



How do ADHD Medications work?

A Guide for Parents and Carers

Written by

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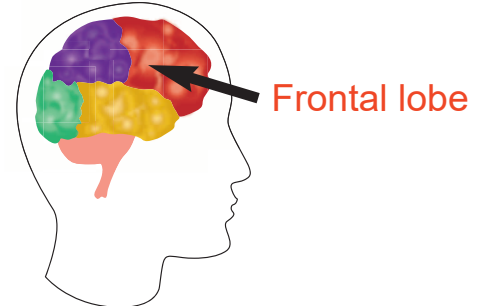
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What is ADHD?

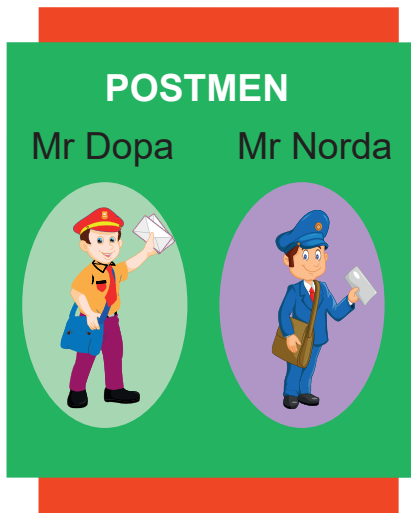
ADHD, a short name for 'Attention Deficit Hyperactivity Disorder' is a common medical condition seen in many children and young people. Having this condition means the child may have problems with being fidgety, on the go, difficulty concentrating and acting hastily without thinking.

How does the brain work?

Frontal lobe is the boss which sends instructions to the rest of the brain and the body (for example stop – wait – focus).



The nerve cells in the brain are connected to each other by a synapse (bridge between the two nerve cells). They talk to each other by sending messages via chemical messengers. Let's call them postmen.



Synapse (Bridge)



Synapse (Bridge)



How do nerve cells talk to each other?

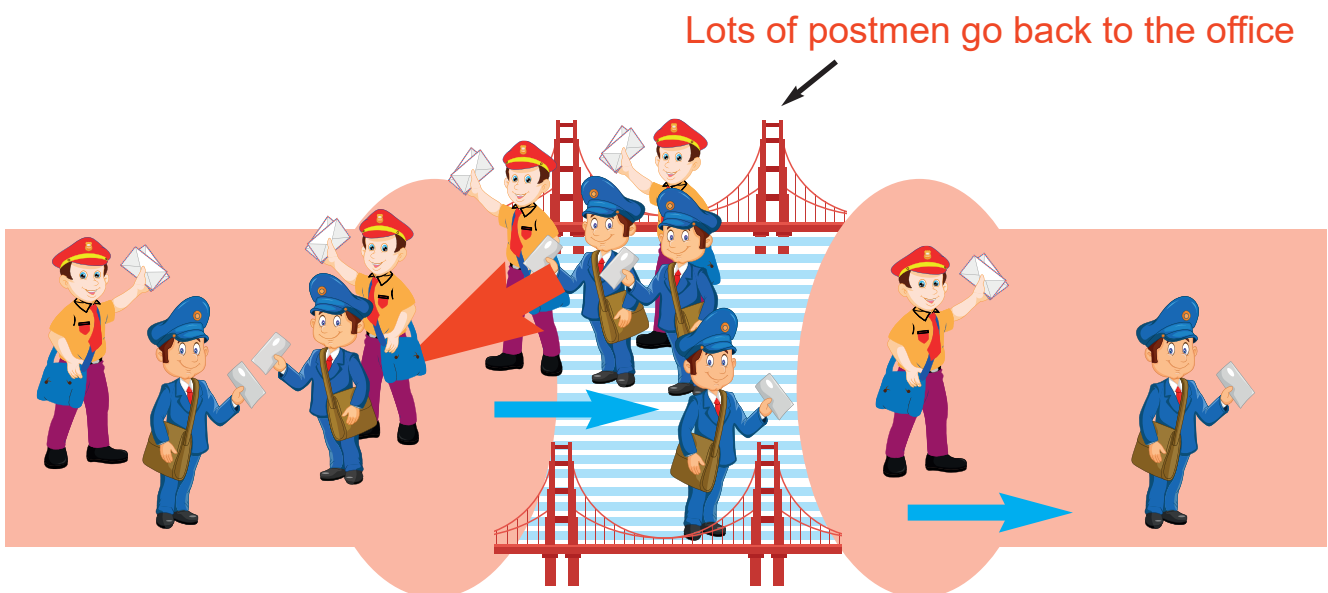
Mr Dopa and Mr Norda are the postmen (chemical messengers) who cross the bridge to deliver letters (messages). However, a few postmen go back to the nerve cell (post office) and don't work.



What happens in ADHD?

In ADHD, lots and lots of postmen go back to the nerve cell (office) and don't work. As a result, there are not enough postmen left on the bridge to continue their duty to deliver letters.

If you do not get the letters (messages) you may become hyperactive, find it hard to concentrate and be impulsive (acting hastily).



How can ADHD medications help?

They help you to get regular messages going across your brain and the rest of the body. This means you are more likely to focus better, be much calmer and think before acting hastily.

There are two different types of medicines, called stimulants and nonstimulants. Please read below to find out how exactly the medicines work.

About methylphenidate

This medicine is a stimulant. It travels to the bridge between the nerve cells and stops the postmen, Mr Dopa and Mr Norda, from going back to the nerve cell (office). As a result, the medication gets the postmen up and moving again and there are more postmen on the bridge to deliver letters (messages).



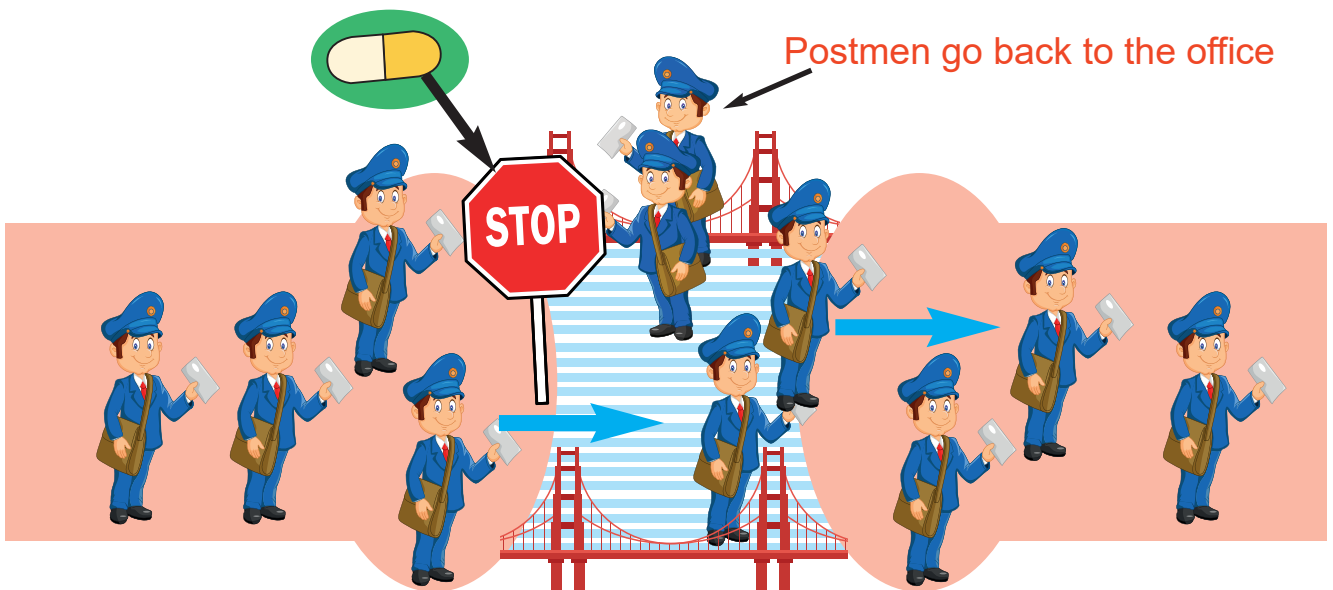
About Lisdexamfetamine

This medicine is also a stimulant. Like methylphenidate, it stops the postmen Mr Dopa and Mr Norda, from going back to the nerve cell (office). In addition, it sends orders to the postmen to get back from the office to work on the bridge. Therefore, the postmen continue to deliver letters.

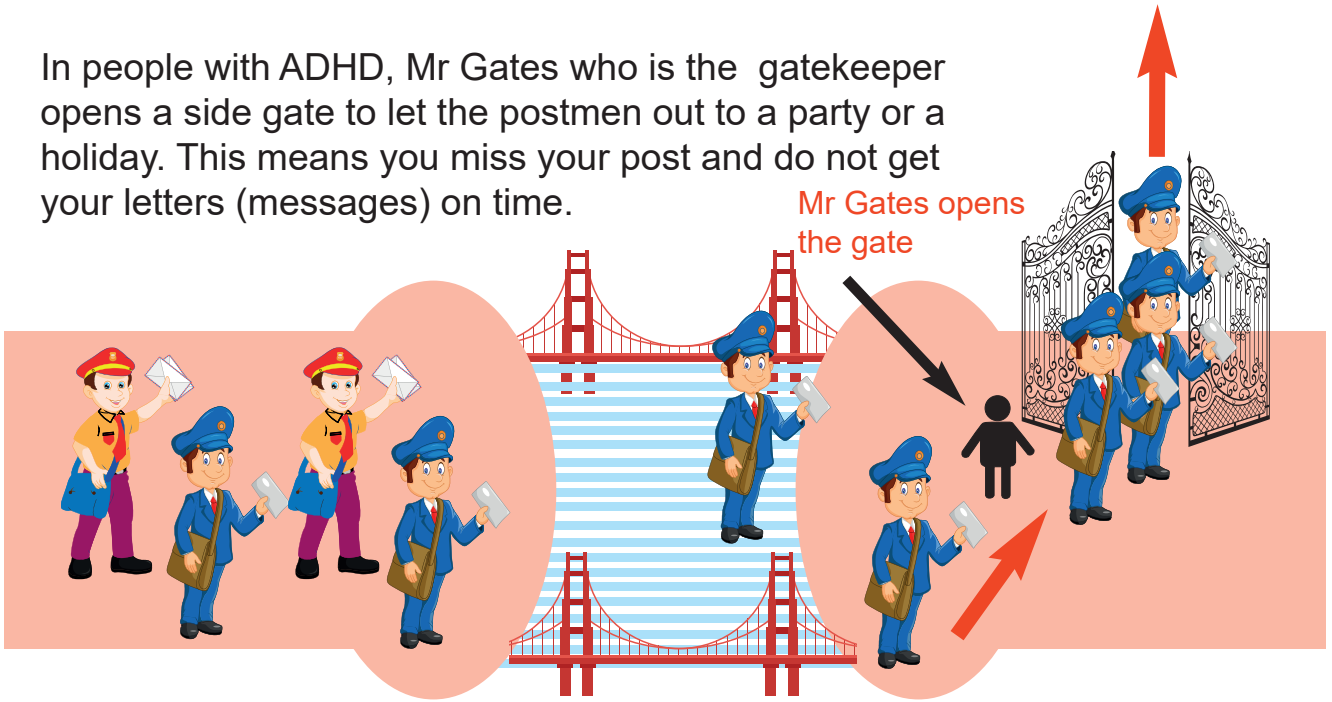


About Atomoxetine

This medicine is a nonstimulant and works on the bridge to stop Mr Norda, the postman, from going back to the nerve cell (office). Therefore, you get more postmen on the bridge to deliver letters (messages).



In people with ADHD, Mr Gates who is the gatekeeper opens a side gate to let the postmen out to a party or a holiday. This means you miss your post and do not get your letters (messages) on time.



About Guanfacine: This medicine, also a nonstimulant, works on the other side of the bridge and stops Mr Gates opening the gate. So the gate is shut and as a result, the postmen don't get out and you will continue to get your letters.



Stimulant medicines

A. Methylphenidate group

Medikinet and Ritalin: A short-acting tablet which works up to 4 hrs, to be taken 2-3 times a day

Equasym XL and Medikinet XL: A longer acting capsule that works up to 8 hrs, taken once a day in the morning. Content can be sprinkled on to yoghurt/apple sauce in case of the child with swallowing difficulties.

Concerta XL, Matoride XL, Delmosart, Xenidate XL and Xaggitin XL: A longer acting tablet that works for up to 12 hrs, taken once a day in the morning.

B. Amphetamine group

Dexamfetamine is a short acting tablet that works for up to 4 hrs.

Elvanse (Lisdexamfetamine): A longer acting capsule which works for up to 13 hrs, taken once a day. The content can be dissolved in water in case the child has swallowing difficulties.

Nonstimulant medicines

Strattera (Atomoxetine): A longer acting capsule that can work for up to 24 hrs, taken once a day or in two divided doses per day.

Intuniv (Guanfacine): A longer acting tablet that works for up to 24 hrs, taken once a day in the morning or evening.



Please see your doctor or nurse to learn more about the medications mentioned above.



What is ADHD?



Let me be your camera



What is it like to have ADHD?



What is the role ADHD medications?



Top 10 inspirational people with ADHD



How do ADHD medications work?

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