information or accommodations in court proceedings.

Thank You
for joining the webinar



Do you have any questions?