

# A D H D

## A Dire Halt in Distribution

PANDA webinar 12/11/25

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## Methylphenidate shortage updates

There is a worldwide shortage of methylphenidate ADHD medicine and there may be periods in 2025 where the brand you normally use isn't available.

We understand how hard it is when you can't access the medicine you need, and Pharmac wants you to know they are doing everything they can to improve



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## Adderall shortage may be associated with increased use of alternative ADHD medication in kids

Prescription fills for ADHD treatments among children aged 5-17 fell after pandemic but increased again; mixed trends seen amid medication shortage

January 27, 2025 11:37 AM

Author | [Beata Mostafavi](#) >

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Shortage of medicines for ADHD (Attention Deficit Hyperactivity Disorder) – Information for patients, families and carers – Updated July 2025



## Can't fill your ADHD script? Here's why, and what to do while the shortage persists

Published: July 9, 2025 7:21am SAST

South\_Agency/Getty Images



Attention-deficit hyperactivity disorder (ADHD) diagnoses are rising across Australia.



But after finally getting a diagnosis, many people are discovering the medicine they've been prescribed isn't available at the pharmacy.



Cumbria, Northumberland,  
Tyne and Wear  
NHS Foundation Trust

NEWS

## ADHD med shortages 'a merry-go-round you just can't predict'

The new school year has coincided with another series of shortages, forcing patients and prescribers to rethink their options.



Journal of Pediatric Health Care

Volume 39, Issue 2, March–April 2025, Pages 297-302



Professional Issues

# Pharmaceutical Supply Chains: A Structural Determinant of Health for Children With ADHD

Victoria F. Keeton PhD, RN, CPNP, CNS  

## JAMA Psychiatry

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### Viewpoint

## Prescription Stimulant Prescribing, Nonmedical Use, and Shortages

### US FDA Research and Response

Joshua P. Rising, MD, MPH<sup>1,2</sup>; Robert M. Califf, MD<sup>1,3</sup>

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JAMA Psychiatry

Published Online: March 26, 2025

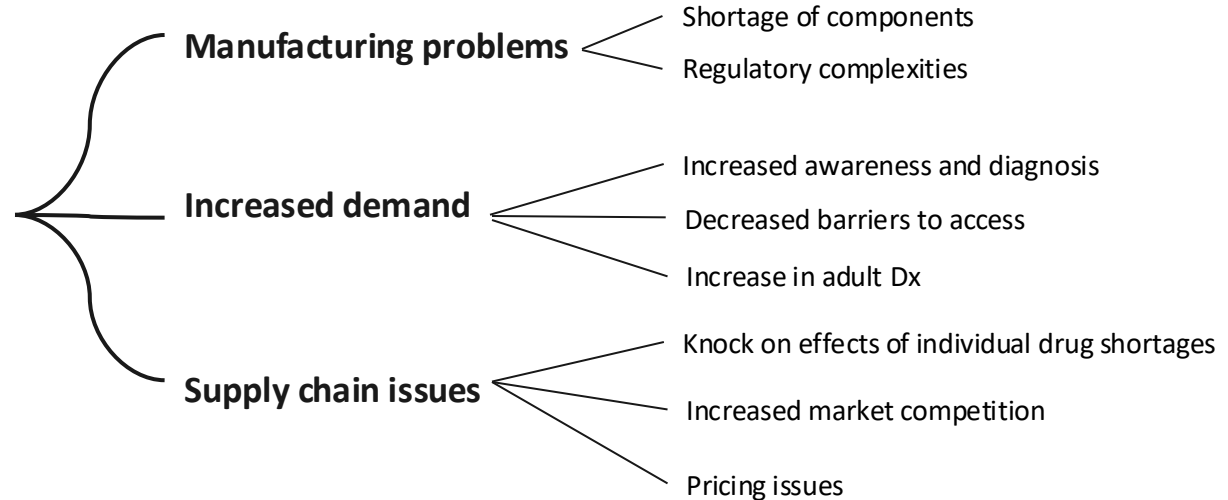
2025;82;(5):436-437.

doi:10.1001/jamapsychiatry.2025.0099

# The complexity of the problem

*The underlying cause of the global shortage of ADHD medications is complex – which means there isn't a simple fix*

## Medication shortage



# The problem in SA

- **Much of the same!**
- Buying power/increased market competition plays a big role – prices steadily rising
- In the state sector:
  - Less flexibility to adapt prescribing/procurement/expenditure
  - Increased demand – have used all contracted medication doses ahead of projected timeline
  - Inefficient or outdated systems for supply chain management
  - Multi-level disparity

# The SASOP/PsychMg child and adolescent attention-deficit/hyperactivity disorder guidelines



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**TABLE 1: Stimulant medications available in South Africa.**

| Substance                                | Trade name               | Duration of action | Formulation                                                                                                                                                | Starting dose              | Dosing interval                     | Maximum daily dose                                  |
|------------------------------------------|--------------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------------------|-----------------------------------------------------|
| <b>Methylphenidate immediate release</b> | Ritalin®                 | 4 h                | 10 mg tablet                                                                                                                                               | 5 mg daily at breakfast    | Two or three times daily, 4 h apart | 60 mg                                               |
|                                          | Douglas MPH®             |                    |                                                                                                                                                            |                            |                                     |                                                     |
|                                          | Biotech MPH®             |                    |                                                                                                                                                            |                            |                                     |                                                     |
| <b>Methylphenidate extended release</b>  | Ritalin LA®              | 6 h–8 h            | Spheroidal oral drug absorption system (SODAS)<br>60% immediate release: 40% extended release<br>10 mg, 20 mg, 30 mg and 40 mg capsules                    | 10 mg daily at breakfast   | Once daily                          | 60 mg                                               |
|                                          | Medikinet MR®            | 6 h–8 h            | 50% immediate release: 50% extended release<br>5 mg, 10 mg, 20 mg, 30 mg and 40 mg capsules                                                                |                            |                                     |                                                     |
|                                          | Concerta®                | 10 h–12 h          | Osmotic release system (OROS): 22% immediate release: 78% extended release<br>18 mg, 27 mg, 36 mg and 54 mg hard-shelled capsules, must be swallowed whole | 18 mg daily at breakfast   | Once daily                          | Children: 54 mg<br>Adolescents: (13–18 years) 72 mg |
|                                          | Neucon®                  |                    |                                                                                                                                                            |                            |                                     |                                                     |
|                                          | Unicorn MPH®, Mefedinel® |                    |                                                                                                                                                            |                            |                                     |                                                     |
|                                          | Contramyl XR®            | 10 h–12 h          | Multi-unit particulate system<br>18 mg, 27 mg, 36 mg and 54 mg tablets                                                                                     |                            |                                     |                                                     |
|                                          | Radd®                    | 10 h–12 h          | Hydrophilic Matrix release system                                                                                                                          |                            |                                     |                                                     |
|                                          | Acerta®                  | 10 h–12 h          | Extended-release film-coated tablets                                                                                                                       |                            |                                     |                                                     |
| <b>Dexamfetamine sulphate</b>            | Amfexa®                  | 6 h–7 h            | 5 mg and 10 mg breakable tablets                                                                                                                           | 5 mg daily at breakfast    | Once or twice daily, 6 h apart      | 20 mg (up to 40 mg in rare cases)                   |
| <b>Lisdexamfetamine†</b>                 | Vyvanse®                 | 14 h               | 30 mg, 50 mg and 70 mg capsules                                                                                                                            | 30 mg daily with breakfast | Once daily with breakfast           | 70 mg                                               |

MPH, methylphenidate.

†, not registered for use in children below 13 years.

# Other medications

## Atomoxetine

- Recommended dose 1.2-1.8 mg/kg/day (start at 0.5mg/kg/day)
- Once daily or divided 12 hourly

## Clonidine

- Complex dosing: start at 0.05mg nocte > bd > tds > qid then increase to max daily dose 0.2-0.4mg/kg/day depending on weight

## Imipramine

- 1-4mg/kg/day (max 200mg/day)
- Daily dose or divided in up to 3 doses

## Atypical antipsychotics

- Risperidone
  - 0.25 mg or 0.01mg/kg daily to max 2mg or 0.06mg/kg daily.
  - Daily dose or divided 12hourly
- Aripiprazole
  - 1mg daily to max 15mg daily

# Attention deficit hyperactivity disorder: diagnosis and management

NICE guideline  
Published: 14 March 2018  
Last updated: 13 September 2019

[www.nice.org.uk/guidance/ng87](http://www.nice.org.uk/guidance/ng87)

1.7.7 Offer **methylphenidate** (either short or long acting) as the first line pharmacological treatment for children aged 5 years and over and young people with ADHD.

March 2018 – this is an off-label use for children aged 5 years. See [NICE's information on prescribing medicines](#). [2018]

1.7.8 Consider switching to **lisdexamfetamine** for children aged 5 years and over and young people who have had a 6-week trial of methylphenidate at an adequate dose and not derived enough benefit in terms of reduced ADHD symptoms and associated impairment.

March 2018 – this is an off-label use for children aged 5 years. See [NICE's information on prescribing medicines](#). [2018]

1.7.9 Consider **dexamfetamine** for children aged 5 years and over and young people whose ADHD symptoms are responding to lisdexamfetamine but who cannot tolerate the longer effect profile.

March 2018 – dexamfetamine is only licensed to treat ADHD in children and young people aged 6 to 17 years when response to methylphenidate is clinically inadequate. It is not licensed for children and young people aged 5 to 17 years who have responded to but are intolerant of lisdexamfetamine. See [NICE's information on prescribing medicines](#). [2018]

1.7.10 Offer **atomoxetine** or guanfacine to children aged 5 years and over and young people if:

- they cannot tolerate methylphenidate or lisdexamfetamine **or**
- their symptoms have not responded to separate 6-week trials of lisdexamfetamine and methylphenidate, having considered alternative

# The SASOP/PsychMg child and adolescent attention-deficit/hyperactivity disorder guidelines



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## Stimulants

Stimulants are the best-studied pharmacological treatment for ADHD across the lifespan. Methylphenidate and AMP have similar effects, with an average response rate of 70%.<sup>72</sup> In addition to reducing the core symptoms of ADHD, stimulants have been shown to improve associated features such as defiance, academic performance, social functioning, as well as fine and gross motor functioning.<sup>11</sup> These effects appear to be dose dependent and are evident across multiple settings.<sup>24,25,64</sup> Internationally, most treatment guidelines recommend one of the stimulants as the first-line pharmacological treatment for ADHD.<sup>24,25,64</sup> However, it must be stressed that treatment choice depends on a variety of factors, which may vary between individual patients and the choice of medication ultimately resides with the prescribing doctor in collaboration with the patient and his or her family. Of the two stimulant groups, MPH would generally be used before AMP in South Africa because of greater prescriber experience and availability of the former in both public and state sectors. See Table 1 for stimulants available in South Africa.

It is important to note that both classes of stimulant medication have similar efficacy and tolerability profiles at the population level. However, at the individual level, patients may respond to or tolerate one class better than the other.<sup>73,74</sup> It may therefore be appropriate for an adequate trial of both classes of stimulants to be given before engaging in a trial of non-stimulant alternatives. Attention-deficit/hyperactivity disorder is a highly heterogeneous condition which affects individual patients differently.

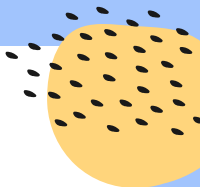
There is very little correlation between body weight and dosage of the stimulant medications. The dosage should be gradually titrated against clinical response and side effects until an optimum response is attained.<sup>25</sup> In practice, this may result in dosages that are above the maximum published dosages according to the package insert. In such cases, patients should be under specialist care and frequent monitoring of side effects should be undertaken.

## Non-stimulants

Atomoxetine has a slightly lower effect size (overall response rate) compared to psychostimulants.<sup>77</sup> The recommended dose of ATX is 1.2 to 1.8 mg/kg/day.<sup>78</sup> Atomoxetine may be considered for patients who experience significant side effects or who have had suboptimal responses to stimulants.<sup>79</sup>

It may also be used in combination with stimulant medication in patients whose response to the latter has been suboptimal as there may be synergistic effects in some patients when these two agents are used together. However, the concurrent use of a stimulant and ATX should be under the care of a specialist and blood pressure and pulse should be regularly measured because of the catecholaminergic effect of both medications. Atomoxetine may also be prescribed when stimulant agents are contraindicated or where there is a high risk of stimulant misuse.<sup>80</sup> In patients with significant comorbid anxiety, ATX may also be preferable as it has potential anxiolytic benefits, most notably in social anxiety, and may be less likely than stimulant medications to aggravate anxiety.<sup>81</sup>

Guanfacine is another non-stimulant for ADHD but not available in South Africa. Other agents used off-label (with lower efficacy profiles and more severe side effects) include clonidine (Menograin®) and imipramine (Tofranil®). There is no evidence for the use of bupropion or modafinil in the treatment of children and adolescents with ADHD. Atypical antipsychotics are among the agents used for comorbidities commonly seen with ADHD, often in combination with other agents. These medications are generally reserved for treatment-resistant cases and require specialised care.



# Methylphenidate:

*Cost variable: ~R122 for least expensive 10mg SA generic and ~R411 for least expensive 10mg LA to ~R1 434 for brand name extended release 54mg*

*formulation*

## **Advantages:**

- High efficacy
- Rapid onset
- **Well tolerated and safe**
- *Multiple duration options: short, intermediate and long acting*
- Provider familiarity
- Inexpensive
- Some evidence for use in children as young as 3 years

## **Disadvantages:**

- Side effect profile
- Cardiovascular concerns
- Short acting limitations
- Prescribing restrictions/access barriers
- *Misuse potential*

# Amphetamines:

*Dexamphetamine: ~R591-R1761*

*Lisdexamphetamine: ~R1 271-R 1 565*

## Advantages:

- **High efficacy** (bigger effect size than methylphenidate)
- Rapid onset
- Long and short acting formulations

## Disadvantages:

- Side effect profile: Higher risk of psychosis
- Cardiovascular concerns
- Prescribing restrictions/access barriers
- Higher chance of tolerance/withdrawal
- Misuse potential

# Atomoxetine:

*Cost variable: ~R362 –R1 430 depending on brand*

## Advantages:

- Long lasting effects – consistent symptom management
- Single daily dose
- Useful when stimulants not tolerated well
- Useful in comorbidities e.g. anxiety, tics
- Low abuse potential
- *Less barriers to prescribing*

## Disadvantages:

- Delayed onset, need consistent dosing
- Need consistent dosing for effect
- Lower efficacy
- Suicidality risk (black box warning)
- Cardiovascular risks

# Clonidine:

*Cost variable: ~R116 –R570 depending on brand*

## Advantages:

- Can be useful when stimulants not tolerated well
- Useful in comorbidities e.g. sleep dysregulation, anxiety
- Low abuse potential
- Less barriers to prescribing
- Inexpensive
- No reported shortages

## Disadvantages:

- Sedation, fatigue, hypotension
- Delayed onset, need consistent dosing for effect
- Lower efficacy – usually use as adjunctive treatment
- Dosing and administration complex
- Off label use
- Tolerance and withdrawal risk

# Imipramine:

*Cost variable: ~R128 –R1 098 depending on brand*

## Advantages:

- Non-stimulant option
- Useful in comorbidities e.g. depression, sleep disturbance, pain
- No reported shortages
- Less barriers to prescribing
- Low abuse potential
- Long lasting effects – consistent symptom management

## Disadvantages:

- Low effect size
- Delayed onset, need consistent dosing for effect
- Multiple drug interactions
- Withdrawal risk
- Off label use

# Atypical antipsychotics:

*Risperidone: ~R201 for generic 0.5mg tablet – R2 941 for 4mg brand name tablet*

*Aripiprazole: ~R295 for generic 5mg tablet – R2797 for 30mg brand name tablet*

## Advantages:

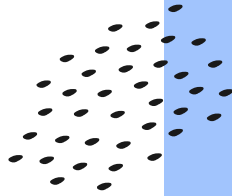
- Useful in comorbidities e.g. autism, conduct disorder
- Broad action – effects on emotional dysregulation and irritability
- Less barriers to prescribing
- Low abuse potential
- Widely available

## Disadvantages:

- Not targeting core ADHD symptoms
- Off label use
- Sedation and weight gain
- Long term risks – metabolic syndrome, EPSE
- QT prolongation



# What to do?



# International Guidance:

- Consider the ongoing shortages when prescribing methylphenidate products
- Consider the availability of other ADHD medicines when prescribing alternative
- Switch within the same stimulant class first before considering a change of class
- Inform patients that supply of the various methylphenidate products is expected to be limited throughout 2025 and 2026
- Do not prescribe more than one month's supply at a time of the affected medicine
- Do not prescribe antipsychotics or benzodiazepines as alternatives to ADHD medicines.



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# Other advice:

- Prioritize patients with highest clinical need (risk of significant functional impairment or relapse)
- Open communication with parents and families – consider drug holidays to save medication for critical times e.g. exams
- Consider temporary dose reductions if clinically appropriate
- Explore non-pharmacological interventions
- Exercise careful diagnostic judgement when evaluating new ADHD presentations
- Encourage families to play an active role in advocacy and to have open communication with schools

# Thoughts for discussion:

- How do we advocate? And what do we advocate for?
- How do we judge who has highest clinical need?
  - Children vs adults?
  - Children in mainstream school vs LSEN?
  - Children in milestone school grades e.g. Matric?
- How do ensure equitable access to medication at all levels of care?
- How do we decide who to transition to alternative medication?
  - Newly diagnosed?
  - People on highest doses? Transition to combination as “stimulant sparing”?
- Would previous adherence influence decision making?
- How do we improve use and access to non-pharmacological strategies?

# Useful resources:

| ARTICLE/RESOURCE AND AUTHOR(S) WHEN APPLICABLE                                                                                                                                                                                                                                    | TOPICS COVERED                                                                                                                                                                                                                                                                                                                                                                                                                          | QR CODE/URL                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>"How to Switch Stimulants: a Dosing Guide for ADHD"</b> <sup>18</sup><br>Chris Aiken, MD                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>Dosing guide</li> <li>Accounts for isomers, duration, and absorption</li> <li>Guidelines for switching between methylphenidate and amphetamines</li> <li>Maximum daily doses</li> </ul>                                                                                                                                                                                                          |  <a href="https://www.psychiatrictimes.com/view/how-to-switch-stimulants-dosing-guide-for-adhd?slide=1">https://www.psychiatrictimes.com/view/how-to-switch-stimulants-dosing-guide-for-adhd?slide=1</a>                                   |
| <b>ADHD medication calculator/convert*</b>                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>Calculator (website/app)</li> <li>Duration of action, time to peak effect, starting dose and titration recommendations, and maximum doses</li> </ul>                                                                                                                                                                                                                                             |  <a href="https://www.adhdmedcalc.com/">https://www.adhdmedcalc.com/</a>                                                                                                                                                                   |
| <b>Prescribing Guidelines for Attention Deficit/Hyperactivity Disorder (ADHD)</b> <sup>19</sup><br>Nationwide Children's Hospital and Partners For Kids                                                                                                                           | <ul style="list-style-type: none"> <li>Guideline document</li> <li>Link to Vanderbilt Assessment Scales for ADHD screening</li> <li>Long-acting stimulant guidelines</li> <li>Long-acting stimulant conversion guide</li> <li>Patient-related considerations and recommendations</li> <li>Lists of preferred and nonpreferred stimulants and non-stimulants with information on alternative formulations and clinical pearls</li> </ul> |  <a href="https://partnersforkids.org/wp-content/uploads/2021/02/WZ50518-PFK_Prescribing-Guidelines-for-ADHD_2020-9.pdf">https://partnersforkids.org/wp-content/uploads/2021/02/WZ50518-PFK_Prescribing-Guidelines-for-ADHD_2020-9.pdf</a> |
| <b>AAPP Pharmacist Toolkit</b> <sup>20</sup><br>Sandra Mitchell, PharmD, BCPP, and Danielle L. Stutzman, PharmD, BCPP                                                                                                                                                             | <ul style="list-style-type: none"> <li>Toolkit document</li> <li>Stimulant class comparisons, including the mechanism of action, metabolism, and general dosing considerations</li> <li>Stimulant dose conversions with treatment plans and recommendations</li> </ul>                                                                                                                                                                  |  <a href="https://aapp.org/guideline/stimulant (login to download)">https://aapp.org/guideline/stimulant (login to download)</a>                                                                                                           |
| <b>"Navigating the Current Shortages of Pediatric ADHD Medications"</b> <sup>22</sup><br>Bailey Smith, PharmD; Luz Rosario, PharmD candidate; Janessa Maldonado, PharmD candidate; Tracy Nguyen, PharmD candidate; Keena Patel, PharmD candidate; Caitlyn Bradford, PharmD, BCPPS | <ul style="list-style-type: none"> <li>Guideline article</li> <li>Medications not affected by current shortage</li> <li>Approved treatment options with conversion guidelines and recommendations</li> </ul>                                                                                                                                                                                                                            |  <a href="https://www.contemporarypediatrics.com/view/navigating-the-current-shortages-of-pediatric-adhd-medications">https://www.contemporarypediatrics.com/view/navigating-the-current-shortages-of-pediatric-adhd-medications</a>       |
| <b>"Practice Parameter for the Assessment and Treatment of Children and Adolescents With Attention-Deficit/Hyperactivity Disorder"</b> <sup>23</sup><br>American Academy of Child and Adolescent Psychiatry                                                                       | <ul style="list-style-type: none"> <li>Practice parameter</li> <li>Clinical course, comorbidities, and etiology of ADHD</li> <li>Recommendations for screening, evaluation, and treatment of ADHD based on different situations</li> <li>FDA-approved and not-approved medications for ADHD and related information backed by scientific research</li> </ul>                                                                            |  <a href="https://www.jaacap.org/article/S0890-8567(09)62182-1/pdf">https://www.jaacap.org/article/S0890-8567(09)62182-1/pdf</a>                                                                                                           |

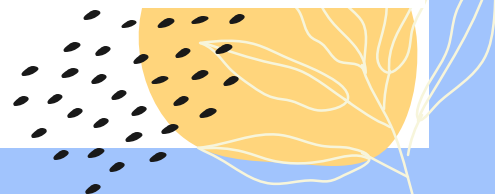
AAPP: American Association of Psychiatric Pharmacists; ADHD, attention-deficit/hyperactivity disorder.  
 \*As of March 27, 2025.



The first stop for professional medicines advice

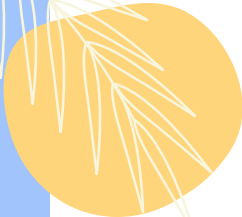
**YOUNGMINDS**

**ADHD**



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# Thanks!

**Any questions?**

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