## Attention Deficit Hyperactivity Disorder in Adults

Psychological Counsellors in Higher Education in Ireland – 27<sup>th</sup> January 2023

Jessica Bramham
Professor of Clinical Neuropsychology



#### Overview

#### 1. Validity:

Does ADHD exist in adults?

#### 2. Presentation:

What to look for?
What are the co-occurring difficulties?

#### 3. Intervention:

What can be done to help?

#### 4. Current services in Ireland:

What is available for adults with ADHD in 2023?



## 1. Validity of ADHD in adults



#### Does ADHD exist in adults?

#### Evidence from:

- Prospective studies
- Genetics
- Neuroimaging
- Neuropsychology
- Treatment response
- Clinical presentation



## Prospective studies



- ADHD symptoms often persist into adolescence and adulthood. Overt hyperactive-impulsive symptoms decline or 'burn out' with increasing age (or may be internalised), but inattentive symptoms show less improvements. (e.g. Taylor et al, 1996, Faraone et al, 2000; Fischer et al, 2002, Wender et al, 2001)
- Proportion who continue to meet diagnostic criteria varies from 4-80% depending on methods – meta-analysis shows 40-50% (Sibley et al, 2016)
- Majority (72-90%) continue to show at least one "disabling symptom" and evidence of "clinically significant impairment" (Biederman et al, 2000)



Predictors of persistence of ADHD into adulthood metaanalysis – severity of ADHD, childhood treatment for ADHD, comorbid conduct disorder, comorbid major depressive disorder (Caye et al, 2016)

#### Genetics

 Multi-gene interaction (dopamine, norepinephrine, epinephrine, seratonin, GABA) increases risk of ADHD

Heritability of ADHD is 0.75 to 0.91

Genetic risk of ADHD

•	If you have a <i>parent</i> with ADHD -	57%
	If your <i>child</i> has ADHD -	29%
	If your sibling has ADHD -	41%
	If your <i>identical twin</i> has ADHD -	80%



#### ADHD and the brain

https://www.youtube.com/watch?v=4r3XWj269\_g



## ADHD and the brain

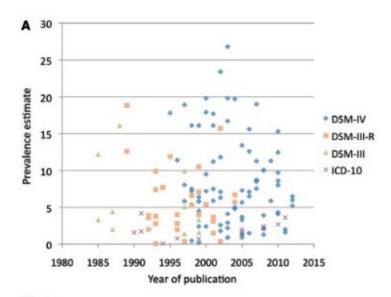


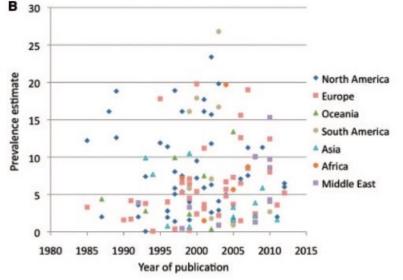


#### Prevalence of ADHD



- Same range worldwide
  - 8-12% of children
  - 1-4% of adults
- Meta-analysis of prevalence (Polanczyk et al 2007, repeated 2014) showed it is not increasing but being diagnosed more often
- Meta-analysis of prevalence in adult outpatient mental health services is 26.7% (Adamis et al, 2022)
- High rates of undiagnosed ADHD in Irish adult mental health services (e.g. Dublin 23.9%, Syed et al, 2010; Sligo 20.7%, Adamis et al, 2018)





## 2. Clinical presentation

Assessment of adult ADHD

• DSM-5 Symptoms in adults

Co-occurring difficulties



#### Assessment of Adult ADHD

- Individual and informant interviews
   e.g. Diagnostic Interview for ADHD in Adults (DIVA)
   Conners Adult ADHD Diagnostic Interview for DSM-IV (CAADID)
- Childhood documentation
   e.g. school reports, statement of special needs
- Adulthood documentation e.g. employers references, occupational health, reports
- Psychometric assessment
   i.e. rating scales



## DSM-5 Symptoms of ADHD

#### **Inattention**

- 1. Fails to give close attention to detail
- 2. Difficulty sustaining attention
- 3. Does not listen when spoken to
- 4. Fails to follow through on instructions and complete task
- Difficulty organising tasks or activities
- 6. Avoids or dislikes sustained mental effort
- 7. Loses things needed for tasks
- 8. Easily distracted by extraneous stimuli

Forgetful in daily activities

#### **Hyperactivity**

- 1. Fidgets with hands or feet
- 2. Leaves seat in situations where is inappropriate
- 3. Wanders or runs excessively /subjective feelings of restlessness
- 4. Difficulty engaging in leisure activities quietly
- 5. 'On the go' or acts as if driven by a motor
- 6. Talks excessively

#### **Impulsivity**

- 1. Blurts out answers before questions completed
- 2. Difficulty in waiting turn
- 3. Interrupting or intruding on others



## DSM-5 Symptoms of ADHD

#### **Inattention**

- 1. Fails to give close attention to detail
- 2. Difficulty sustaining attention
- 3. Does not listen when spoken to
- 4. Fails to follow through on instructions and complete task
- Difficulty organising tasks or activities
- 6. Avoids or dislikes sustained mental effort
- 7. Loses things needed for tasks
- 8. Easily distracted by extraneous stimuli

Forgetful in daily activities

#### **Hyperactivity**

- 1. Fidgets with hands or feet
- 2. Leaves seat in situations where is inappropriate
- 3. Wanders or runs excessively /subjective feelings of restlessness
- 4. Difficulty engaging in leisure activities quietly
- 5. 'On the go' or acts as if driven by a motor
- 6. Talks excessively

#### **Impulsivity**

- 1. Blurts out answers before questions completed
- 2. Difficulty in waiting turn
- 3. Interrupting or intruding on others



+ Emotional regulation difficulties

## Diagnoses

- Combined type: 6+ inattentive and 6+ hyperactive/impulsive
- Inattentive subtype: 6+ inattentive symptoms;
   <6 hyperactive/impulsive (also known as ADD)</li>
- **Hyperactive/impulsive subtype:** 6+ hyperactive/impulsive symptoms; <6 hyperactive/impulsive
- Has to be present from before 12 years and
- In adults can have only >5 rather than 6 symptoms (change from DSM-IV)

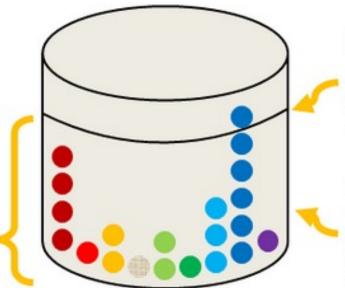


Functional impairment (daily responsibilities, education, work, leisure, social relationships, money, driving, offending)

## Neurodiversity diagnosis – Amanda Kirby

You can picture someone's challenges as like different coloured and different Sized balls in a bucket:

Number of balls indicates the severity of the challenge in that area. Some are easier to see!



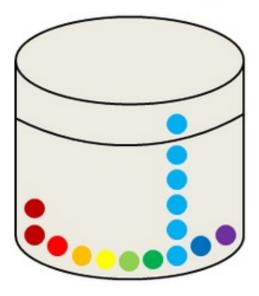
Have to meet a certain level to 'count' and get a diagnosis for challenges or meet the criteria for services

Different colours indicate different types of challenge, e.g. reading, attention, social, motor, home life, behaviours

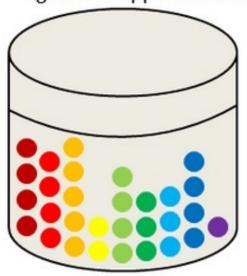


## Neurodiversity diagnosis – Amanda Kirby

This system works well for people with a single colour ball = one area of challenge



Fails people with multiple needs or less well identified needs who don't quite meet a criteria = greater support needs





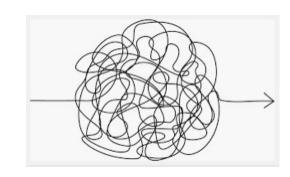
## Co-occurring difficulties with ADHD

- Only 14% are 'simple ADHD'
- Anxiety 25-50%
- Depression 16-31%
- Dysthymia 19-37%
- Bipolar disorder 9-22%
- Substance misuse disorders 25-50%
- Personality disorder 18-25%
- Other specific learning difficulty 40%

(Kessler et al, 2006)



## Additional Adult ADHD Difficulties

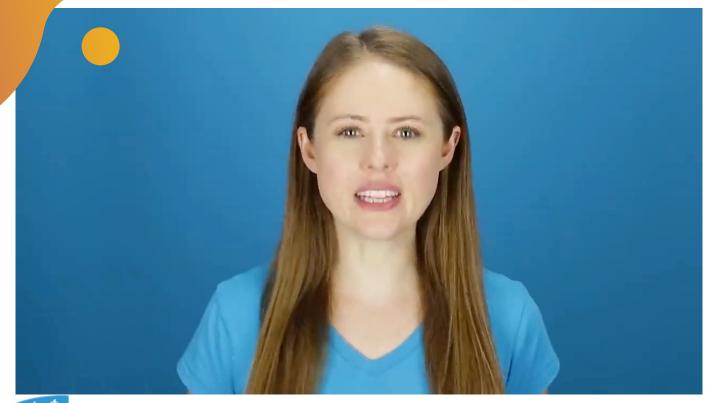


- Low self-esteem
- Motivation problems
- Procrastination
- Low mood
- Anxiety
- Emotion regulation problems
- Low tolerance of frustration
- Crowded thoughts or ceaseless mental activity
- Sleep problems
- Relationship problems
- Substance use problems









ADHD - How to (explain) ADHD

## Anxiety in ADHD

- Fear of failure anticipatory anxiety
- Marked self-consciousness or susceptibility to embarrassment or humiliation
- Concerns about competence and performance anxiety
- Exacerbates attentional difficulties
- 'Adaptive' OCD



• Over- focusing and perseverative behaviour

## Social relationship difficulties

- Rejection sensitivity dysphoria
- Lack intimate confiding relationships
- Feeling 'different' from others
- Impulsivity and emotional dysregulation can lead to relationship breakdown
- Problems maintaining relationships due to executive functioning
- Low boredom threshold
- Others are intolerant of ADHD differences
- Dilemmas around disclosure of ADHD



## Low mood and depression

- Criticism for being 'lazy' or 'stupid'
- Lack of supportive relationships
- Low self-esteem through not achieving potential
- Failure to finish tasks lack of sense of achievement/mastery
- Mood regulation difficulties- emotional lability
- Low mood can present as irritability, being 'snappy'
- Low mood following diagnosis
- Increased risk of self-harm and suicide attempts



#### ADHD & Suicidal Behaviour/Self-Harm





#### Three possible reasons for this increased risk are:

(Furczyk and Thome, 2014)

- 1. Symptoms of **ADHD** itself e.g. impulsivity
- 2. Elevated levels of co-occurring mental health difficulties e.g.
  - a) depression
  - b) anxiety
  - c) emotion regulation difficulties
- 3. Elevated levels of alcohol/substance use

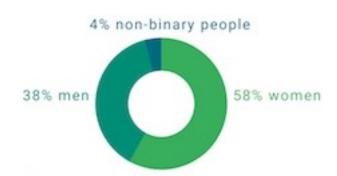


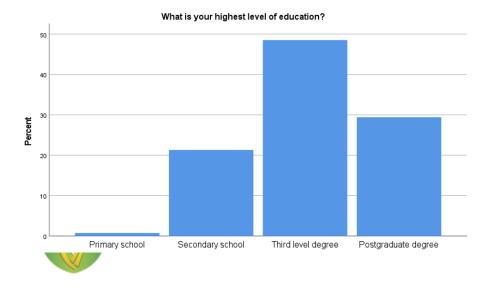
## ADHD and suicide in Ireland study

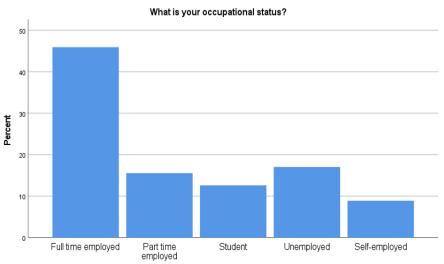




- N=136 participants with ADHD; 90% diagnosed in adulthood
- Mean age was 39 years (range 18-71 years)
- 78% had third level education
- 70% employed; 13% students; 17% unemployed

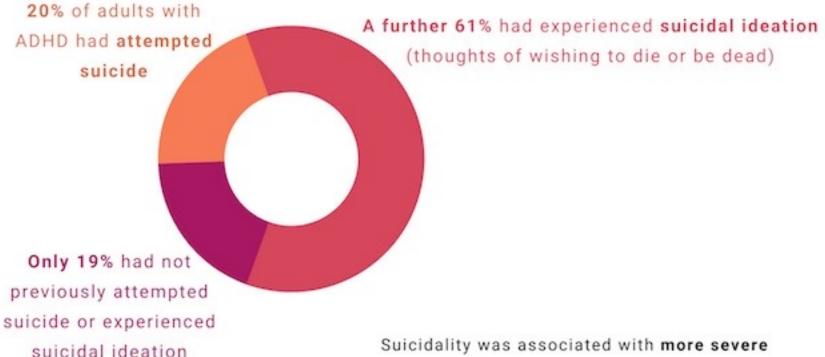






## Findings: Suicidal Behaviour







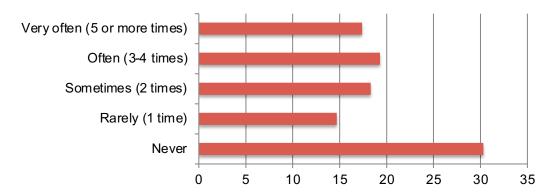
Suicidality was associated with more severe ADHD symptoms, anxiety and use of cocaine, amphetamines and sedatives

Suicidality was not associated with depression, alcohol or cannabis use

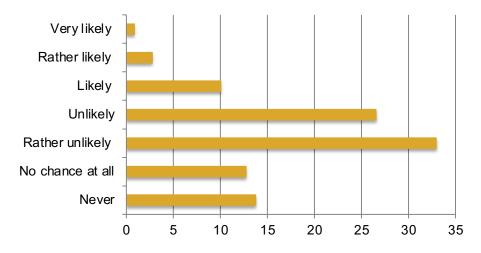
## Findings: Suicidal Behaviour



How many times have you thought about killing yourself in the past year?



How likely is it that you will attempt suicide one day in the future?

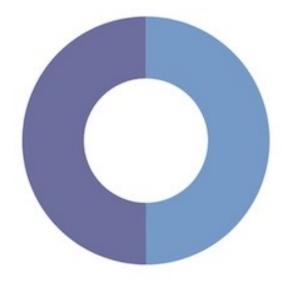




### Findings: Self-Harm



50% of adults with ADHD have self-harmed



Self-harm was associated with more severe ADHD symptoms emotional dysregulation cannabis use

#### Mean age when first harmed self: 13 years (range 3-47 years)

#### Types of self-harm

72%
71%
62%
62%
56%
49%
49%
28%
27%
24%
22%
21%

National Self-Harm Registry Ireland for self-harm in hospitals recorded rate 0.2% of general population Up to 20 times higher rates in the community i.e. 4% of population (based on McMahon et al, 2020)

# 3. INTERVENTIONS FOR ADHD IN ADULTS



## Improvements in adult ADHD difficulties



 Biological change affects the symptoms directly, e.g. pharmacological treatment, maturation of the brain.



• **Environmental change**, e.g. the ability to change the environment so that problems arising from the difficulties are reduced.



 Psychological coping strategies, e.g. by the individual recognising how difficulties affect them and the development of internal techniques to manage their challenges.



#### **ADHD** medication

#### **Cerebral Stimulants**

- Methylphenidate
  - Short acting forms (e.g. Ritalin, Equasym)
  - Sustained release (e.g. Concerta)
- Dexamphetamine (e.g. Dexadrine, Adderal)

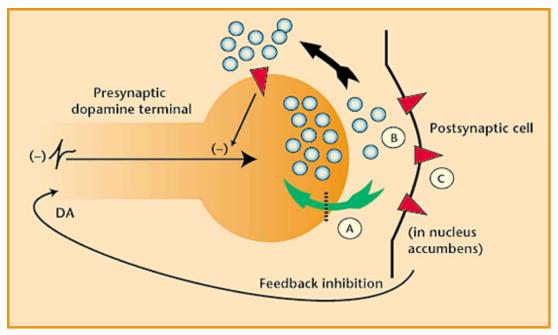
#### **Non-stimulant drugs**

- Atomoxetine (e.g. Strattera)
- Venlafaxine



#### Cerebral Stimulants

- Blocking of dopamine transporter
- Increase intrasynaptic dopamine and norepinephrine





## ADHD and the stigma of medication

https://www.youtube.com/watch?v=38qpm6VKB
 Fc



## Evidence-based psychological interventions for adults with ADHD

### Cognitive Behavioural Therapy

- Scholz et al, (2020); Fullen et al (2020), Young et al (2016)
   Systematic reviews and meta-analyses
- Safren et al. (2005) CBT for medication-treated ADHD with residual symptoms
- Rostain & Ramsay (2006) Combined medication and CBT
- Bramham et al (2009) Young-Bramham CBT workshops
- Included psychoeducation, coping strategy training, building on strengths

#### ADHD coaching

- Tuttle et al (2016) Systematic review 22 studies
- Zwart & Kallemeyn (2001) coaching for college students with ADHD & LD
- Swartz, Prevatt & Proctor (2005) case study evidence
- Included time management, motivation, increasing self-efficacy, short-term and long-term objectives with rewards and consequences
- More action, less insight oriented



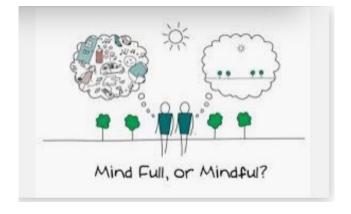
## Evidence-based psychological interventions

#### Dialectical behavioural therapy

- E.g. Philipsen et al (2007); Nasri et al (2020)
- Including psychoeducation, mindfulness, 'chaos and control' organisational strategies, emotion regulation, stress management, substance use, self respect

#### Mindfulness meditation

- E.g. Zylowska et al (2008); Edel et al (2017)
- Focus on attentional control, distractibility awareness, and emotion regulation

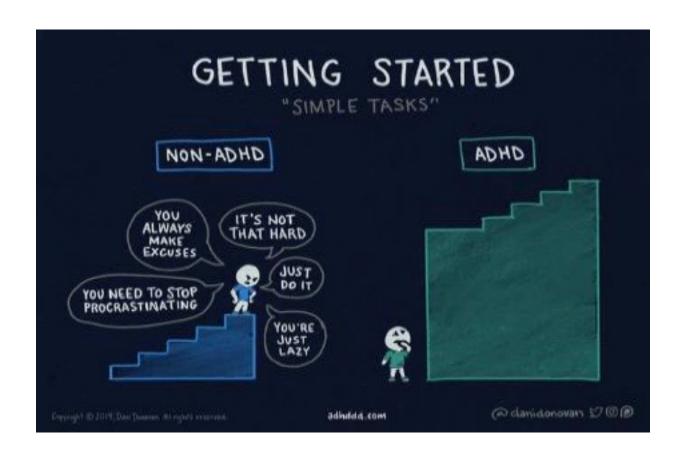




## 'The Motivation Bridge'

Can apply to therapy too

https://www.youtube.com/watch?v=OM0Xv0eVGtY





# 4. ADHD IN ADULTS IN IRELAND



#### 3<sup>rd</sup> Level for Students with ADHD



24% increase in the number of students registered with ADHD in disability services across third-level education in Ireland from 2020-2021 (AHEAD, 2022).

Press release

New National Access Plan to drive equality of access to higher education launched by Minister Harris



From <u>Department of Further and Higher Education, Research, Innovation and Science</u> Published on 31 August 2022

#### **PHD - CHRISTINE BOYD**



**Disability Services** 

**Student Health Services** 

**Counselling Services** 











































#### **PRELIMINARY RESULTS**



 One institution (UCC) provides ADHD assessments



27% of institutions have access to a psychologist for ADHD specific support

14% of institutions provide psychiatric support for ADHD



27% of institutions provide ADHD-specific OT services



#### **RESULTS**





All institutions offer exam supports, additional study skills and assistive technologies to students with ADHD with a diagnosis





#### **KEY RECOMMENDATIONS**

ADHD/ wider
neurodiversity services
need to be developed
tailored to support
students with ADHD in an
academic environment

Services should include multidisciplinary teams who are skilled in assessment and interventions.

The provision of training for academic staff is recommended to improve knowledge of the condition.



#### **WHAT NEXT?**



An Roinn Breisoideachais agus Ardoideachais, Taighde, Nuálaíochta agus Eolaíochta Department of Further and Higher Education, Research, Innovation and Science





Further research will explore the current assessment pathways and needs of students with ADHD



# HSE National Clinical Programme for Adults with ADHD

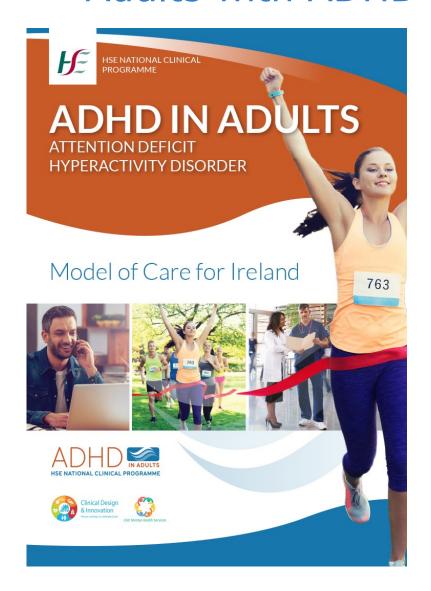
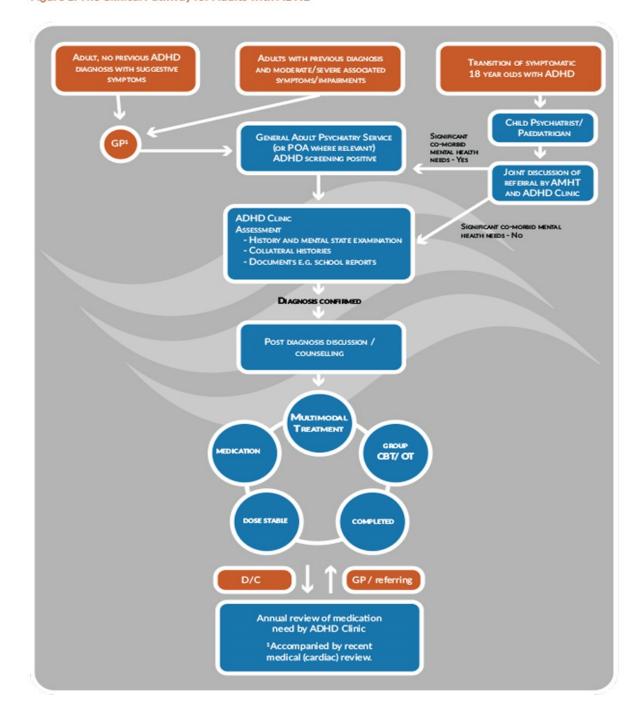




Figure 1: The Clinical Pathway for Adults with ADHD

# The Clinical Pathway





#### Model of Care



- Assessment
  - DIVA
  - including co-morbidities
  - functional impairments
  - collateral history
- Post-assessment discussion
- Multimodal HSE interventions
  - ADHD specific medication
  - Psycho-education

    ADHD specific CBT

    OT intervention

- Non HSE interventions:
  - Voluntary organisations (e.g. ADHD Ireland)
    - information, support, education
  - ADHD specific coaching
  - Finding and keeping a job, e.g. EmployAbility.

#### Table 2: Distribution of proposed ADHD clinics

## Distribution of Clinics



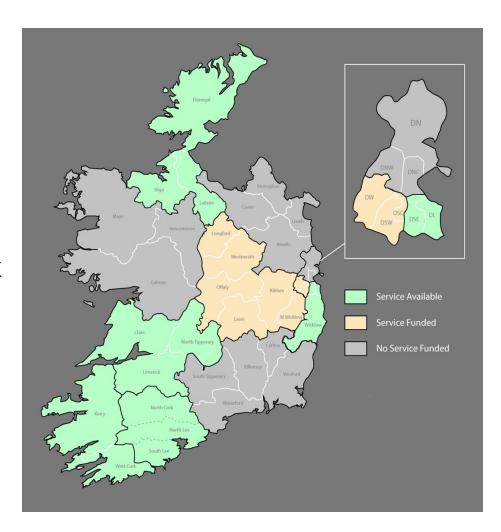


<sup>1</sup> Served by proposed separate forensic ADHD Clinic

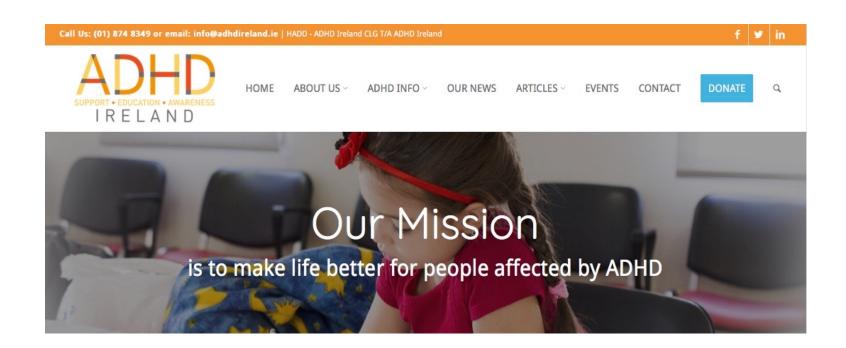
#### Implementation in 2022/23

- 2022 €1.8m allocated
- 4 new sites in recruitment
- 2 of 4 sites now operational
  - CHO4 Cork
  - CHO4 Kerry/West Cork
  - CHO7 Dublin
  - CHO8 Midlands/CHO7 Kildare West Wicklow.





#### Other Supports for Adults with ADHD



Information/self-help App



 UMAAP - Understanding and Managing Adult ADHD Programme





Adult ADHD App Launch, 8th of November 2022

# Developing the Adult ADHD App

Christina Seery, PhD Candidate, UCD School of Psychology

App Working Group: Christina Seery, Fiona O'Riordan, Ken Kilbride, Nicola Coss, Margo Wrigley, & Jessica Bramham











## **Planning & Designing**

What information is essential for the app?



# The Adult ADHD App in Action

Free on App Store – ADHD in Adults











Self-referral process

Email: <u>UMAAP@adhdireland.ie</u>



All welcome – with or without a diagnosis







## **UMAAP**

#### Aims of UMAAP

- Increase understanding of adult attention-deficit/hyperactivity disorder (ADHD)
- Provide skills and techniques to help with managing ADHD
- Help improve self-esteem and quality of life







#### 1) PSYCHOEDUCATION

Learning about ADHD - understand and gaining expertise in how ADHD affects an individual

## 2) THIRD WAVE CBT – ACCEPTANCE AND COMMITMENT THERAPY SKILLS (ACT)

Aims to address how a person relates and responds to their inner experiences (i.e. thoughts, emotions, urges) in order to live in a way that is meaningful for them







## **TOPICS**

Psychoeducation and ACT Psychology Skills

1 2 3 4 5
Introduction Inattention and impulsivity Daily Life Emotions and Mood Accepting and Thriving



- Webinar style (participants can post questions in the Zoom chat)
- Six weekly workshops
- HSE funding for 20 roll outs in 2023!

Companion workbook with summaries and exercises



IRELAND





- Support groups
- Focus time Body doubling technique

#### Other online resources

How to ADHD – YouTube series

https://www.youtube.com/watch?v=Rfcdx3qm77M

ADDitude

https://www.additudemag.com/category/manage-adhdlife/



### Thank you for listening

## Any questions welcome! Contact details- <u>jessica.bramham@ucd.ie</u>

#### **Resources:**

**Diagnostic Interview for Adult ADHD (DIVA)** 

https://www.advancedassessments.co.uk/resources/ADHD-Screening-Test-Adult.pdf

Adult ADHD Rating Scale (WHO) (AARS)

https://add.org/wp-content/uploads/2015/03/adhd-questionnaire-ASRS111.pdf

**Wender Utah Childhood ADHD Rating Scale** 

 $\underline{https://psykiatristod.se/download/18.298d3d1f16d8b550c9444287/1571821789691/WURS\ AD}\\ \underline{HD\ .pdf}$ 

#### **ADHD Ireland**

https://adhdireland.ie

**UK Adult ADHD Network – Training events** 

https://www.ukaan.org

