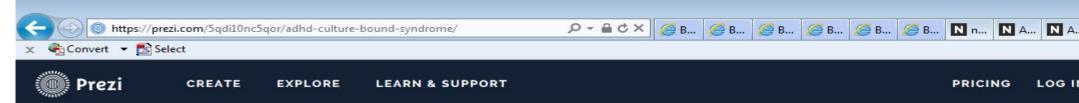


Adult ADHD and the Tower Hamlets Adult ADHD Clinic

PLT 11th November 2021

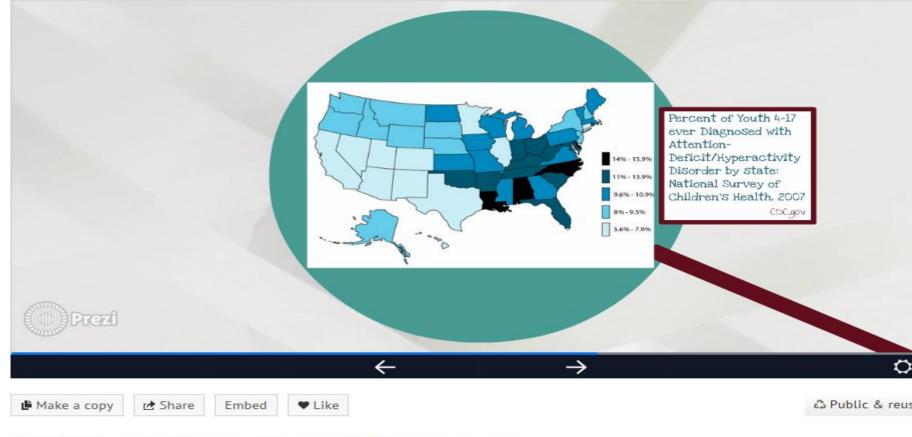
Rahul Bhattacharya





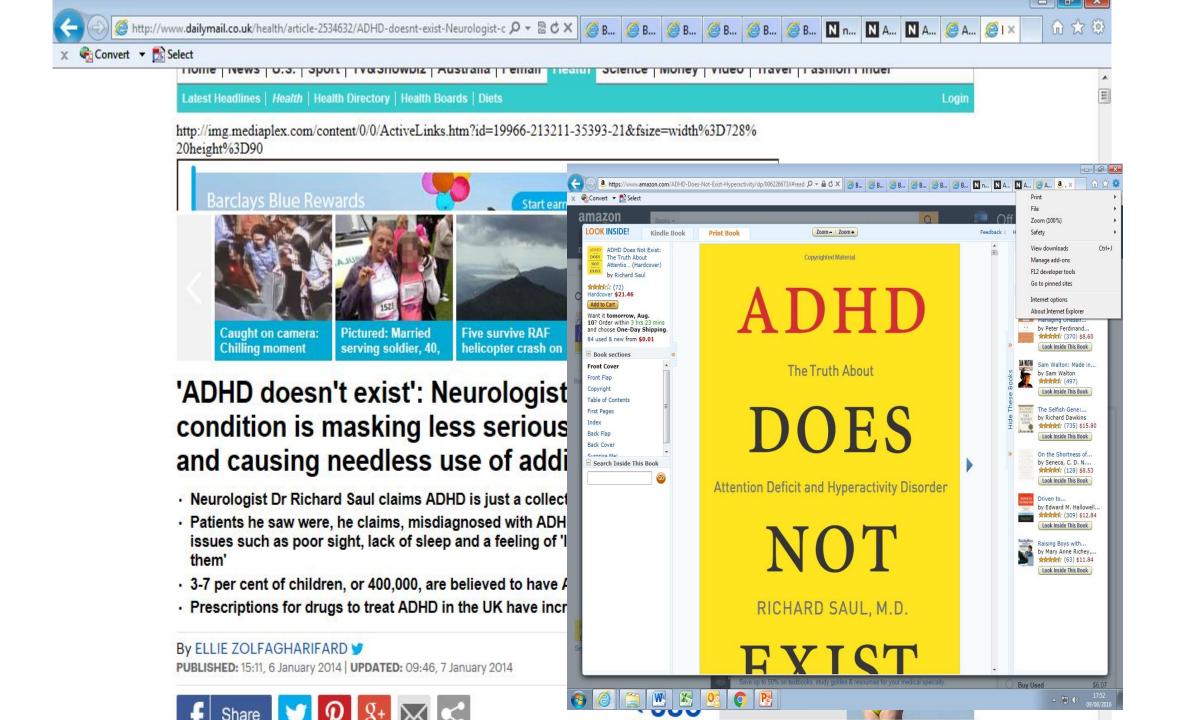
Houston, we have a problem!

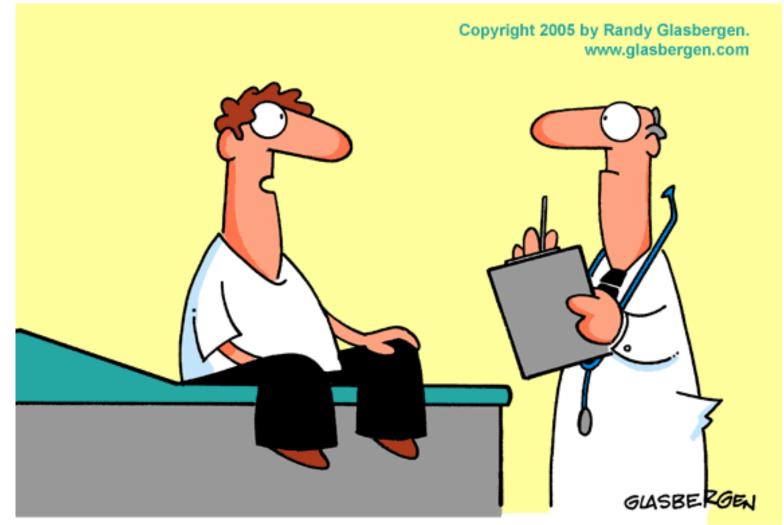
Oops. A firewall is blocking access to Prezi content. Check out this article to learn more or contact your system administrator.



ADHD - Culture-Bound Syndrome

Capstone Final





"I already diagnosed myself on the Internet. I'm only here for a second opinion."

ADHD in Adults ..issues..

- Self Diagnosis
- Over Diagnosis
- Under Diagnosis
- Stigma attached to other mental disorders leading to a PREFERENTIAL DIAGNOSIS of ADHD
- Establishing the **developmental** nature of the inattention or hyper-activityimpulsivity difficulties
- Challenges to VALIDITY of the diagnosis and DENIAL of the problem by colleagues (esp professional trained before ADHD diagnosis in adults was validated)
- Unlicensed and Controlled medications

What is the definition of ADHD?

- Primary ADHD is a neurodevelopmental disorder affecting both children and adults.
- It is described as a "persistent" or on-going pattern of inattention and/or hyperactivity-impulsivity that gets in the way of daily life or typical development.

There are three presentations of Primary ADHD:

- Combined inattentive & hyperactive-impulsive (DSM V)
- Inattentive (sub-type)
- Hyperactive-impulsive (sub-type)

Clinical picture of ADHD

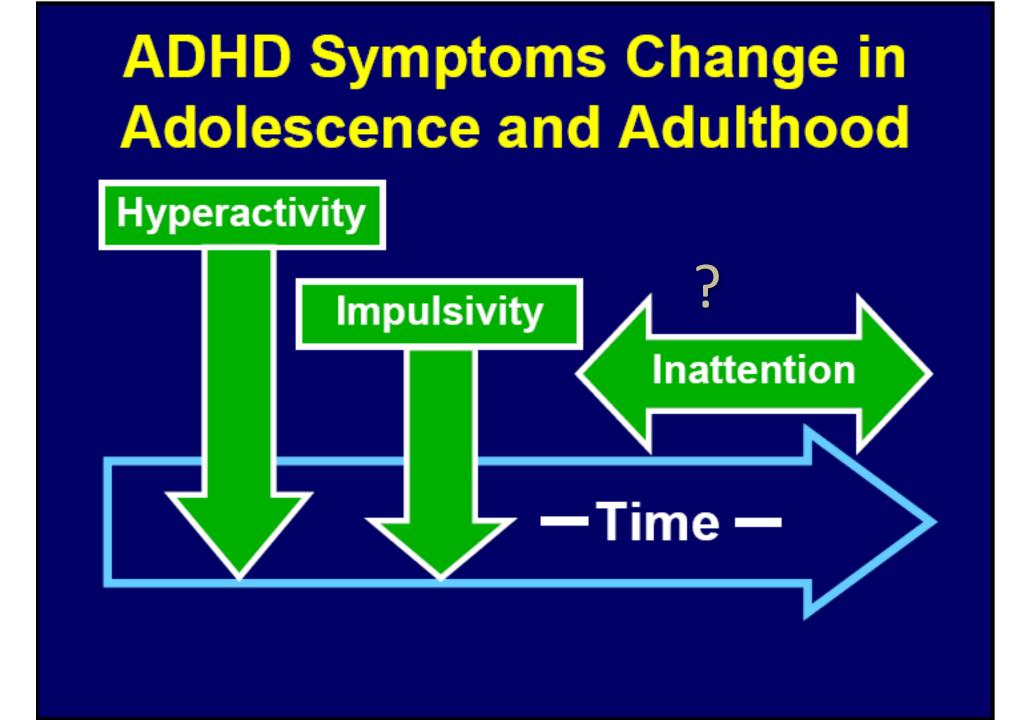
Lifetime symptoms of Attention-Deficit/Hyperactivity Disorder:

- Inattention: distracted, chaotic, forgetful, difficulty making decisions, organising and planning, poor sense of time and lateness, procrastination
- Hyperactive: (inner) restlessness, tense, talkative, busy; Associated with coping by: excessive sporting or physical activity /alcohol abuse/avoidance of activities than need to calm down
- Impulsive: acting before thinking, impatient, difficulty awaiting turn, blurting out

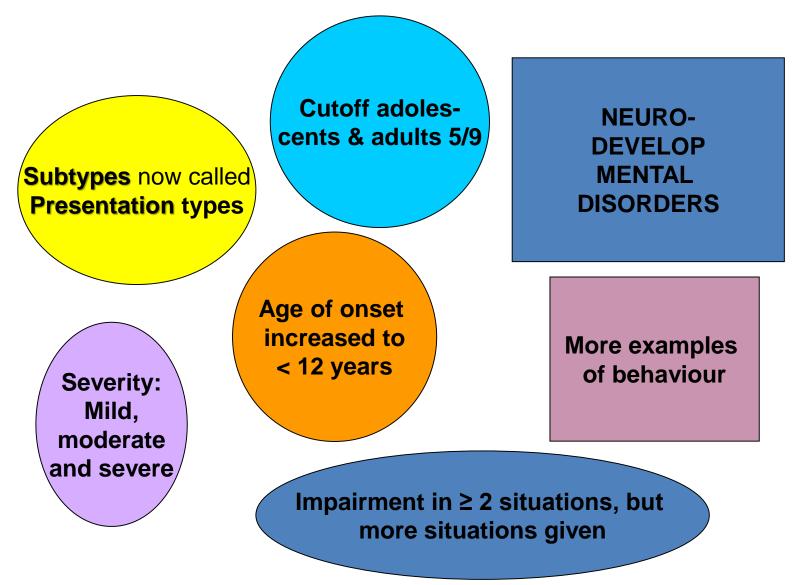
Associated findings: job hopping, gambling, binge eating, sensation seeking

In addition in 90% of adults, lifetime:

Mood swings and Angry outbursts



DSM-5 changes in ADHD



ICD 11

- The Neurodevelopmental Disorders section of the ICD-11 represents a significant departure from the ICD-10 and is very much aligned with recent decisions made by the DSM-5.
- The ICD 10 term was hyperkinetic disorder appeared under the ICD-10 category of behavioral and emotional disorders with onset in childhood or adolescence (So No Adult ADHD!?)
- In the ICD-10, pervasive developmental disorder is exclusionary for hyperkinetic disorder, a stipulation that is no longer present in the ICD-11 both ASD and ADHD may co-exist

ADHD in Adults: Compare and Contrast with Children

- Assessment of children is usually comprehensive with direct observation of the child in different settings (home, school..)
- Part of the neuro-developmental pathway
- Adults are usually assessed by a psychiatrist via interview, ideally with supplementary collateral info from someone who knew the individual in childhood (Asherson, 2005)
- 'INFORMANT ASSESSMENTS of behaviour is traditionally used in child & adolescent psychiatry in contrast to the focus on the MENTAL STATE EXAMINATION to assess the mental phenomena of psychiatric disorders in adult psychiatry' (Asherson, 2008)

Suggested protocol for assessment of ADHD in Adults

(Adapted from Crimlisk, 2011)

1. History and Mental State Examination	2. Collateral information
• Developmental History	• interviewing family member, childhood acquaintance
• Family History	• school reports
Past Psychiatric/Medical History	Physical risk assessment for Rx
• Substance use	
• Identification of key clinical characteristics of ADHD (see symptom checklist)	3. Rating scales for current symptoms and retrospective behaviour
• Assessment of risks	For example:
• Forensic History	• DIVA – retrospective and current symptoms (FREE)
• Assessment of functional impairment	• Wender Utah Rating Scale– retrospective and current symptoms (FREE)
• Comorbidity	Conners Adult ADHD Rating Scale
• Coping strategies/compensation mechanisms (e.g. alarms/reminders/reliance on others/high IQ)	• Barkley's Current Symptoms Scale
•Attitude to medication; sources of support	

Impulsivity:

-Blurts things out -Acts without thinking -Interrupting -Difficulty waiting or taking turns

Hyperactivity:

-Always on the go -Driven by a motor -Fidgety -Restless -Running -Climbing -Talking ++

Executive function difficulties:

Difficulty with recall and working memory -Reduced problem solving skills -Emotional ups and downs

Stimulation:

-Feeling over stimulated -Feeling under stimulated

Sleep Disturbance:

-Difficulty falling asleep -Restless sleep -Difficulty waking up and getting ready in the morning -Irritable and sleepy in the day

Learning problems: -Difficulty recalling information taught -Behind in class due to inattention -Difficulty structuring long pieces of work

Managing comorbidities: -DCD -Dyslexia -ASD -ODD -Anxiety -Low mood

ADHD Iceberg

Inattention:

-Difficulty focussing -Disorganised -Losing things -Making accidental mistakes -Finding it hard to listen for long periods -Easily bored -Mind wandering / day dreaming

Impaired sense of time:

-Difficult to predict how long tasks will take -Difficulty planning ahead -Losing track of time / lateness -Procrastination -Avoidant of long / boring tasks

Difficulty learning from rewards and punishment:

-Difficulty with motivation for long term rewards -Difficulty learning from past mistakes

Emotional ups and downs:

-Really excitable -Quick to anger / frustration -Perfectionism

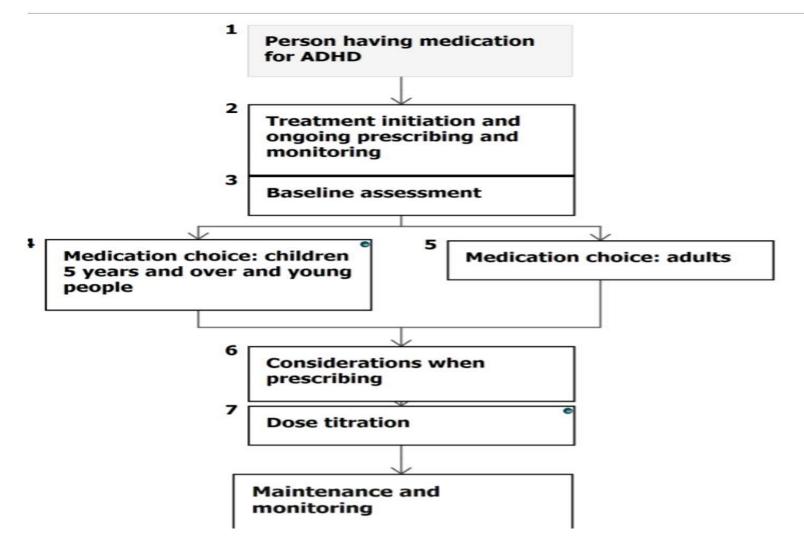
Managing ADHD – Adults (ref NICE guidelines)

- 1.5.15 Offer medication to adults with ADHD if their ADHD symptoms are still causing a significant impairment in at least one domain after environmental modifications have been implemented and reviewed.
- 1.5.16 Consider non-pharmacological treatment for adults with ADHD who have: Made an informed choice not to have medication; difficulty adhering to medication; found medication to be ineffective or cannot tolerate it.
- 1.5.17 Consider non-pharmacological treatment in combination with medication for adults with ADHD who have had partial benefited from medication
- 1.5.18 When non-pharmacological treatment is indicated for adults with ADHD, offer the following as a minimum: a structured supportive psychological intervention focused on ADHD; regular follow-up either in person or by phone.
 Treatment may involve elements of or a full course of CBT.

Medication

Medication for ADHD

NICE Pathways



Prescribing in Adult ADHD considerations

	Methylphenidate	Lisdexamfetamine	Dexamfetamine	Atomoxetine	Guanfacine XL
BNF	Not licensed for adult ADHD. Doses over 60 mg daily not licensed; doses of <i>Concerta</i> <i>XL</i> over 54 mg daily not licensed.	V	Not licensed for adult ADHD. Mention for refractory ADHD.	V	Not licensed for adults ADHD
NICE	V	√ (off label use if no childhood ADHD)	√ (if patients cannot tolerate the long profile of Lisdexamfetamine)	√ (off label use if no childhood ADHD)	X (NICE ESNM70)
Controlled drug	√ (Schedule 2)	√ (Schedule 2)	√ (Schedule 2)	Х	Х

Schedule	Schedule 2	Schedule 3	Schedule 4, Pt I	Schedule 4, Pt II	Schedule 5
(refers to schedules of the Misuse of Drugs Regulations)	Includes – opioids, (e.g. diamorphine, morphine, methadone), major stimulants (eg	Includes minor stimulants, temazepam, tramadol diethylpropion, buprenorphine, flunitrazepam,	Includes benzodiazepines zopiclone, zaleplon	Includes Anabolic and androgenic steroids, clenbuterol, growth hormones	Includes low strength opioids e.g. codeine, morphine 10mg/5ml
	amphetamines, lisdexamphetamin e), remifentanil secobarbital,	barbiturates except secobarbital. Pregabalin and Gabapentin			
Designation	CD POM	CD No register POM	CD Benz POM	CD Anab POM	CD Inv POM CD Inv P
Safe custody	Yes, except quinalbarbitone	Yes, (with certain exemptions, including tramadol, pregabalin, gabapentin and midazolam -see MEP)	No	No	No
Prescription requirements (including handwriting*) - apply to Out Patient and discharge prescriptions	Yes	Yes	No	No	No
Prescription is	No	o	Yes	Yes	Yes
repeatable*	i.e instances of an a	ded instruction on	the main prescriptio	n to be repeated e.g	. repeat x 3
Requisitions necessary?	Yes	Yes	No	No	No
Records to be kept in CD register	Yes	No	No	No	No
Pharmacist must ascertain the identity of the person collecting CD	Yes	No	No	No	No
Emergency supplies allowed	No	No, except phenobarbitone for epilepsy	Yes	Yes	Yes
Validity of prescription	28 days	28 days	28 days	28 days	6 mths (if POM)
Maximum duration that may be prescribed	30 days as good practice	30 days as good practice	30 days as good practice	30 days as good practice	30 days as good practice

And the Brands and Preperations

Duration of	Methylphenidate	Concerta XL®, Xagg	gitin XL [®] ,Delmosart [©]	[®] - 12 hours			Strattera®	Elvanse®	Dexedrine [®] /
action	(Ritalin®, Equasym®) <12 hours	Equasym XL® Medikinet XL [®] - 8 hours Xaggitin XL and Delmosart are both bioequivalent to Concerta XL – Xaggitin XL and Delmosart replace Concerta XL on the formulary					24 hours	– 8 hours	Dexamfeta mine 4 - 24 hours
Formulation	Ritalin [®] 10mg	Equasym®	Concerta ® XL	Medikinet ® XL	Delmosart PR ®	Xaggitin ® XL			4 - 24 HOUIS
	Medikinet®	10,20,30mg capsules	18mg, 27mg, 36mg tablets	5mg,10mg,20mg, 30mg, 40mg	18mg.27 mg,36mg,54mg				
	5mg, 10mg, 20mg tablets Immediate- release	Immediate – release component (30% of dose),	Immediate – release component (22% of dose),	Immediate release component (50% of the dose)		8mg, 27mg36mg54mg	Strattera® 10mg,18mg, 25mg, 40mg,	Elvanse® 30mg, 50mg, 70mg	Dexedrine®/ Dexamfetam ine
	preparations may be suitable if more flexible dosing regimens are needed, or during initial titration to determine correct dosing levels	Modified release component (70% of dose)	Modified release component (78% of dose)	Modified release component (50% of dose)			60mg, 80mg, 100mg		5mg

Medication (ref NICE Guidelines)

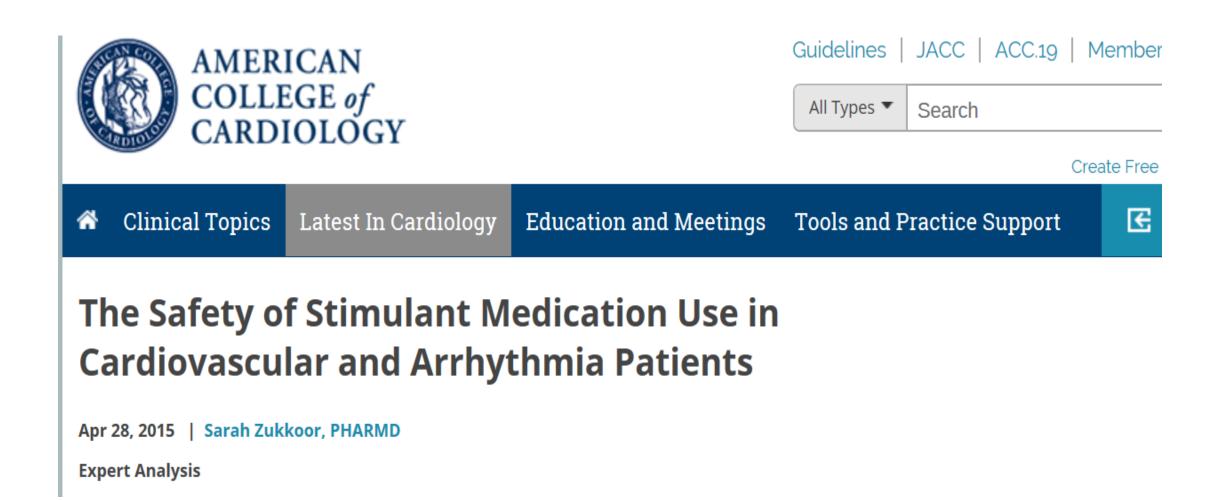
 1.7.2 All medication for ADHD should only be initiated by a healthcare professional with training and expertise in diagnosing and managing ADHD.

Baseline assessment

- 1.7.4 Before starting medication for ADHD: a review to confirm they continue to meet the criteria for ADHD and need treatment;
- Presence of coexisting mental health and neurodevelopmental conditions; current educational or employment circumstances; risk assessment for substance misuse and drug diversion;
- Review of physical health : current medications + height and weight; baseline pulse and blood pressure
- Medical History especially focusing on Cardiovascular assessment (risk history-1.7.5); an electrocardiogram (ECG) if the treatment may affect the QT interval.

History of congenital heart disease or previous cardiac surgery; history of sudden death in a first-degree relative under 40 years suggesting a cardiac disease; shortness of breath on exertion compared with peers; fainting on exertion or in response to fright or noise; palpitations that are rapid, regular and start and stop suddenly (fleeting occasional bumps are usually ectopic and do not need investigation); chest pain suggesting cardiac origin; signs of heart failure; a murmur heard on cardiac examination; blood pressure that is classified as hypertensive for adults

Cardiovascular safety of stimulants



Cardiovascular safety of stimulants

- 'The observed effects of stimulants on BP and HR would be expected to increase cardiovascular risk. Schelleman et al. found a 1.8-fold increase in risk of sudden death or ventricular arrhythmia in adult patients who initiated methylphenidate therapy. Methylphenidate dosage was inversely associated with risk, suggesting that the association may not be directly causal.'
- 'Conversely, a retrospective, population-based study of more than 150,000 adults with prescriptions for methylphenidate, amphetamine, or atomoxetine matched to non-users demonstrated a lack of association between stimulant use and incidence of MI, sudden cardiac death (SCD), and stroke. Individuals with cardiovascular disease were included and potential confounding variables were adjusted for in the analysis.'
- 'Trials have found no statistically or clinically significant changes in QT intervals over short and longterm treatment with methylphenidate and amphetamine drugs. Alternatively, there is evidence that atomoxetine may prolong the QT interval.'
- Zukkoor, 2015

Adult ADHD NICE recommended medication

- 1.7.11 Offer lisdexamfetamine or methylphenidate as first-line pharmacological treatment for adults with ADHD.
- 1.7.12 Consider switching to lisdexamfetamine for adults who have had a 6-week trial of methylphenidate at an adequate dose but have not derived enough benefit in terms of reduced ADHD symptoms and associated impairment.
- 1.7.13 Consider switching to methylphenidate for adults who have had a 6-week trial of lisdexamfetamine at an adequate dose but have not derived enough benefit in terms of reduced ADHD symptoms and associated impairment.
- 1.7.14 Consider dexamfetamine^[10] for adults whose ADHD symptoms are responding to lisdexamfetamine but who cannot tolerate the longer effect profile.
- 1.7.15 Offer atomoxetine^[11] to adults if they cannot tolerate lisdexamfetamine or methylphenidate or their symptoms have not responded to separate 6-week trials of lisdexamfetamine and methylphenidate, having considered alternative preparations and adequate doses.

Medication choice

THE LANCET Log in Register Psychiatry PDF * ARTICLES | VOLUME 5, ISSUE 9, P727-738, SEPTEMBER 01, 2018 PDF [580 KB] Figures Comparative efficacy and tolerability of medications for attention-deficit hyperactivity disorder in children, adolescents, and adults: a systematic review and network meta-analysis Samuele Cortese, MD • Nicoletta Adamo, MD • Cinzia Del Giovane, PhD • Christina Mohr-Jensen, PhD • Adrian J Hayes, MD • Sara Carucci, MD • et al. Show all authors

Medication choice

- 'Taking into account both efficacy and safety, evidence from this meta-analysis supports methylphenidate in children and adolescents, and amphetamines in adults, as preferred firstchoice medications for the short-term treatment of ADHD.'
 - Cortese at al, 2018

Medication management

- When prescribing Methylphenidate continue with the same brand specified
- Methylphenidate, Lisdexamfetamine and Dexamfetamine are Controlled Drugs (schedule 2) and prescriptions must be issued on a monthly basis. Medication requests for longer than a month (e.g. covering holidays) should be discussed with the Specialist and can be issued at the prescriber's discretion.

Outside initiation of ADHD prescribing and annual review, why refer?

Annual Review of medication

What NICE says:

- 1.10 Review of medication and discontinuation
- 1.10.1 A healthcare professional with training and expertise in managing ADHD should review ADHD medication at least once a year
- 1.10.2 Encourage people with ADHD to discuss any preferences
- 1.10.3 Consider trial periods of stopping medication or reducing the dose when assessment of the overall balance of benefits and harms suggests this may be appropriate. If the decision is made to continue medication, the reasons for this should be documented.

What I understand:

- Review of efficacy?
- Review due to tolerability issues?
- Review if any patient who becomes pregnant or who wishes to plan a pregnancy
- Worried about diversion?
- Collaborative decision making
- Documentation of plan balancing risk and benefit

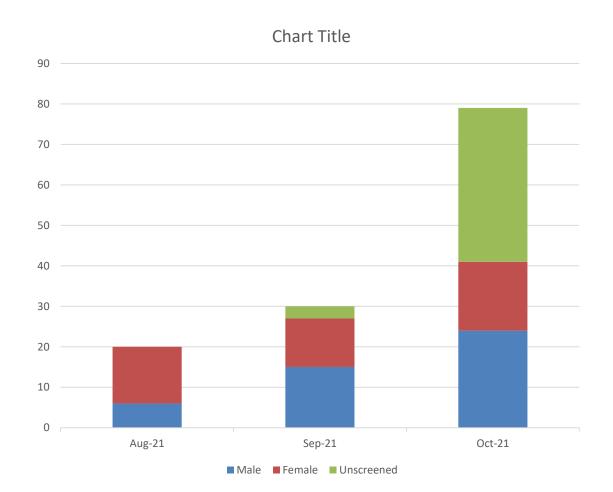
Tower Hamlets Adult ADHD Offer

- 0.2 wte Consultant Psychiatrists
- 0.5 wte Band 5 Admin
- 0.5 wteNeuro-Psychologist Band
 7 (yet to be recruited to)
- Team Manager

- Pharmacy budget
- Estates / Facilities

Referrals to the TH ADHD Clinic

- According to DSM 5 prevalence of ADHD is 2.5% of adult population (5% of children)
- Population of TH estimated in 2017- 308,000
- Approximately ¾ are adults with few older adults
- ? 5000- 6000 adults with ADHD
- Increasing population
- Changing demographics





Assessment Process and Treatment

- New diagnostic assessments require 2-3 clinic appointments, including a DIVA or other structured assessment.
- Medical reviews (existing diagnosis) require 1-2 clinic appointments.
- Medication optimization may need several appointments.
- Currently appointments are conducted virtually using Clinic.co with some face to face appointments.
- Patient resource pack given once diagnosis confirmed.

We care

We respe

We are inclusi

Referring to ADHD Clinic

- Why are you referring?
- Is this for Diagnosis
- Is this for Annual Medication Review
- Transfer of prescribing: if you are happy to continue in primary care ADHD clinic does not need referral
- If there is an existing diagnosis made and you want this reviewed by the ADHD clinic: PLEASE forward previous report / letter (if not available ask patient)

Points to Ponder before referring

For new Diagnosis:

- Why now?
- Is this a new problem?
- If at all possible please offer a pulse, BP and weight (especially if no recent reading in system)

For previous diagnosis

- If transferred from another practice – DOES this need a further appointment?
- if yes: Is there any previous letters / reports on system (please share); If diagnosed outside NHS please ask them to share their reports (Diagnostic letter / last clinic letter)

Co-morbidities in ADHD

State or Trait?

- Anxiety (sleep, concentration)
- Depressed (concentration)
- Substance Use Disorder (including Intoxication and chronic drug use)
- Rarely Bipolar disorder especially hypomania

Other Long term conditions

- Head Injury
- Personality Disorder (there are overlaps in diagnostic criteria)

We are increasing seeing queries around co-morbidities

- Autism Spectrum disorder
- ADHD is also common co-morbidity in intellectual disability

Types of Adult ADHD referral considerations

- Adult ADHD patients can come to GPs with a diagnosis from:
- a. Continuation of treatment from CAMHS ;
- b. Wanting to restart treatment (either being on treatment as a child or as an adult);
- c. With diagnosed with ADHD and under treatment elsewhere (ranging from NHS treatment in a different borough to private treatment- transfer request to GP/ NHS or from abroad);
- d. Diagnosed but not started on treatment.
- e. Requesting ADHD diagnosis for employment tribunals, court reports etc.

a. NO need to refer

b. REFER for re-titration / initiation especially there is a big gap between previous treatment. If brief gap and you are happy to restart please do so.

c.1. Transfer from other NHS service – please continue ; refer only for annual review

c.2. Private or abroad-

C2a- if diagnosed but not treated (not on meds and wants meds) or if you are concerned REFER

C2b- diagnosed and on ADHD meds if you are concerned REFER (think of likelihood of 'un-diagnosing' and discontinuing)

d. Check if the private or alternative source is requesting treatment and patient wants treatment; if patient wants meds and schedule of titration is not available AND/ OR not going to be done by the source who diagnosed ONLY then REFER to ADHD clinic for starting medication.

e. Do NOT refer

Physical Health Check

- Most ADHD Clinic consultations are held remotely.
- Patients referred would benefit from a baseline monitoring of weight and height (or BMI) / pulse / Blood
 Pressure sometimes patients as adults with capacity have capability to do this and share the result with clinic.
- \checkmark Where they agree I have suggested the ELFT health pods.
- \checkmark Where they attend face to face the ADHD clinic can carry these out.
- ✓ We also check shared care records to see if this is already available on SCR or HIE (RiO interfaces).
- ✓ We may sometimes have to ask for help from GP if the above 3 fail.
- Generally we don't need routine Bloods and ECG for ADHD medication. If needed the ADHD clinic can request them to get these done at RLH (or MEH) or with yourselves
- ECG is needed only when 'clinically indicated' (except for Guanfacine XL)
- > LFT may be required for some cases of Atomoxetine but not recommended as routine.
- Baseline FBC may be requested for Methylphenidate
- Suicidal risk monitoring with Atomoxetine- Crisis information pack is offered by the clinic

Types of non-pharmacological treatments

- 1. Psychoeducation about ADHD and its treatment to address prejudices/fears
- 2. Cognitive-behavioral treatments to modify maladaptive attitudes
- 3. Remedial instruction/coaching to modify deficits or maladaptive behaviors

Change in approach in adults v CYP

Age group	Typical non-pharmacological treatment approaches*
Pre-school children	Parent training Indirect
Young school children	Parent training Classroom interventions
Older school children	Parent training Classroom interventions Multimodal approaches involving the parents, teachers and individuals
Adolescents	Classroom interventions Social skills training Cognitive behavioural therapy Multimodal approaches involving the parents, teachers and individuals
Adults	Cognitive behavioural therapy Dialectical behavioural therapy Direct

*All listed psychosocial interventions, except cognitive behavioural therapy in adults, are recommended first-line treatments unless impairments are severe or the individual with ADHD is non-responsive to psychosocial interventions

Remedial instruction or Coaching

Coaching has long been around for ADHD and revolves around the idea of 'Skill deficiencies' that persist post treatment / into adulthood

- Study skills and academic deficits
- Organization of ideas and stuff
- Priority setting & time management
- Budgeting income and spending
- Monitoring self in conversations

Pills don't teach skills.

Screening Questionnaires

Scale	
Adult ADHD Self Reported Scale (ASRS)	Freely available from WHO; Main version – 18 items; Short version for screening – 6 items
Barkley Workbook scale	DSM IV symptom checklist
DuPaul Rating Scale	DSM IV symptom checklist
Weiss Impairment Scale	Detailed coverage of impairments associated with ADHD in adults
Barkley Impairment Items	10 question screening tool
Connors Adult ADHD rating scale	Similar to DIVA but not freely available
DIVA versions range from 2.0 to 5.0	DSM based scale used in the clinic
Wender Utah Rating Scale	Extensive questions with several sham questions

Websites

- AADD-UK: is a site for and by adults with ADHD. It is a small, unfunded charity that runs some support groups as well as a website and online community. They aim to raise awareness of ADHD in adulthood. <u>www.aadduk.org</u>
- ADDitude: is a website and magazine for children and adults with ADHD. It offers a variety of resources including articles, signposting to other resources, and a mailing list where they send you regular articles and

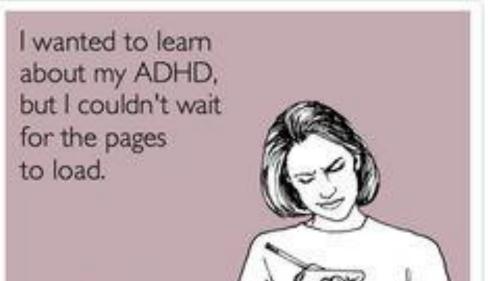
information. <u>www.additudemag.com</u>

- TotallyADD: is a website dedicated to helping adults with ADHD and those affected by it (e.g. family members, employers, health professionals). They provide lots of information as well as documentaries; however, there is sometimes a fee to watch their videos. <u>www.totallyadd.com</u>
- ADDISS offer The National Attention Deficit Disorder Information and Support Service. ADDISS provides peoplefriendly information and resources about Attention Deficit Hyperactivity Disorder to anyone who needs assistance - parents, sufferers, teachers or health professionals. <u>http://www.addiss.co.uk/</u>
- UK Adult ADHD Network (UKAAN): was established in March 2009 to provide support, education, research and training for mental health professionals working with adults with Attention Deficit Hyperactivity Disorder (ADHD). UKAAN was founded by a group of experienced mental health specialists who run clinical services for adults with ADHD within the National Health Service <u>www.ukaan.org/</u>
- The City and Hackney ADHD clinic has developed an excellent ADHD resource pack which is offered post diagnosis to patients

Thank you

elft.adhdservice@nhs.net

QUESTIONS



the second se