Attention Deficit Hyperactivity Disorder (ADHD)

What is ADHD?

ADHD is caused by a combination of both genetic and environmental factors. It is a neurodevelopmental condition.

ADHD can be broken down into two types, inattention and hyperactive. Often child with a diagnoses of ADHD will exhibit both types at different times. Young people are often (but not always) very cognitively able but struggle with encoding memories into long term stores due to lower stimulation of positive neural pathways.

Where dysregulation occurs, it can often happen quickly, young people experience big emotions quickly i.e. they love instead of liking. Although young people often show extreme hyper activeness the condition can be very tiring to live with as concentrating and learning require additional expenditure of energy.

Symptoms normally present before the age of 12. However nearly 50% of all young people diagnosed with ADHD state that the symptoms are reduced by the time they reach adulthood.

Young people with inattentive ADHD...

- Will show a lack of attention and are easily distracted.
- May seem to be not listening or daydreaming.
- Will make careless mistakes on academic tasks.
- Will lose things, struggle with keeping orderly and with task requiring complex executive functioning skills. Foresight, hindsight, sense of time, managing change and understanding what to remember can be very difficult. Selective attention skills are often lacking. Cognitive load can be filled with inconsequential items which limits learning capacity.
- Can forget instructions quickly.
- Can become hyper attentive when the activity is "interesting" to them and norepinephrine and dopamine levels are increased.
- Untidy handwriting
- Difficulty starting tasks.

Young people with hyperactive impulsive ADHD...

- May be fidgety or talk excessively.
- May be frequently out of their seat and have the need and desire to move regularly.
- Struggle to be quiet for lengthy periods of time.
- May have difficulty waiting their turn or taking part.
- May only be able to concentrate for very short periods at a time.

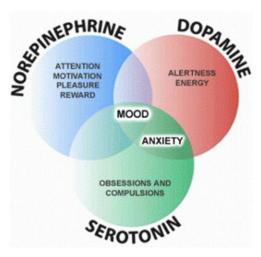
- May blurt out answers or make comments they don't really mean. The may
 act as if they have a "lack of social filter" and may stand out in social situation.
- Be accident prone.
- May skip from task to task very quickly without the desire to complete or finish the previous activity
- Can have very short fuses
- Act without thinking and can put themselves in dangerous situations at break or play time this can be exhibited through "manic play". This can also be witness through clumsiness.
- Young people often have very good co-ordination but challenges in executive functioning can mean that movements become disordered.
- Often will have sensory needs due to lack of selective attention. The environment is very important to young people with ADHD.
- Will sometimes try to inflame situations. This is based on the need for to increase dopamine levels.
- Can appear to have high self esteem because of the extreme behaviours and emotions they sometimes show along with controlling personalities. This is often a veneer hiding a young person with low confidence struggling to access activities in the same manner as their peers.

The neurobiology and neuroanatomy of ADHD

It is vitally important that all staff working with young people with ADHD have a basic understanding of the neurobiology and neuroanatomy of ADHD.

It is currently believed that young people who have ADHD release fewer of the neurotransmitter's norepinephrine and dopamine. This combination makes paying attention and being alert to learning more difficult.

The lower levels of dopamine release also inhibited long term potentiation meaning fewer neural synapses are grown and learning becomes more difficult. This also means physiologically and neurobiologically that young people with ADHD often understand and can recall information for short periods of time but the information is not successfully encoded into long term stores.



Strategies to support young people with ADHD

Communication

- Learn the "tells" when a young person is listening and when they are not. Normal "active listening skills" don't apply to young people with ADHD.
- Short simple and directed instructions. Give instructions in stages. Young
 people can benefit from tick lists to works through to aid anxiety reduction and
 also improve executive functioning.
- Check understanding through recall of instructions.
- Appropriate fidget tools can help. These provide the neural stimulation and dopamine release that aids learning.
- Visual timetables and now and next boards are often very helpful.
- Regular brain breaks are needed. In extreme cases pupils may be only able to focus for short periods of time i.e. a few seconds to a few minutes.
- Young people benefit from being given options when working to feel they have some control over the activity.
- Avoid sounding agitated. Sometimes young people with ADHD will aim to aggravate or be rude to staff as the behaviour stimulates them. They can be persistent with rudeness and its best to remove yourself from the situation. Young people will often follow you continuing to be rude. Use this opportunity to lead them to a safe space where they can regulate.

In class support

- Low stimulation environments can be helpful. Consider placing pupils in a position in the class where there are the fewest visual distractions (away from windows).
- Limit the amount of information given out on work sheets.
- Highlight the important areas of information for them to use when completing a task to aid selective attention.
- Use "screens" to cover parts of text in text books to prevent the young person being distracted by information that is not relevant.
- Remember that young people with ADHD need the dopamine release to be able to concentrate. Work has to be exciting and delivered in a stimulating manner.
- Have pre establish consequences for good and bad behaviour and stick as closely as possible to them. Schools will need to make reasonable adjustments to their behaviour policies to allow for this.
- Timers can be helpful for young people to self-monitor how long they have been on task. This should be trialled on a pupil by pupil basis.
- Spare paper for scribbling or drawing can be helpful for young people with ADHD particularly if they are required to sit still or listen for an extended period of time.

- Young people can use post it notes and write their questions or ideas on them rather than shouting out.
- When taking part in group work it is essential that the teacher carefully
 picks the other members of the group to provide optimal working
 conditions and increase the chances of concentration.
- Consider alternative methods of presenting work other than written activities. Presentations, videos, speeches, pictures etc can be more engaging.
- Plan brain breaks into the lesson. This could be as simple as having "jobs" to complete i.e. handing out the next resource sheet or it could involve going into the corridor outside the classroom to complete a sensory circuit.
- Non verbal signals to gain attention can be helpful. Using the pupils name can help although if used too regularly young people can view this is confrontational.
- Limit stationary on desks to only what is needed.
- Sometimes partial completion of a task is success. Praise pupils for this an make it obvious before starting that the aim is not to complete the task otherwise young people with ADHD can believe they have failed. If a pupil has tried hard and completed a task it may be appropriate for the teacher to mark only the correct answers.
- It may be better to have the most challenging activities towards the start of the day when energy levels are high enough to allow them to focus.
- Whiteboards are useful tools where incorrect answers or work the pupil is not happy with can be easily erased.
- Drinking and eating can be a useful self regulation tool for young people with ADHD. This can provide micro brain breaks during lessons.
- Where possible low level behaviours should be ignored. In mainstream schools a good idea is to train all pupils in neurodiversity. This should help them understand the differentiated learning methods and behaviour plans that other pupils may be working in line with.
- Reward process work well.
- Do not use loss of break or lunchtime as a sanction for young people with ADHD. This will only exasperate the problem. Young people with ADHD need an outlet for their energy. If for safety reasons a break or lunchtime needs to be removed the time should be spent on a cognitively engaging activity or regulation and restorative work.

Outside of class support

- Breaktimes and lunchtimes can be particularly stressful for young people with ADHD. Some pupils will require adult support through these unstructured times.
- Schools should consider using a wide variety of break and lunchtime activities
 to support all pupils. Sometimes the school may be able to engineer young
 people with ADHD into situations or social grouping where success is more



likely. Where young people are unable to access breaktime or lunchtime provide them with an important job that needs to be completed to help the staff or school.

- Pupil may require social stories or consequence maps prior to being unsupported at break and lunchtime to help them develop plans for how to deal with difficult situations.
- During interventions away from the classroom young people with ADHD often benefit from working on emotional intelligence and require support deciphering how other may be feeling in different circumstances.
- Support staff will need to have the same level of training and understanding of ADHD to support young people at break and lunchtime.