

## April 14, 2025

## WHO Expert Committee on Selection and Use of Essential Medicines emlsecretariat@who.int

RE: Application Reference: A.19 Methylphenidate – Attention Deficit Hyperactivity Disorder

Dear Members of the Essential Medicines for Children Committee,

The Association for Child and Adolescent Mental Health (ACAMH), is writing to express their strongest endorsement for the inclusion of methylphenidate in the WHO Model List of Essential Medicines for the treatment of children and adolescents between the ages of 6 to 17 years with Attention Deficit/Hyperactivity Disorder (ADHD), and for the corresponding application "A.19 Methylphenidate – Attention Deficit Hyperactivity Disorder."

The Association for Child and Adolescent Mental Health (ACAMH) is a UK-based international charity that promotes research, training, and best practices in child, adolescent and young person mental health. Founded over 60 years ago, it publishes leading journals in the field, such as the Journal of Child Psychology and Psychiatry, (JCPP) and supports professionals through events and resources. With a membership branch network throughout the UK and Ireland and international branches in Malta, Egypt and India, ACAMH brings together clinicians, researchers, and practitioners to advance evidence-based care for young people aged 0–25. Its core goals include enhancing scientific understanding, improving multi-disciplinary practice, and fostering global collaboration in child and adolescent mental health.

Given our focus on evidence-based practice, we have been carefully appraising and disseminating the evidence on methylphenidate. Based on the highest levels of evidence synthesis (network meta-analyses<sup>12</sup> and umbrella reviews<sup>3</sup> of randomized controlled trials), we are confident in stating that methylphenidate is among the most efficacious interventions in psychiatry—and indeed, in medicine—as evidenced by a landmark study comparing effect sizes across medical treatments<sup>4</sup>.

Importantly, methylphenidate has been shown to be as tolerable as placebo in network metaanalytic evidence from short-term trials<sup>1</sup>. Regarding long-term evidence, discontinuation and withdrawal trials have demonstrated persistence of effects beyond the short term<sup>5</sup>. Within individual design studies<sup>6</sup> have also shown significant effects on key outcomes such as reduction of physical injuries, motor vehicle accidents, substance use disorder and improvement of academic performance. A recent study<sup>7</sup> using the sophisticated method of emulated target trial has shown a significant reduction in mortality following stimulant (including mainly methylphenidate) treatment.

The longest available observational follow-up study <sup>8</sup> (14 years) has shown a slight increase in the risk of hypertension (+8%), which simply reinforces current recommendations for clinicians to









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monitor blood pressure and pulse, but no evidence of other significant cardiovascular effects.

The largest observational study<sup>9</sup> (the ADDUCE study), funded by the EU Research Commission, showed that long-term treatment with methylphenidate for up to two years is safe. There was no evidence to support the hypothesis that methylphenidate treatment leads to reductions in growth. Again, methylphenidate-related changes in pulse and blood pressure, were overall small.

We are aware that a minority of critics have asserted that the quality of evidence supporting methylphenidate is poor<sup>10</sup>. However, it is important to note that the assessment of evidence quality is a process that involves subjective decisions and is inevitably influenced by bias, including ideological bias. The vast majority of professionals (researchers and clinicians) that we are in contact with, do endorse the benefits and safety of methylphenidate. Importantly, the vast majority of individuals with lived experience have reported the benefits of methylphenidate in their lives. Overall, while it is impossible to have perfect evidence, we believe that the evidence supporting methylphenidate is among the strongest in mental health research.

While we are fortunate to live in a country where methylphenidate is licensed (UK), we are aware that many countries around the world are not in the same position.

Given the cost to society of untreated ADHD, we therefore strongly endorse the inclusion of methylphenidate in the WHO Model List of Essential Medicines.

Yours sincerely,

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**Martin Pratt** 

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On behalf of the Association for Child and Adolescent Mental Health (<u>www.acamh.org</u> www.acamhlearn.org)











## References:

- 1. Cortese S, Adamo N, Del Giovane C, et al. Comparative efficacy and tolerability of medications for attention-deficit hyperactivity disorder in children, adolescents, and adults: a systematic review and network meta-analysis. *Lancet Psychiatry* 2018;5(9):727-38. doi: 10.1016/s2215-0366(18)30269-4 [published Online First: 20180807]
- 2. Ostinelli EG, Schulze M, Zangani C, et al. Comparative efficacy and acceptability of pharmacological, psychological, and neurostimulatory interventions for ADHD in adults: a systematic review and component network meta-analysis. *Lancet Psychiatry* 2025;12(1):32-43. doi: 10.1016/s2215-0366(24)00360-2
- 3. Correll CU, Cortese S, Croatto G, et al. Efficacy and acceptability of pharmacological, psychosocial, and brain stimulation interventions in children and adolescents with mental disorders: an umbrella review. *World Psychiatry* 2021;20(2):244-75. doi: 10.1002/wps.20881
- 4. Leucht S, Hierl S, Kissling W, et al. Putting the efficacy of psychiatric and general medicine medication into perspective: review of meta-analyses. *Br J Psychiatry* 2012;200(2):97-106. doi: 10.1192/bjp.bp.111.096594
- 5. Matthijssen AM, Dietrich A, Bierens M, et al. Continued Benefits of Methylphenidate in ADHD After 2 Years in Clinical Practice: A Randomized Placebo-Controlled Discontinuation Study. *Am J Psychiatry* 2019;176(9):754-62. doi: 10.1176/appi.ajp.2019.18111296 [published Online First: 20190521]
- 6. Chang Z, Ghirardi L, Quinn PD, et al. Risks and Benefits of Attention-Deficit/Hyperactivity Disorder Medication on Behavioral and Neuropsychiatric Outcomes: A Qualitative Review of Pharmacoepidemiology Studies Using Linked Prescription Databases. *Biol Psychiatry* 2019;86(5):335-43. doi: 10.1016/j.biopsych.2019.04.009 [published Online First: 20190417]
- 7. Li L, Zhu N, Zhang L, et al. ADHD Pharmacotherapy and Mortality in Individuals With ADHD. *Jama* 2024;331(10):850-60. doi: 10.1001/jama.2024.0851
- 8. Zhang L, Li L, Andell P, et al. Attention-Deficit/Hyperactivity Disorder Medications and Long-Term Risk of Cardiovascular Diseases. *JAMA Psychiatry* 2024;81(2):178-87. doi: 10.1001/jamapsychiatry.2023.4294
- 9. Man KKC, Häge A, Banaschewski T, et al. Long-term safety of methylphenidate in children and adolescents with ADHD: 2-year outcomes of the Attention Deficit Hyperactivity Disorder Drugs Use Chronic Effects (ADDUCE) study. *Lancet Psychiatry* 2023;10(5):323-33. doi: 10.1016/s2215-0366(23)00042-1 [published Online First: 20230320]
- 10. Ribeiro JP, Gluud C, Storm MRO, Storebø OJ. Should methylphenidate be included in the WHO model lists of essential medicines? *Eur Child Adolesc Psychiatry* 2025;34(1):361-62. doi: 10.1007/s00787-024-02565-w [published Online First: 20240912]







