Attention Deficit Hyperactivity Disorder (ADHD)

INFORMATION FOR TEACHERS

Cork/Kerry Child and Adolescent Mental Health Service (CAMHS)
What Is ADHD?

ADHD is a Neurodevelopmental disorder which affects up to 3 - 5% of school aged children with approximately 5 - 7% of children diagnosed worldwide. It can affect children’s behaviour, learning and their social relationships. The three core symptoms of ADHD are:

[Diagram showing Inattention, Hyperactivity, and Impulsivity]

When these symptoms are deemed inappropriate for a child’s stage of development and are causing impairment in their level of functioning at home and in school, an ADHD assessment may be warranted. Young people may find it difficult to keep up in school because they have difficulty concentrating, listening, and remaining seated. They may be forgetful and disorganised in their everyday activities which can often be problematic for them. They may also have difficulty managing their behaviour and emotions.
Symptoms of ADHD

Inattention

Children and adolescents often have difficulty paying attention and may be easily distracted in the classroom setting. The following are some behaviours that a teacher may observe in the school setting.

- Children with ADHD may differ from their peers in the degree to which they are able to attend.
- They may find it hard to stay on task or focus over a period of time (sustained attention) and may avoid any task that requires this type of attention.
- They may find it hard to start or finish written work without support or prompts from a teacher or special needs assistant.
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- They may find it hard to follow instructions and may not appear to listen when spoken to directly.
- They may be often forgetful and disorganised e.g. losing or forgetting materials.
- Girls in particular may be prone to daydreaming in the classroom.
Hyperactivity

- Children may find it hard to sit still or even to remain seated when expected to do so.
- They may show a greater tendency than their peers to display high energy levels and remain ‘on the go’ a lot.
- They may rush written work.
- They may be restless, fidgety and/or squirm in their seat
- They may talk excessively.
- The high level of hyperactivity tends to reduce with age with adolescents reporting more of an inner sense of restlessness.
Impulsivity

This manifests itself in a tendency to act first and think later.

- They may have little or no awareness of danger and may often engage in behaviours without thinking of the consequences.
- They may often talk out of turn in class instead of raising their hand.
- They may be prone to interrupting conversations.
- In adolescence, impulsivity is often linked with oppositional behaviours and poor decision making.

Emotional dysregulation is often linked with ADHD where children/adolescents have a low frustration tolerance and may be prone to anger outbursts and may get into arguments/fights more than their peers.
What Causes ADHD?

The exact cause is still unknown but ADHD is understood to be caused largely by genetic factors and can also be influenced by the environment.

ADHD runs in families. More than half of all parents with ADHD will have a child with ADHD and recent genetic studies suggest a heritability rate of as much as 74%. Siblings of children diagnosed with ADHD are 2 - 3 times more likely to have ADHD as well.

There are also some risk factors that make ADHD more likely to occur in children with a genetic ADHD vulnerability including premature births and babies that have a low birth weight. In addition, smoking, drug use and drinking alcohol in pregnancy is found to increase the risk of ADHD in the new-born.

Research has consistently showed reduced amounts of certain neurotransmitters (chemical messengers) in the brain including Dopamine and Noradrenaline. Dopamine has a controlling influence on certain physiological functions including, memory, sleep, cognition, movement, mood and responding to rewards. Noradrenaline is involved in focus, processing and controlling impulsive behaviours.

How long will a child have ADHD?

For many children and adolescents the symptoms of ADHD can improve with age. However, some young people continue to have symptoms that persist into adulthood. During adolescence they may become less hyperactive and impulsive but the inattentiveness more often persists.
Can Other Conditions Present with ADHD?

There are other conditions that are more likely to occur if you have ADHD. Some of these include speech and language difficulties, specific learning difficulties, autism spectrum disorder, anxiety, mood disorders, oppositional defiant disorder, conduct problems, tic disorder, sleep disorders, and sensory processing difficulties. However, some children with ADHD may never have these difficulties.

In a school setting it is particularly important to be vigilant for the possibility of specific learning difficulties such as dyslexia, dyscalculia, dysgraphia, developmental language disorder, and non-verbal learning difficulties, as up to a half of students with ADHD will have one (or more) or these learning difficulties.
Positive Traits

Young people with ADHD tend to have a lot of positive traits, such as, being innovative, artistic, creative, sporty or musical. They tend to find it easier to try out new ideas and think outside of the box. They can often have excellent leadership skills. It is important to support all children and adolescents to pursue their interests and talents and build on their strengths so they have a sense of accomplishment.
How do you Treat ADHD?

Research has indicated a number of strategies that support children and Adolescents with ADHD:

• **Education** – It is helpful for parents, teachers, children and adolescents to know the facts about ADHD. It is particular important for teachers to learn about ADHD so they can help and support children and adolescents to develop strategies to help themselves.

• **Behaviour management** – Some children/adolescents with ADHD also present with oppositional defiant behaviours. There are many behavioural strategies that teachers can use to manage this oppositional behaviour such as communication strategies, routines, rewards and consequences.

• **Adaptions to the environment** – Teachers can change the child’s environment through appropriate seat location, uncluttered working environments and organisational plans to optimise their skills and coping ability in the school environment.

• **Medication** – Some children/adolescents in your class may be prescribed medication to help them focus better, and lessen their impulsive behaviours and hyperactivity. The medication works by enhancing how the dopamine system works in the brain and helps them feel calm and to stop and think before they make decisions. A large study in 2017, involving 10,000 twelve year old twins in the Netherlands demonstrated that children taking ADHD medication scored significantly higher on educational achievement tests than children with ADHD who did not take medication.

• **Classroom based interventions** – Schools can allocate additional supports to help manage ADHD behaviours in the classroom in order to enhance the young person’s learning in the school environment.
• **Cognitive behavioural therapy (CBT)** – There is a small amount of evidence to suggest that CBT can be useful for young people who have benefited from medication but whose symptoms are still causing a significant impairment, such as, social skills with peers, problem solving, self-control, expressing feelings and active listening.

**ADHD and Girls**

Symptoms of ADHD in girls often go unnoticed and their symptoms can be more subtle than boys. Girls tend to have greater difficulties with their attention, organisation and motivation, whereas boys can often present as more hyperactive and disruptive. Girls tend to mask their difficulties more easily and are therefore less likely to be identified and referred for ADHD assessment. It is unknown how often diagnoses in females are missed.

Adolescent girls with undiagnosed ADHD commonly present with mental health difficulties such as low mood, anxiety and deliberate self-harm.
Role of CAMHS

CAMHS undertake assessments for ADHD following referral from GP or senior health professional. If any teacher is concerned about a student, please first speak to the parents. You can also access the NEPS psychologist for support around behaviour or to seek an opinion about whether CAMHS referral is necessary. Parents can seek CAMHS referral via their GP.

CAMHS services typically involve psychiatry, nursing, psychology, speech and language therapy, occupational therapy, social work, social care work and other therapies working together to address a child’s mental health needs. Where a child has co-morbid developmental needs, they can continue to attend their local primary care services or the Child Disability Network Team in their area.
Role of NEPS

The National Educational Psychological Service (NEPS) is the psychological service of the Department of Education. NEPS’ goal is to support the wellbeing, academic, social and emotional development of all pupils in primary and post-primary schools through the application of psychological theory and practice in education. In common with many other psychological services and best international practice, NEPS has adopted a consultative model of service which focuses on supporting teachers to intervene effectively with pupils whose needs range from mild to severe, and transient to enduring.

NEPS provides:

1. **An Individual Casework Service**

Where evidence-informed interventions have been implemented and reviewed and a school has concerns that a pupil is not making reasonable progress, the school may request the involvement of the NEPS psychologist. The NEPS casework service involves the provision of a psychological service for a pupil, with the psychologist working with the pupil and/or with his/her teachers or teachers and parents. The purpose of the NEPS psychologist’s involvement is to facilitate a common understanding of the issues and agreement on a plan to support the pupil’s needs.

2. **A Support and Development Service**

The NEPS Support and Development service is an applied psychological service for teachers and school staff to help build capacity in schools to respond to the wellbeing, academic, social and emotional needs of all pupils and those with particular needs who are experiencing barriers to their wellbeing, learning and participation.
How to structure the classroom to support attention and learning

• Sit students away from all distractions - windows, doors or toilet.

• Aim to sit the student as near to the top of the classroom in close proximity to the teacher. This is important for prompting, correcting and supporting the student to stay on task.

• Aim to sit the student near a well-motivated and behaved peer.

• Redirect the child’s attention when it wanders and work towards them developing the ability to do so themselves, by asking “what do you need to do? Where are you at with your task?” It can also be useful to agree a non-verbal prompt, e.g. a sticker on the table you can tap to give more subtle reminders to redirect attention.

• Always look for opportunities to provide frequent and consistent feedback for appropriate behaviour e.g. staying on task, completing work, checking, etc.

• Allow the use of fidgets if they have been recommended as part of the child’s IEP or recommended by occupational therapist- but monitor their use closely as they can become distracting.

• Encourage the student to remove all unnecessary clutter from their desk.

• Use colour coded folders for work materials.

• For younger children, use visual cues, visual timetables and reminders of what the students should be doing and what activity is coming next.

• Break larger assignments in to shorter pieces of work and complicated tasks in to more manageable chunks of work.
• Prime the student before they start a task:
  ■ How they will start
  ■ What will come next
  ■ What content needs to be included
  ■ How long they have to complete the task

• Aim to give worksheets that contain only one or two activity tasks that need to be completed.

• Encourage older students to divide their worksheets into sections and cover sections that they are not working on.

• Summarise the plan for the lesson both visually and verbally and link to previous learning.

• Write learning objectives on the board

• Write up questions that will be asked after the lesson so the child is primed to gather and retain the information.

• Set a visual timer to help them to externally see the time and self-monitor.

• Provide Time Reminders. It may be helpful to suggest how they should pace themselves within the time limit: ‘You have five minutes left to complete the three questions’. You should now be on question two or three’.

• Summarise Key Points. Help students solidify new knowledge reviewing key concepts. Repetition is important for a student with ADHD. Use open ended questions to help students with ADHD relate what they have learnt.

• Use Assistive technology: The use of assistive technology such as computers, iPads and interactive whiteboards can make classwork more engaging, interactive and rewarding for students, in addition to supporting their ability to complete tasks and assignments.
Executive Functioning and ADHD

Executive functioning refers to a broad range of higher level cognitive processes that are carried out in the prefrontal areas of the frontal lobes of the brain. These include working memory, planning, self-regulation, self-monitoring and problem solving and goal actions. Many children, adolescents and adults with ADHD struggle with executive functioning.

Working memory

Working memory refers to the capacity to hold information in short term memory and perform simple mental processing. Up to 80% of children with ADHD have poor working memory (Kofler et al 2020). This impacts on their ability to listen to and retain instructions, perform mental calculations or other mental processing, and retain information they are reading.

Strategies to support working memory

There are three aspects to following an instruction - listening, retaining, and following through. Children with ADHD may experience particular difficulty with any or all of these steps. Some general strategies that can help:

- Maintain eye contact when giving the instruction (unless the child has ASD when it may be counterproductive).
- Ensure that each instruction is clear and concise.
- Check that the student has heard and understood the instruction by asking them to repeat back what they are required to do.
- Aim to only give one instruction at a time.
- For more complex instructions, break the instruction into steps and count them out on your fingers and repeat if necessary.
• Avoid signs of irritation when you have to repeat a task requirement.

• Use visual prompts to accompany verbal instructions where possible - eg hold up the page you want the student to find, show them examples of what is required.

**Other working memory strategies**

• Do not rely on the students taking adequate notes. Lengthy oral instruction should be avoided or supplemented with other teaching techniques.

• Provide hand-outs and lesson summaries. Preferably give these to students to use while you are teaching- this helps them redirect their attention when it has wandered, and it reduces working memory load so enables them to engage with ideas and learning.

• To support working memory, encourage students to check the summary first both for new material and when revising. When we are primed through the use of summaries, we are better able to absorb information and this reduces cognitive load.

• Encourage the use of calculators and external aids such as number lines for maths.

**Processing Speed**

Processing speed is a measure of the brain’s efficiency - the ability to process simple information quickly and accurately. Some children with ADHD will have slow processing speed, and this is most common in students with the inattentive type.

This may impact on the pace of a child’s work, their ability to perform in exam situations, and their ability to answer questions in class. It usually results in significant mental fatigue with effort.
Strategies to support students with slow processing speed

• Allow more time for all tasks. Work should be broken up into short bursts, with additional breaks to prevent mental fatigue.

• Ensure the student is not the first to be asked a question to allow extra time to plan their answer. Avoid asking questions about novel information unless the student volunteers.

• It is unrealistic for a student with slow processing speed to take notes during a class. It would be most useful to provide written material.

• Eliminate unnecessary clerical tasks such as transcribing problems, and make use of brief response formats.

• Focus on quality not quantity.

• Use timers etc. to help the student be more aware of time and speed up their work.

• Be extra aware of the student’s self-concept as a learner, as many students with slow processing speed underestimate their intelligence and are demoralised. Adjust tasks to enable them to show their knowledge and learning.

Organisational skills

Children and adolescents with ADHD often struggle with how to start a task, how to monitor their progress, how to plan their work and stick to the plan.

Some general strategies:

• Use reminder lists, post-its, photos, and cue cards as visual prompts.

• Use week to view diaries, calendars and set reminders on their phones or digital assistants.

• Encourage older students to use a journal as an external resource
• Encourage them to set timers to externalise time periods (e.g. Pomodoro app which sets time for study and breaks)

• Encourage the use of technology for any lengthy assignments. Read and write technology is particularly useful for students with ADHD (e.g. Read Write Gold, Kurzweil).

• Students with ADHD will need specific training in study skills, ideally incorporating and capitalising on their unique learning style. Some students benefit from mind-mapping, others from recording notes and summaries and listening to them on headphones. Others may use visual prompts such as mnemonics to help them memorise. Because neurodivergent students are highly individual, some of this support should ideally be carried out on a one-to-one basis.

• Explicitly teach students how to write effectively and concisely - one of the key difficulties in exams in answering the question asked and only that question. Encourage students to plan out each point they need to make, and constantly check their work against the plan to avoid going off track. Work on how to construct a paragraph, making sure each sentence follows the last, etc.

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*Keep homework expectations realistic- students with ADHD will typically take much longer to do the same task due to distractibility and disorganisation- short focused tasks are more effective for learning.*

*It is common for bright students to get burned out by the huge effort they need to expend at academic tasks - the balance between homework, sports and exercise, relaxation time and social time is especially important for neurodivergent people.*
How to Motivate a Child/Adolescent with ADHD

Research has shown that the brain based reward systems of those with ADHD make it difficult to elicit and sustain motivation for activities that do not provide immediate and continuing reinforcement. To engage the ADHD brain in learning is it useful to:

- Use external ways of motivating through rewards and privileges. These work best when they can be attained frequently. Immediate rewards are much more motivating.

- Set goals: ask the students to write down their specific goal, and help them to make their goals specific, observable and achievable so they can be monitored.

- Encourage students to develop a ‘vision board’ at the beginning of the school year of where they want to be at the end of that particular school year.

- Any long term goal should be broken in to smaller steps to keep students motivated.

- For younger children use games and timers to provide frequent reinforcement.

- Try and connect areas of disinterest to areas of interest for the students, e.g. using sports averages or cooking measures to teach maths.

- Praise effort over ability or success.

- Be realistic in your expectations of what a child with ADHD can do within a given timeframe. Prioritise tasks that need to be completed or submitted within a given timeframe.
**Behaviour Management in the classroom: general strategies**

- Aim to ensure a daily predictable, consistent and structured routine.
- Use consistent boundaries and enforce simple and clear rules.
- Use clear commands instead of requests. *Please take out your Maths book from your bag* instead of saying ‘can you’ or ‘will you’.
- Find frequent opportunities to praise children and aim to praise each step rather than waiting for their finished projects.
- Monitor your communication style with your student with ADHD. Research has shown that children with ADHD receive much more negative feedback than their peers from parents and teachers. Try to phrase things positively and focus on small steps towards a goal. Use non-verbal reminders where you can.
- Ensure that you have a clear plan of action for behaviours so that when an incident occurs you can respond appropriately and follow through with the consequences. Avoid using the child’s special interests and talents as contingencies for good behaviour or withholding them if a child misbehaves e.g. missing out on soccer/football practice or yard time.
- Avoid giving multiple commands to a student with ADHD. Give one command at a time and get them to repeat back what you asked to ensure that they have heard and understood the command.
- Always tell the student what you want rather than what you don’t want. *Please keep your hands to yourself* rather than saying ‘don’t hit’. Try to focus on the positive.
- Before going out to the yard at break time, remind the student of what specific behaviours you want to see and continue to reward these behaviours with specific praise.
- Remember to *always separate the student’s behaviour from the student themselves*.
Behaviour management: encouraging problem solving skills

• When a child or young person’s behaviour is challenging, staying connected and actively listening to them will be critical in supporting their learning and problem solving and in preventing future behavioural difficulties.

• To avoid conflict and maximise capacity to reflect, try to let emotions calm before talking with the student. Instead of getting into an argument take a deep breath, count to five and step back from the conversation. Encourage the student to do the same.

• Assume positive intentions. Even if a student has behaved badly, take a non-judgemental approach and be curious as to what they were feeling and experiencing that caused the behaviour. Engage them in discussing appropriate consequences, should these be necessary.

  Ask
  - what happened?
  - why it happened?
  - how we can make it right?

• Act as mediator when necessary to help students listen to each other’s perspectives and identify appropriate solutions.

• Avoid mentioning previous difficulties, and try to move on quickly. Communicate your confidence that the student can learn from their mistakes.

• Never use shame or embarrassment as a way to control a student’s behaviour. Students with ADHD can acquire and internalise labels e.g. ‘class clown’ or ‘messer’, so discourage this strongly wherever you see it.

• Praise positive behaviours with the aim of encouraging more of these behaviours and tell the student exactly what they did well.

• Encourage problem solving and negotiation of rules with the student body to encourage a sense of ownership, responsibility and independence.
How schools can support a student’s emotional wellbeing

Children and adolescents with ADHD will very often have difficulties with emotional regulation. They may lack self-awareness and fail to notice their own emotional warning signs, resulting in anger outbursts or anxiety attacks. They may have difficulty calming their emotions and problem solving. People with ADHD have much higher rates of mental health difficulties, including anxiety, low mood and self-harm.

• It is really helpful for a student with ADHD to have a trusted adult they can turn to - this could be class teacher, year head, resource teacher, SNA. At times of increased stress or emotional difficulties, try to schedule time with this person on a weekly basis just to check in.

• Be flexible. Recognise that school can be very difficult for neurodivergent children who are struggling with their emotions. Give opportunities for breaks, reduce expectations, and offer extra support at times of crisis.

• Learn about neurodiversity and help all your students to see the benefits of different ways of thinking and learning. Allow a range of ways for an assignment to be completed, e.g. bullet points, mind map, graph rather than essay format.

• Give opportunities to shine. Adolescents with ADHD can make excellent leaders. While they may not always be great at following a plan from A to Z, they can find creative and novel solutions that really add to a project. When motivated, they may work very hard so try to use their areas of interest. Positions of responsibility, when realistic, really benefit self-esteem.

• Show interest in ideas and strategies, not just success or the finished project. Celebrate personal attributes and strengths that go beyond the academic.

• Have a good ideas board in the classroom to celebrate creativity, even when it’s not on topic.
Creating a Healthy Lifestyle

A Healthy lifestyle is a very important part of every child and adolescent’s physical, mental and emotional wellbeing. When speaking to students try and reiterate the following points:

• It is important that every child gets at least 8 - 10 hours of sleep per night. Many children with ADHD have difficulty sleeping. A good night’s sleep has many benefits for children including improvements in attention, concentration and behaviour.

• It is important to make healthy food choices by eating a balanced diet.

• It is important for all children/adolescents with ADHD to get daily physical exercise so try and ensure that this happens in the school day.

• It is important for students to try and balance the amount of screen time they have with other activities.

Educating Teachers on ADHD

Cork/Kerry Community CAMHS have an online educational video on ADHD for teachers and special needs assistants. Please find the link to this recording below.

Understanding ADHD – A workshop for Teachers and School Staff.

Link:
https://scanner.topsec.com/?t=250e01b317cab9c7d16563f04e671f7631eaa766&d=257&u=https%3A%2F%2Fhse.webex.com%2Fhse%2Flsr.php%3FRCID%3Dbdb48ab9655af19e0b9b255f79c8c9e41&r=show

Password: FbxCXE8c
Information Resources, Training and Support Groups for ADHD

**ADHD Ireland:** provides Information, resources and training on ADHD for children, adolescents and adults.

**Website:** www.adhdireland.ie  **Email:** info@adhdireland.ie

**Telephone:** (01) 8748349

**ADDISS UK:** The National Attention Deficit Disorder Information and Support Service is a UK charity which provides lots of information, resources and training on ADHD.

**Website:** www.addiss.co.uk

**ADHD Foundation Neurodiversity Charity:** UK based integrated health and education service.

**Website:** www.adhdfoundation.org.uk

**ADDITUDE:** Free online US magazine with links to latest research and best practice including free webinars and access to downloads from previous recordings on many topics.

**Website:** www.additudemag.com

**CHADD:** (Children and Adults with ADHD) a US based non-profit organisation which also provides resources and information on ADHD.

**Website:** www.chadd.org

**Health Service Executive (HSE):**

**Website:** www.hse.ie/eng/health/az/a/adhd/
**NICE Guidelines**: The Current UK national guidance for ADHD can be found by searching on the National Institute for Health and Clinical Excellence (NICE Guidelines).

**Website**: www.nice.org.uk

**INCADDS**: The Irish National Council of ADHD support groups’ is an umbrella organisation for ADHD support groups in Ireland. Tips for Teachers

**Website**: www.incadds.ie/tips-for-teachers.html


**Special Education Support Service (SESS)**:

**Website**: www.sess.ie/behaviour-resource-bank
Reading List for Teachers

‘The Guide to Assistive Technology in Special Education’ by Joan Green

‘Kagan Cooperative Learning’ by Dr Spencer Kagan.

‘Managing ADHD in Schools’ by Russell Barkley

‘How to Reach and teach children with ADD/ADHD: Practical Techniques, Strategies and Interventions’ by Sandra Rief

‘Executive Function in the Classroom’ by Christopher Kaufman.

‘Incredible Teachers: Nuturing Children’s Social, Emotional and Academic Competence’ by Carol Webster - Stratton

‘Teaching kids with Mental Health and Learning Disorders in the regular classroom’ by Myles Cooley

‘How to Teach and Manage Children with ADHD’ by Fintan O’Regan

‘Teaching Teens with ADD, ADHD and executive Function Deficits’ by Chris Zeigler Dendy
Bibliography


Soroa, M., Gorostiaga, A. & Balluerka, N. (2013) Review of tools used for assessing teacher’s level of knowledge with regards to attention deficit hyperactivity disorder (ADHD) *Global Journal of Health Science* 8 (12) 141 – 149.


