

The Overlap Between Attention-Deficit/Hyperactivity Disorder and Intellectual Disability in Children and Adolescents: A Scoping Review

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AIMS

This scoping review aimed to describe the current evidence on the overlap between attention-deficit/hyperactivity disorder (ADHD) and intellectual disability (ID) in children and adolescents, with a focus on prevalence, symptom overlap, diagnostic challenges, pharmacological and non-pharmacological management, and impact on quality of life.

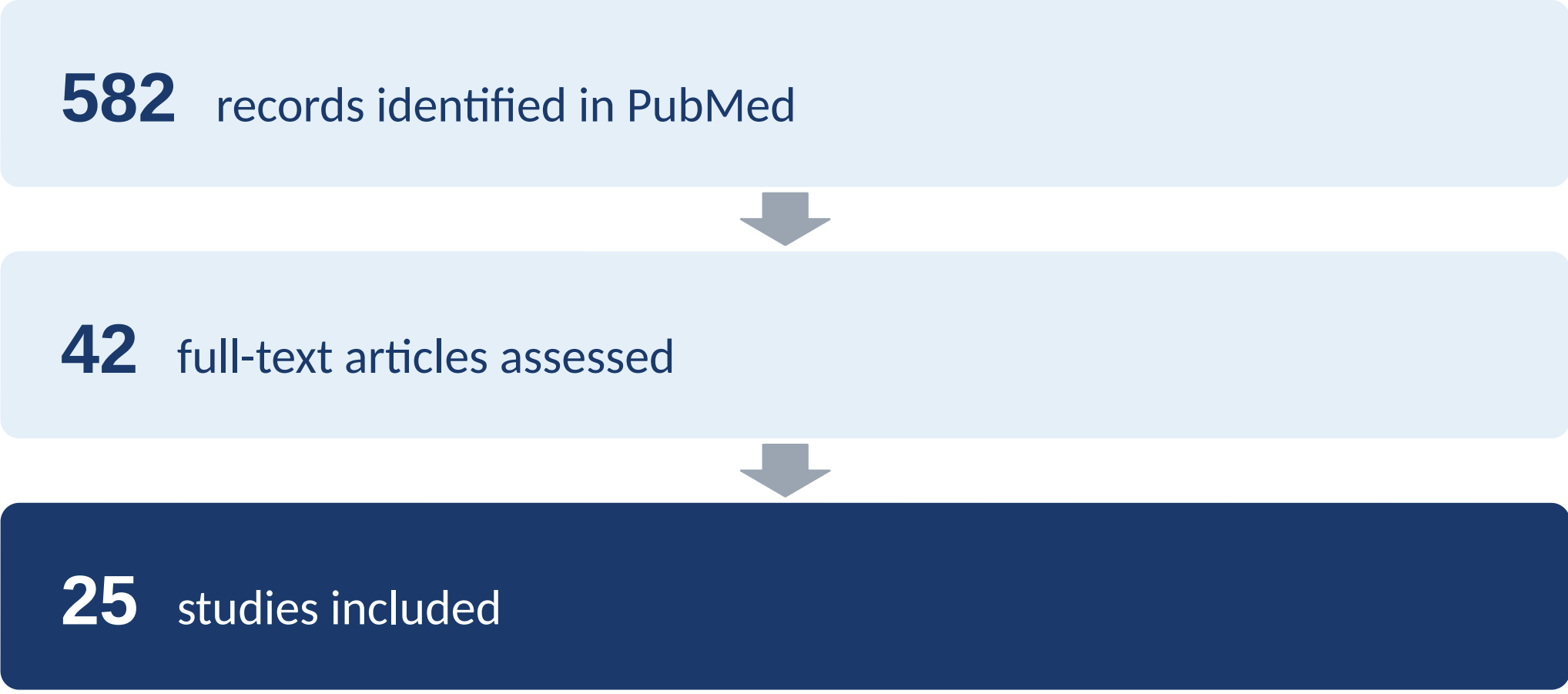
BACKGROUND

- ADHD and ID are common neurodevelopmental conditions that frequently co-occur.
- ADHD symptoms in children with ID are often attributed to cognitive impairment alone, which delays intervention and worsens outcomes.
- Both the International Classification of Diseases 11th Revision (ICD-11) and the Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-5) permit co-diagnosis when symptoms exceed developmental level.

Diagnostic overshadowing: ADHD symptoms are ascribed to the intellectual disability itself, so ADHD goes unrecognised and untreated.

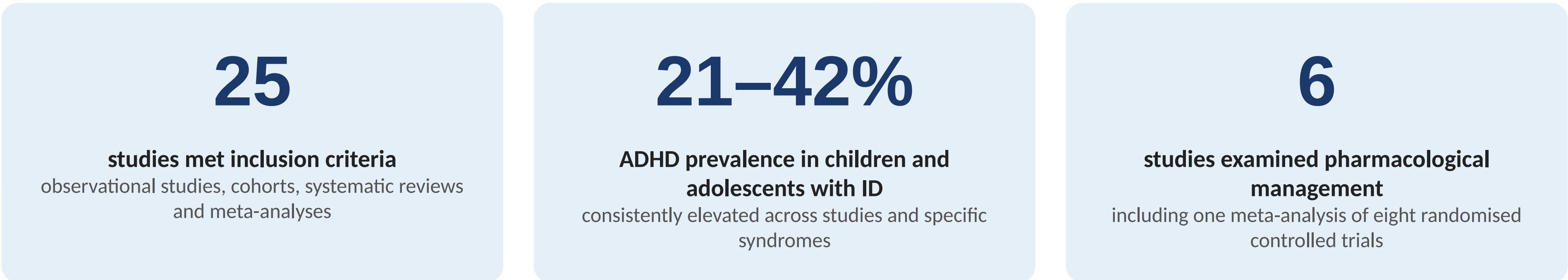
METHODS

- Scoping review of PubMed: English-language studies, January 2015 – October 2025, participants under 18 years.
- Search terms covered ADHD, hyperkinetic disorder, ID, learning disability and related terms.
- Eligible: observational, cohort and cross-sectional studies, systematic reviews and meta-analyses.
- All abstracts and full texts were double screened by the team; data were extracted and narratively synthesised.

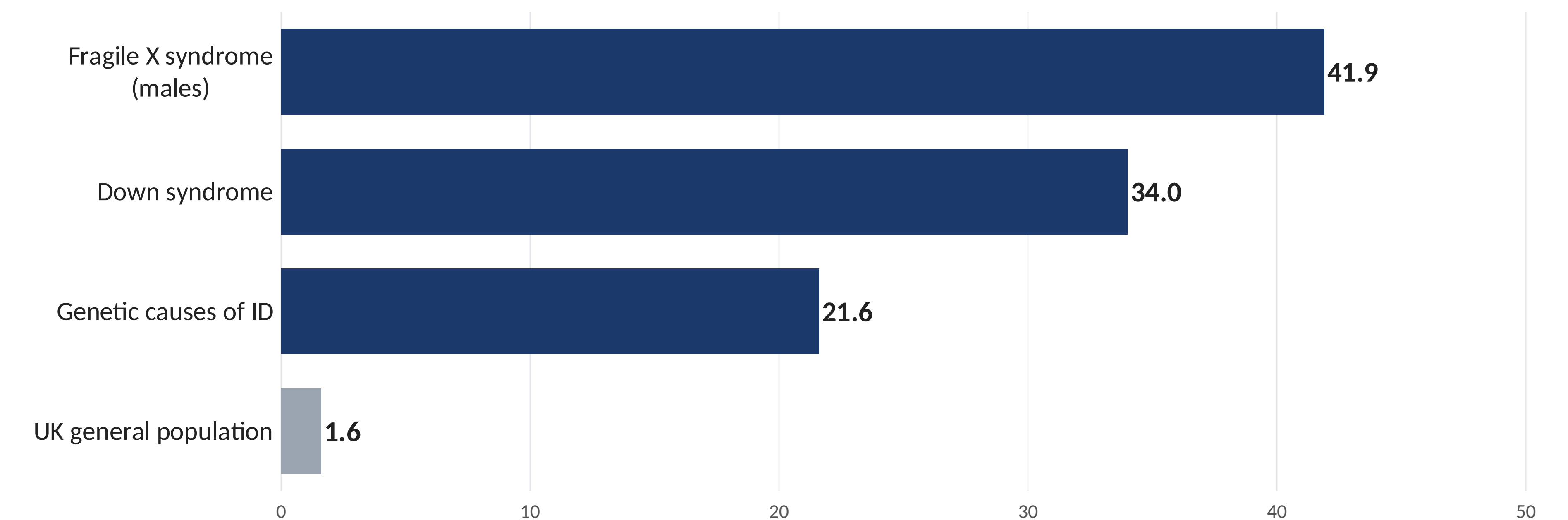


Included studies varied widely in design, location and research focus.

RESULTS

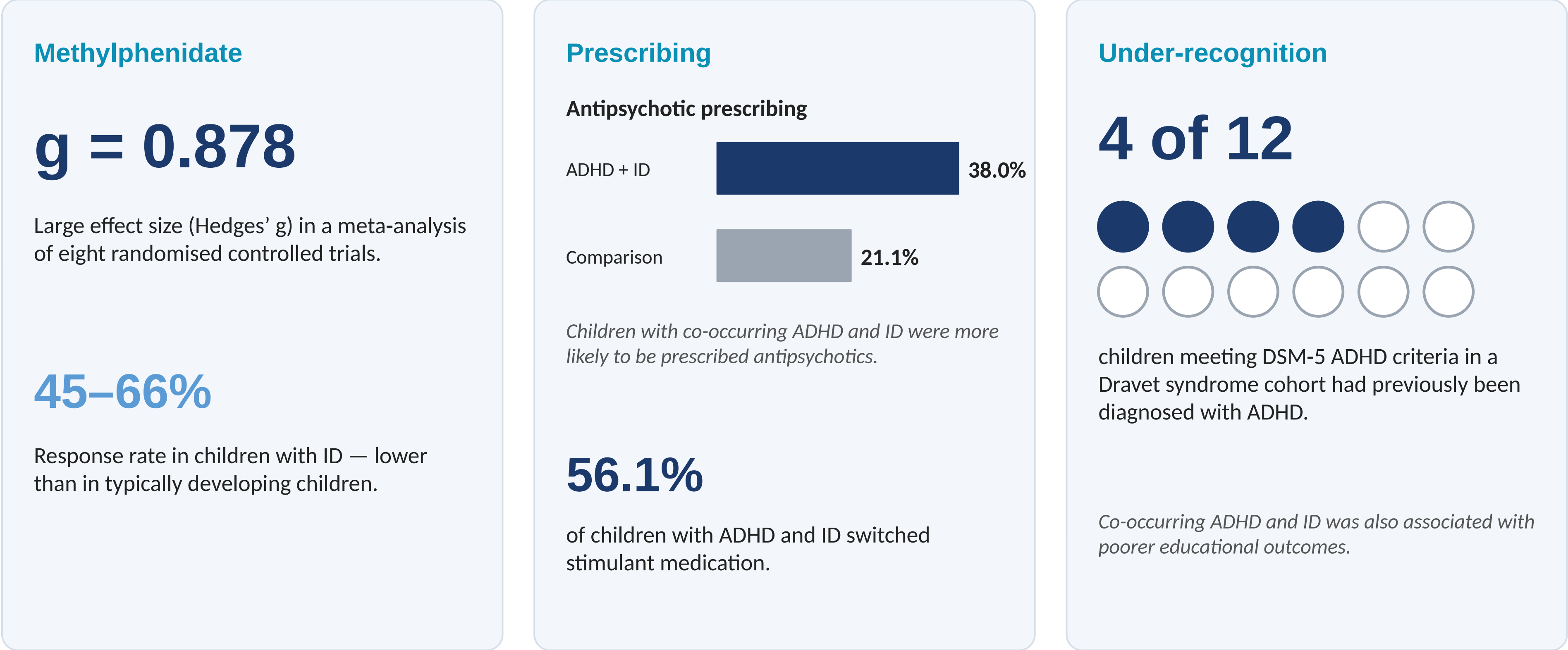


ADHD prevalence by population (%)



Included studies consistently reported elevated ADHD rates among children and adolescents with ID and specific syndromes, with prevalence estimates between 21% and 42%; the UK general-population rate (1.6%) is shown for reference.

Management and outcomes



CONCLUSIONS

- 1

ADHD is common but frequently under-recognised in children with ID; diagnostic overshadowing is likely to be pervasive.
- 2

Methylphenidate is effective, though response is lower than in typically developing children.
- 3

Structured, developmentally-informed assessment and sex-sensitive screening are needed.
- 4

Future priorities: a systematic review and meta-analysis for pooled prevalence, validated assessment tools for severe ID, and sex-stratified data.

This scoping review mapped current research and did not assess the quality of the evidence.

Ethics This review used previously published, aggregated data and did not involve human participants or identifiable personal data; ethical approval was not required.	Funding The authors received no specific funding for this work.	Declaration of interest The authors have no conflicts of interest to declare.	Contact Dr Janakan Sivalingam, CAMHS P-CAP Team, Livewell Southwest, Plymouth. janakan.sivalingam@nhs.net
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