Expert in Mind
Essential in uniting professionals

Is it ADHD?

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What we will cover in this webinar

- What is ADHD?
- Assessment of ADHD
- Management of ADHD
- ADHD and the Law
- ADHD as a superpower

What is ADHD?

DSM-5 Criteria:

A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development:

1. Inattention: Six or more symptoms (out of 9)….

+/-

2. Hyperactivity and Impulsivity: Six or more symptoms (out of 9)…
   - Present before 12 years
   - Present in 2 or more settings
   - Interfering with social/academic/occupational functioning
   - Not better explained by another mental disorder

Prevalence ADHD

- ADHD a common childhood behavioural disorder.
- Systematic reviews indicate community prevalence globally 2-7%, with average of 5%
- At least a further 5% have difficulties with overactivity, inattention, and impulsivity but below threshold for full criteria.
- Timely recognition and treatment improves long-term outcomes.
- Untreated ADHD associated with low self-esteem, family and peer relationship problems, substance misuse, antisocial behavior, obesity, higher mortality (especially accidents)

Recognition

Increased prevalence in:

- Preterm
- LAC
- ODD/CD
- Anxiety/depression
- Epilepsy
- FH ADHD
- ND disorders eg ASD/tics
- Acquired brain injury
- FASD
- Youth Justice System
- H/O substance misuse

UNDER-RECOGNISED IN GIRLS

Referral

- Watchful wait up to 10 weeks if behavioural/attention problems suggest ADHD
- Offer parents referral to group-based ADHD-focused support group (don’t wait for diagnosis)
- If problems persist and there is moderate impairment, refer to secondary care for assessment
- If SEVERE impairment refer directly
- Primary care should NEVER make the initial diagnosis or initiation of treatment

ADHD Diagnosis

Diagnosis should only be made by a specialist psychiatrist/paediatrician or other appropriately qualified HC practitioner with training and experience in diagnosis of ADHD on the basis of:

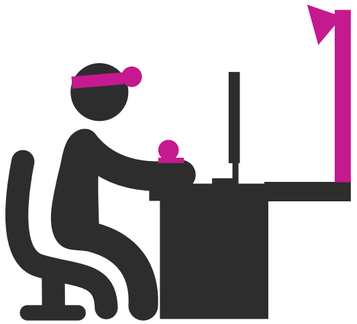
- Full clinical and psychosocial assessment
- Full developmental and psychiatric history
- Observer reports (rating scales/school reports)
- Assessment of mental state
- **Psychological/social/educational impairment**

  Need to meet DSM-5-TR (DIVA) or ICD11 criteria (ICD11 no clear cut-off or rating scales)

ADHD Diagnosis contd.

- Pervasive in at least 2 settings
- Include assessment of needs, co-existing conditions, physical health
- Parent/Carer’s mental health
- Views of YP to determine significance of clinical impairment (DIVA)

QbTesting



QbTest is a new medical device used worldwide by clinicians.

FDA cleared for the use of **ADHD assessments and treatment monitoring** for ages 6-60 (in conjunction with other clinical measures)

Appraised by the National Institute for Clinical Excellence (NICE)
15-20 minute test to monitor

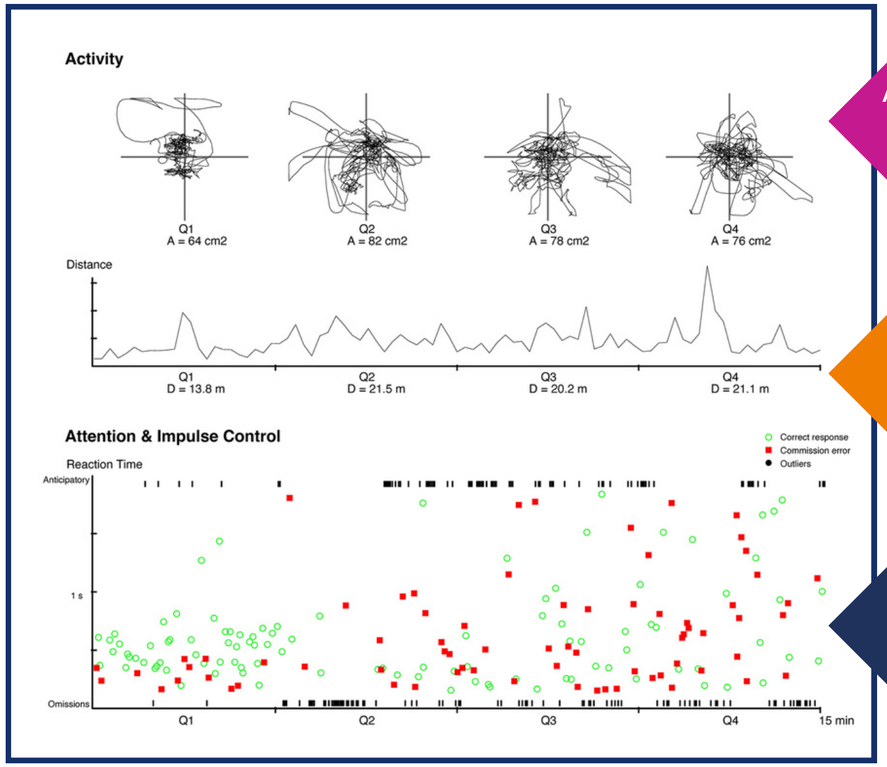
QbTest diagnostic technology measures the three core symptoms of ADHD:

- Activity
- Attention
- Impulsivity

Qbtech

QbTesting contd.

Test 1- Patient X
Taken at initial assessment

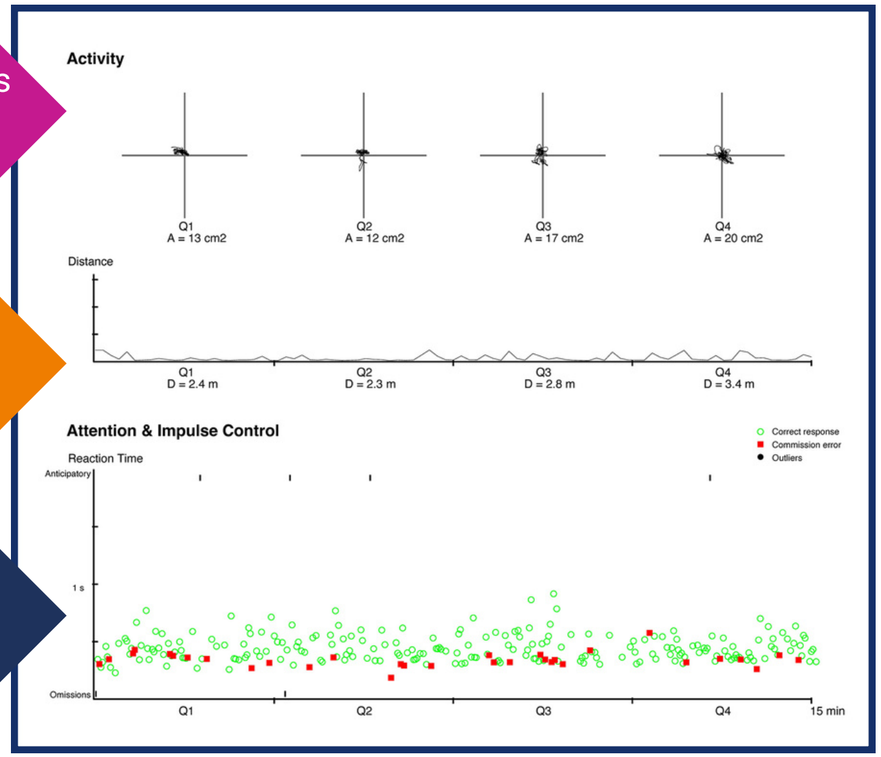


Activity section
A person's movements during the test
Tracked by the headband

Distance section
Actual distance travelled by the movement during the test

Attention & Impulse Control
Clicks made
Red are missed
Green are correct

Test 2 - Patient X
Taken after course of medication



ADHD and Comorbidities

- **Heterogenous condition complicated by extensive comorbidities. Estimated that 60-100% of those with ADHD have comorbid disorders which continues into adulthood.**
- ASD. In the US 42% of those with ASD meet ADHD criteria. More severe symptoms across all domains of ADHD where one has both ASD and ADHD. Those with both ASD and ADHD have worse sleep.
- 17% have ADHD and learning disability

ADHD and Comorbidities contd.

- 55% of those with Tourette’s also have ADHD
- 13-50% of youth with ADHD have depression
(5 x higher than those without ADHD)
- 15-35% of those with ADHD also have anxiety disorders
(independently expressed in children)
- 30-50% of children with ADHD also meet criteria for Conduct Disorder or Oppositional Defiant Disorder (ODD). More common in boys.

ADHD/PTSD - Developmental Trauma

- PTSD 4 x more likely in ADHD diagnosis
- ADHD 2 x more likely in PTSD diagnosis
- Developmental Trauma more likely in ADHD families

ADHD/PTSD comorbidity

- PTSD one of most difficult co-occurring conditions to diagnose alongside ADHD. Be aware of common comorbidity and that each condition can present as the other and exacerbate the symptoms of the other.
- PTSD requires trauma-focused psychological therapy.
- Treating ADHD with stimulants can exacerbate the underlying symptoms of anxiety and trauma.
- Be a detective. Comprehensive. Inclusive.

Overlapping symptoms; PTSD/ADHD

- PTSD Dissociative reactions; ADHD ‘own world’/does not listen.
- PTSD Prolonged psychological distress/marked physiological reactions to cues resembling the trauma; ADHD irritable/angry outbursts.
- PTSD Avoidance of Internal/External reminders; ADHD/ODD refusal to do things/anger on requests.
- PTSD and ADHD; Persistent exaggerated negative beliefs eg ‘I’m bad’.
- PTSD and ADHD; Irritable and angry outbursts.
- PTSD and ADHD; Problems with concentration.
- PTSD and ADHD; Sleep disturbance.

ADHD/PTSD

- Clinical history and assessment. Timing of onset symptoms and asking about traumatic events/accidents.
- Remember that ADHD more likely to become traumatised.
- Trauma involving even mild head injury more likely to cause secondary ADHD

Developmental Trauma

- **Not a disgnostic term but a description. Involves trauma and disrupted attachment. 0-3 years sensitive period for brain development.**
- Generally 1st 3 years of life, but some researchers define it up to 5 years.
- Often associated with disrupted attachments and LAC/adoption.
- Can include medical procedures, severe traumatic events, birth difficulties, frightening events (often causing a traumatic response), caregiving failures unrelated to maltreatment.

Developmental Trauma

- Often prolonged, recurrent, and often IP trauma, such as psychological sexual or physical abuse in childhood. Can commonly present with ADHD.

Adverse Childhood Experiences Study

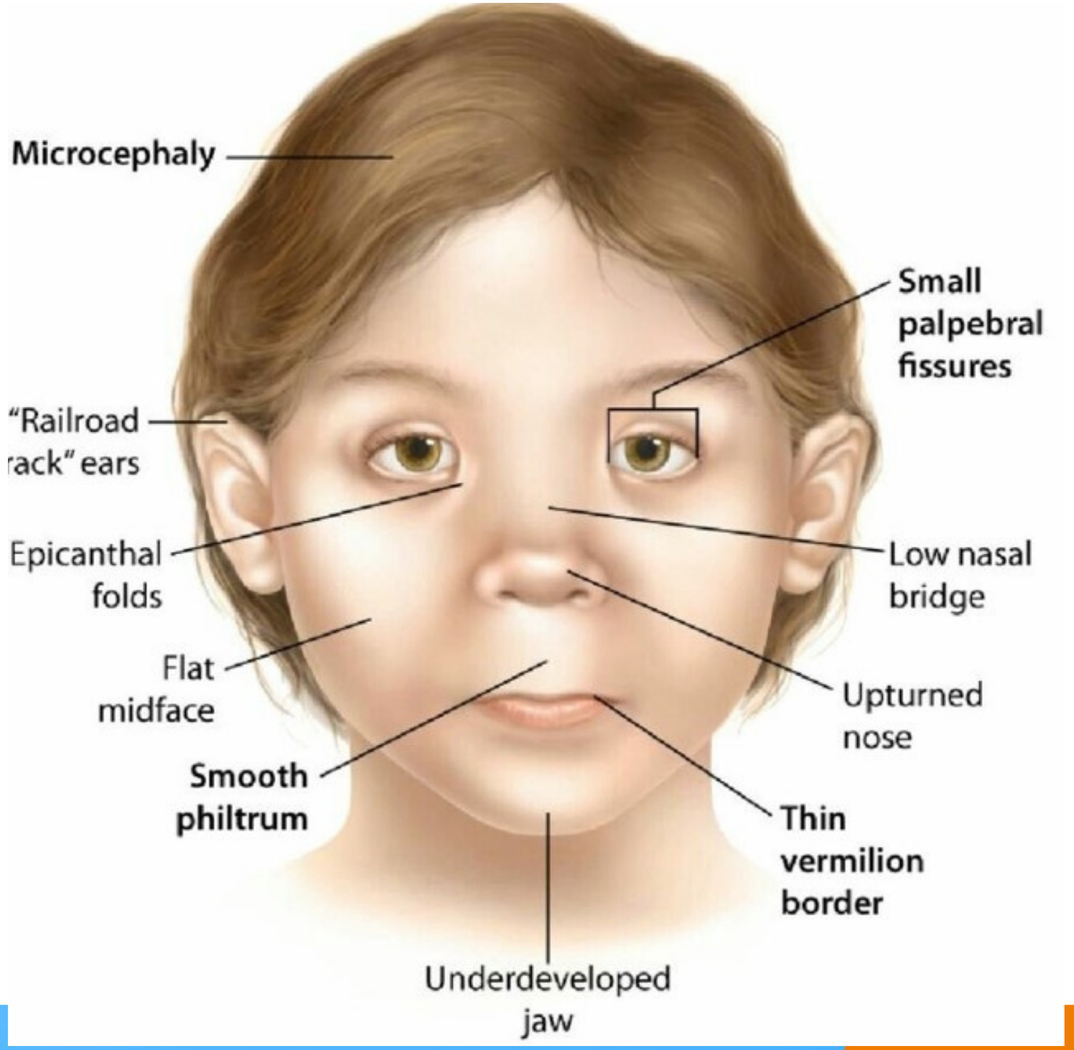
- ACES associated with;
- Disrupted neurodevelopment
- Social, emotional and cognitive impairment
- Adoption of health-risk behaviours
- Disease, disability and social problems
- Early death.

What is FASD?

- Foetal Alcohol Spectrum Disorders is an umbrella term used to describe a group of conditions that affect a person due to prenatal alcohol exposure (PAE).

- It is probably the most common preventable cause of non-genetic learning disability and, as such, individuals may also be living with a number of complex, lifelong, physical, mental, psychological and emotional difficulties due to the exposure to alcohol as a foetus.

Foetal Alcohol Syndrome



FASD can lead to problems with...

- Memory
- Planning
- Organisation
- Managing emotions
- Impulse control
- Focus

FASD Impact; Common Behaviours

- Learning Difficulties
- Impulsivity
- Difficulty learning from mistakes
- Problems with social relationships
- Attention/hyperactivity; may have additional diagnosis of ADHD
- Developmental delays
- Memory problems

FASD Summary

- FASD more common than ASC (x3)
- ADHD disagnosed in 94% of those with heavy prenatal alcohol exposure but exact relationship unclear
- There is a significant burden of neurodevelopmental disorder being missed
- Most cases of FASD DO NOT have dysmorphism
- We are at frontier of this emergent area which has been slow to develop
- Complete shortages of services in the UK

The Media on ADHD

- “What we know about ADHD overdiagnosis”
- “ADHD is overdiagnosed; here’s proof”
- “I was diagnosed with ADHD at 37. If only it had been earlier”
- “I was worried I was obsessed with sex. In fact I have ADHD”
- “Cambridge students ‘fake ADHD’ to get more time in exams”
- “ADHD ‘not over diagnosed’ despite surge in Ritalin prescriptions”
- “Its not a bloody trend; understanding life as an ADHD adult”

ADHD; is it overdiagnosed?

- Systematic review of 334 studies in children and adolescents; convincing evidence that ADHD is overdiagnosed.
- For those with milder symptoms, harm associated with ADHD diagnosis may outweigh the benefits.
- JAMA Network Open. Kazda et al April 12th 2021

ADHD; is it underdiagnosed?

- ADHD UK charity state 2.6 million have ADHD in the UK but only 60,000 diagnosed.
- 25% of prison population have ADHD, most of whom do not have ADHD diagnosis before prison

ADHD Information and support

- Following diagnosis of ADHD, offer structured discussion with parent/carers and YP as to how ADHD could affect their life:-
- Support for families and carers
- POSITIVE impact including increased understanding of symptoms, ID and building on strengths, and increased access to services
- NEGATIVE impact eg labelling/stigma, tendency to impulsive behaviour, importance of environmental modifications, educational issues, employment, social relationships, challenge of co-existing conditions/MH condition, increased risk of substance misuse.
- Possible effect on driving (ADHD and/or meds)

Supporting Family and Carers

- Ask how ADHD affects themselves and other family members and discuss concerns
- Encourage joining self-help/support groups if appropriate
- Do parents with ADHD need extra support with organisational strategies
- Advise on importance of positive p/c-child contact, clear and appropriate rules, consistent management, structure in YP’s day
- Explains parent training is not for bad parenting but to optimise parenting skills for above-average parenting needs with ADHD child

School, Colleges, Universities

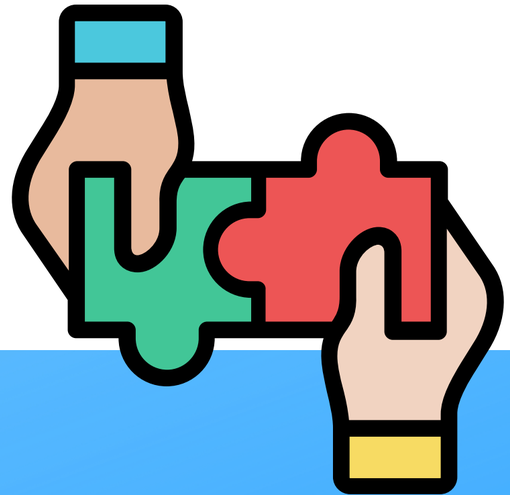
- Consent to contact at transition times
- Explain validity of ADHD diagnosis and effect on educational life
- Other co-existing conditions are distinct (eg LD) and may need different adjustments
- Treatment plan, ID any SEN with advice for reasonable adjustments and environmental modifications
- Value of feedback from placement to people with ADHD and their HC profs

Environmental Modifications

- Specific to circumstances eg change to seating, lighting, sound, decreasing distractions (eg headphones).
- Optimise education by shorter periods of focus with movement breaks
  Follow verbal requests with written instructions
- Use of TA’s
- Reasonable adjustments: a legal obligation to ensure not substantially disadvantaged
- Shared treatment plan: written care plan shared between HC professional and person with ADHD. In YP may be shared with families, schools, social care if relevant and agreed

Managing ADHD

- Ensure a comprehensive shared treatment plan addressing psychological, behavioural, educational needs taking account of:
- Severity and impairment, goals, resilience/protective factors, and the impact of other ND and MH conditions
- Regularly discuss how the child/YP and family members/carers want to be involved in treatment planning and decisions



Children Under 5

- 1st LINE:- Offer ADHD-focused parenting programme to parents of under 5’s with ADHD
- If after this ADHD symptoms persist across settings, still causing impairment after environmental modifcations implemented and reviewed, offer advice from specialist ADHD in younger children service (tertiary)
- DO NOT offer medication without specialist second opinion ideally from tertiary service

Children Over 5 and Young People

- Give information re ADHD and offer additional support that is ADHD focused..as few as 1 or 2 sessions
- If signs of ODD and CD offer parenting programmes in line with NICE for antisocial behavior and CD in children and YP
- Consider individual parent-training programmes when difficult to attend, family's needs are too complex to be met by group programmes

Children Over 5 and Young People contd.

Offer medication ONLY when:-

- ADHD still causing signs of impairment in at least 1 domain after environmental modifications implemented and reviewed
- Parents and carers have discussed information re ADHD
- A baseline assessment has been carried out
- Consider CBT for a YP who has benefited from medication but where impairment still in 1 domain eg social skills with peers, problem solving, active listening, difficulty expressing feelings…

Health advice

Healthy	Stress the value of a balanced diet, good nutrition and regular exercise
DO NOT advise	DO NOT advise elimination of additives/colourings
Diary	Keep diary if conviction food/drink causing hyperactivity. Refer to dietician if evidence.
DO NOT offer	DO NOT OFFER dietary fatty acid supplements.
Advise	Advise NO long-term evidence for few food diet

Medication

- All MEDICATIONS FOR ADHD ONLY initiated by HC professional with training/expertise in diagnosis and management of ADHD
- Health Care professionals initiating medication for ADHDshould be familiar with the pharmacokinetic profiles of all short and long-acting preps available for ADHD
- Ensure treatment tailored to individual needs
- Take account of variation in bioavailability/pharmacokinetic profiles of different preps

Baseline Assessment

- Review if CT to meet ADHD criteria and need medication
- Review social and educational circumstances,and co-existing MH and ND conditions
- Risk assess substance misuse/drug diversion
- Other meds
- Review physical health (med history, meds, height, weight, pulse, BP as compared to norms for age)
- Consider ECG

Medication Choice

1 Methylphenidate SA or LA

2a Consider switching to Lisdexamfetamine after 6 week trial on Methylphenidate at adequate dose and not achieved enough symptom reduction, with ongoing impairment

2b Consider switch to Dexamfetamine if responsive to Lisdexamfetamine but cannot tolerate longer effect

3 Offer Atomoxetine or Guanfacine if cannot tolerate Methylphenidate or Lisdexamfetamine or if not responding after 2 separate 6 week trials at adequate doses

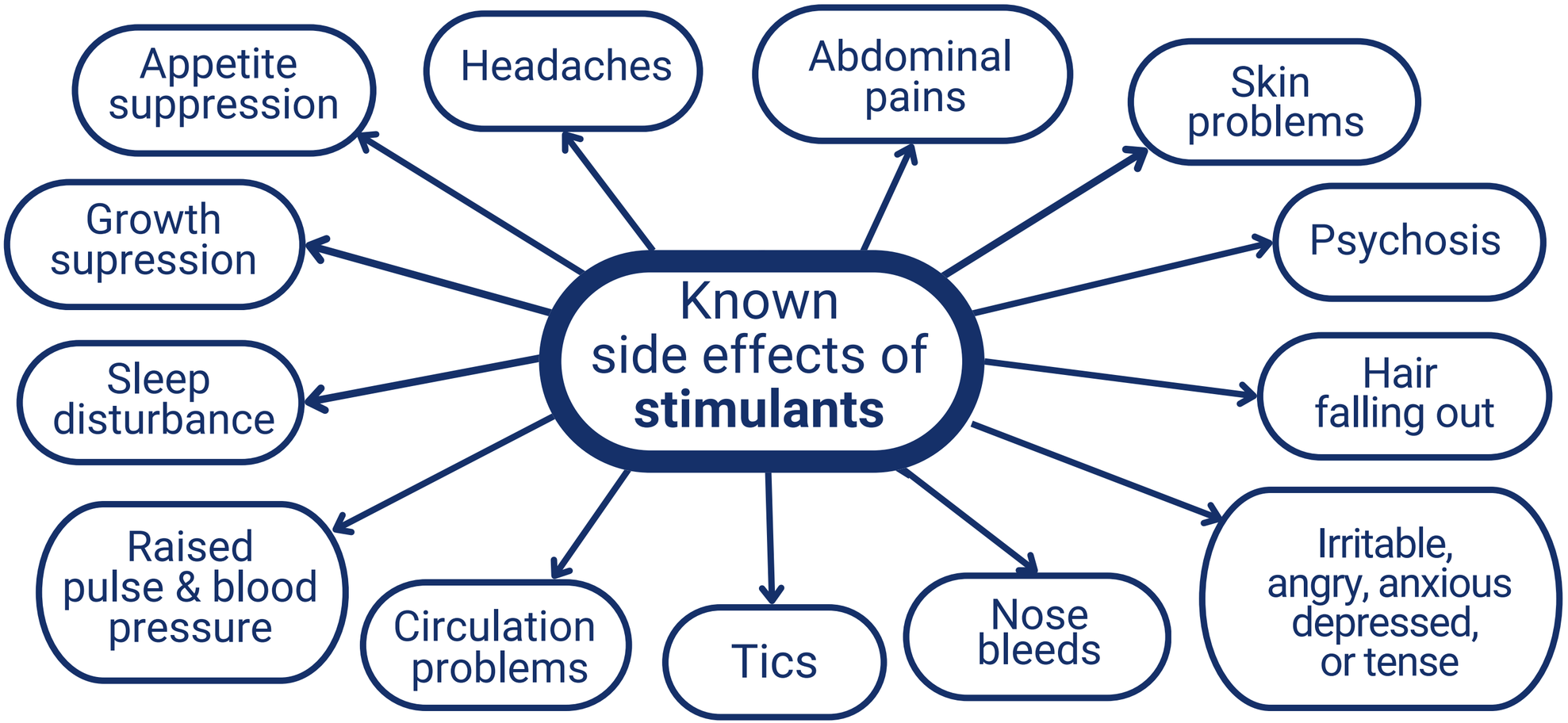
Medication Choice; Adults

1. NICE states Lisdexamfetamine or Methylphenidate (more recent research supports Lisdexamfetamine)
2. Dexamfetamine
3. Atomoxetine

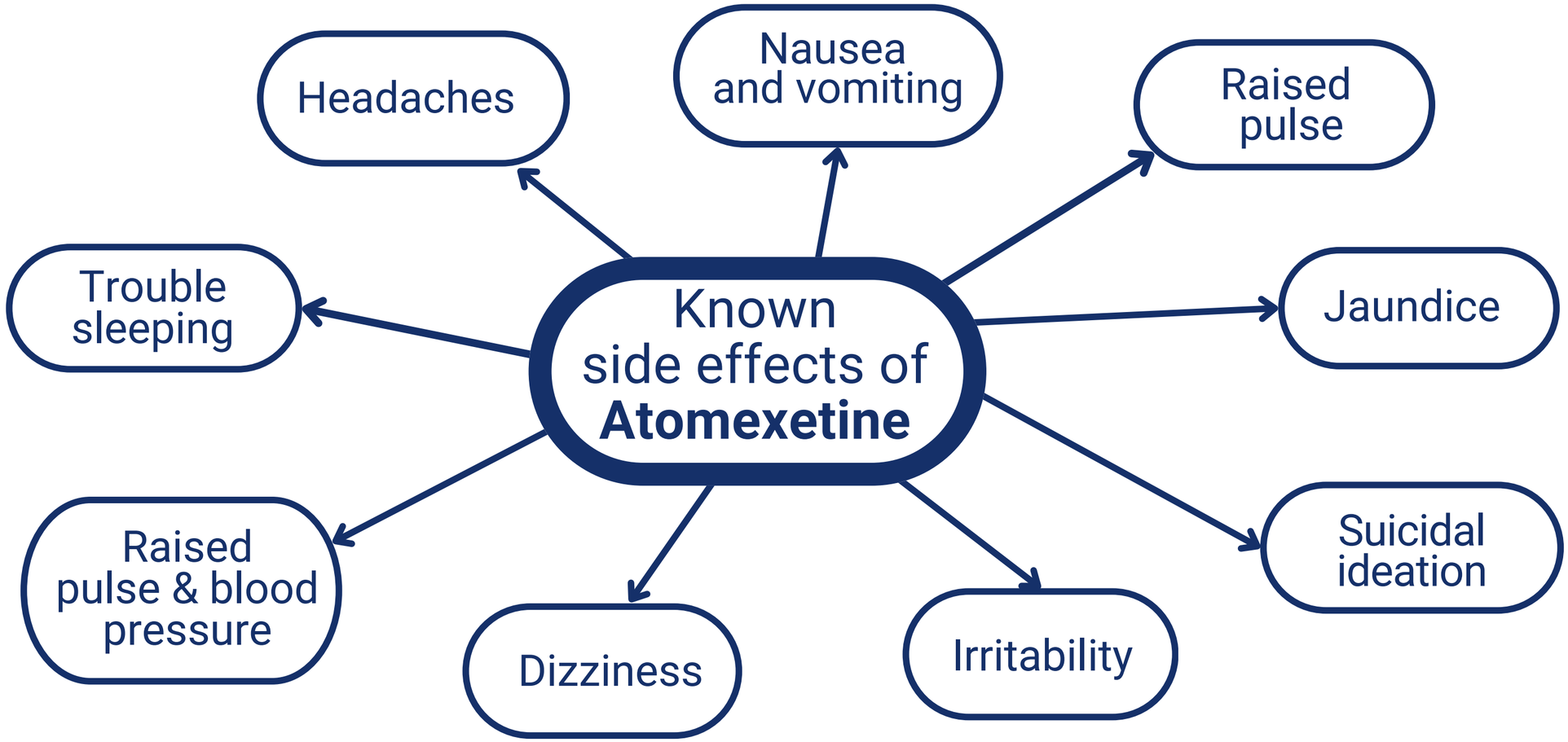
Medication Choice Contd..

- Refer for second opinion or tertiary centre if unresponsive to 1 or 2 stimulants and 1 non-stimulant
- DO NOT offer Clonidine without advice from tertiary centre
- DO NOT offer Atypical Antipsychotics in addition to stimulants with co-existing aggression, rages, irritability

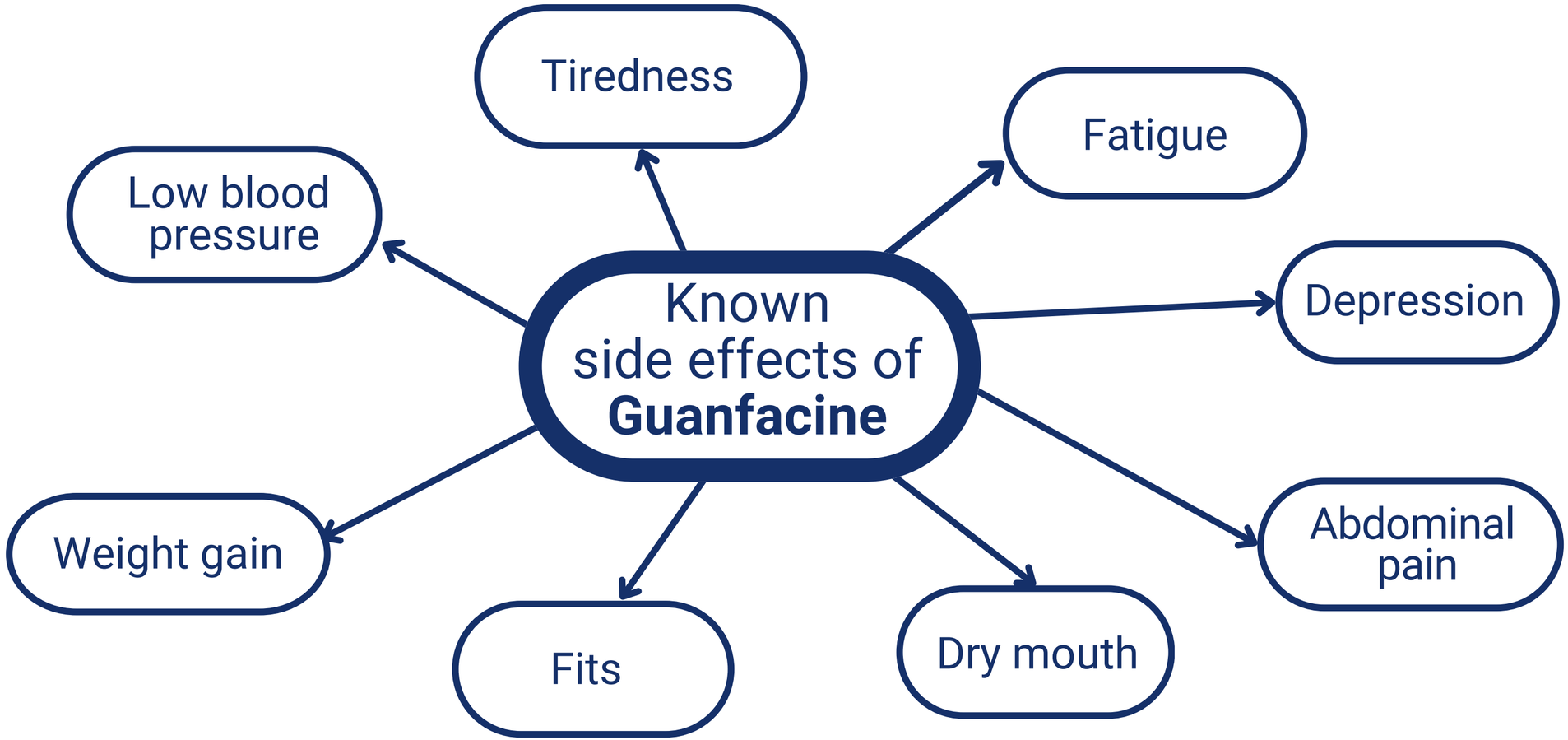
Hazards of prescribing



Hazards of prescribing contd.



Hazards of prescribing contd.



Hazards of prescribing; unknown long-term effects

- “ADHD drugs risk of heart disease” - Sunday Times
- World-wide drug shortages;
  “My ADHD medication ran out - then my life fell apart” - Sunday Times

Considerations

- Convenience, adherence, reducing stigma, reducing CD/storage probs at schools, risk of misuse and diversion, pharmacokinetic profiles
- IR drug for greater flexibility? MR and IR in combination to optimize effect
- Caution with stimulants if risk of diversion for cognitive enhancement or appetite suppression
- Do not offer IR or MR preps which can be injected if risk of misuse or diversion

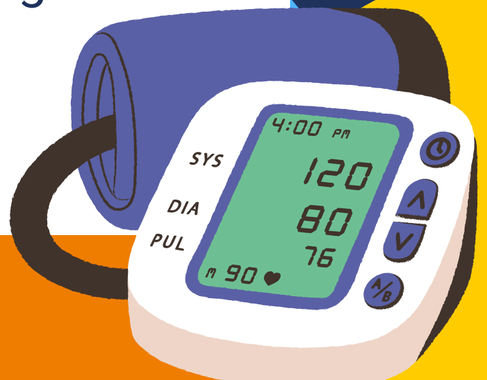
Physical Monitoring

Height and Weight:

- 6/12 in children and YP
- 3/12 in under 10’s
- Measure weight at 3 and 6 months after starting treatment then follow-up 10 and over every 6/12
- Growth charts
- Planned breaks if height affected

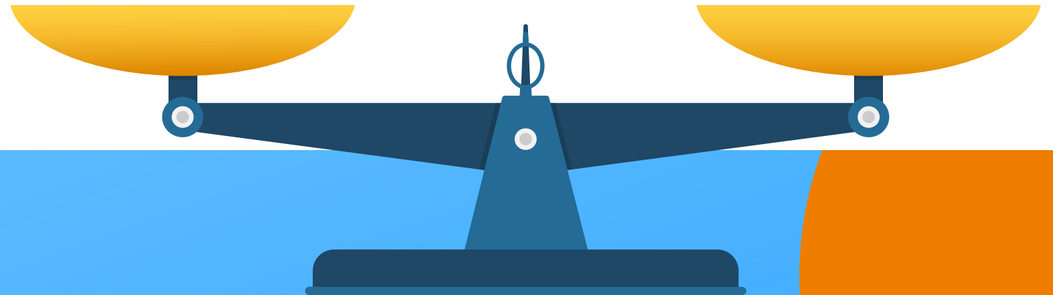
Cardiovascular Monitoring

- Monitor HR/BP cf norms before and after each dose change and every 6/12
- DO NOT offer routine blood tests or ECGs to people taking meds for ADHD unless clinical indication
- If HR greater than 120 bpm or systolic BP above 95th centile on at least 2 occasions refer to specialist in paediatric hypertension
- If on Guanfacine and has orthostatic hypotension or fainting reduce dose or switch



Tics/Seizures

- If tics stimulant-related does impairment outweigh benefits?
- If stimulant-related consider switch to Guanfacine, Atomoxetine, Clonidine, or stop
- If new or worsening seizures, review medication and stop any meds which might be contributing
- After investigation, cautiously reintroduce meds



Sleep, Worsening Behaviour, Stimulant Diversion

- Use sleep diaries. Adjust meds accordingly
- Worsening behavior: adjust meds and review diagnosis
- Monitor the potential for stimulant diversion as circumstances change

Sleep disturbance in ADHD more common than unaffected peers

- Higher prevalence of sleep disorder in children with neurological and developmental disorders, often chronic, leading to additional learning and behaviour problems, affecting the whole family’s health and wellbeing, and impair ability to continue in education and employment. (Gringras, BMJ, 2012).

Guardian May 2017

- Melatonin overprescribed by paediatricians and a ‘fashionable’ treatment for parents who want perfect children.

- Prof Paul Gringas, lead sleep clinician at Evalina Childrens’ Hospital quoted as saying it is overprescribed and should not be given when no behavioural techniques have been tried.

Annual Review

Health Care professional with training/expertise in ADHD should review at least yearly

ADHD and the Law

Criminal Law

- Criminal defence. Timing of offence? ADHD medication not covering the ADHD evenings.
- Prison population; 25% have ADHD; (BMC Psychiatry. Susan Young et al, Sep 2018).

ADHD and the Law contd.

PI/Clinical Negligence cases

- Could the traumatic event have caused ADHD? Would they have developed ADHD in any event?
- Is it PTSD or ADHD
- ABI leading to secondary ADHD. Murky, especially where some but not all features ADHD.
- Complex causation issues; Oxygen deprivation at birth, oxygen deprivation due to clinical negligence, prolonged hospitalisation. Subsequent ADHD diagnosis

ADHD and the Law contd.

Family Law

- LAC and adoption high prevalence of FASD, developmental trauma, ADHD.
- Warring parents where 1 parent with PR does not accept ADHD diagnosis and/or treatment in front of a judge. Both cases ruled in favour of diagnosis and treatment.

ADHD as a superpower

Problem solving	**Imagination**	**Creativity**	**Compassion**
Humour	**Determination**	**Perseverance**	**Observation** *(notice everything)*
Multitasking	**Hyper focus** *(often at deadlines)*	**Boundless energy**	**Zeal for life**

ADHD as a Superpower Contd.

- AI cannot recreate the ADHD creativity
- Increasingly business/professions look for ADHD
- Careers; fast paced, innovative, creative, caring for others, following one’s passion, highly structured.

Conclusions

- ADHD is a common condition
- The majority of cases also meet criteria for another comorbid condition
- ADHD can be overdiagnosed, missed, misdiagnosed, and/or undiagnosed
- There are risks associated with untreated ADHD but risks also associated with ADHD treatment.
- ADHD can be a superpower.

Thank you for listening

Do you have any questions?