

A Goldilocks Approach to Youth Psychotropic Prescribing

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Abstract

Psychotropic prescribing in youth is increasingly debated through concerns regarding both overmedicalisation and unmet mental health need. Rising rates are often interpreted as evidence of overprescribing, yet clinicians often operate in under-resourced services, with long waiting lists and limited access to psychological therapies. This paper argues that the key issue is not whether prescribing rates are too high, but whether prescribing is proportionate to clinical need. Drawing on international and recent Irish CAMHS prescribing data, we propose a “Goldilocks model” of psychotropic prescribing in youth, in which optimal prescribing lies on a continuum between the extremes of under- and over-prescribing. This position is shaped by evidence, patient factors, and service context. While psychotropics have an important evidence-based role within child psychiatry, safe and effective use depends on accurate assessment, appropriate monitoring, and access to multidisciplinary and psychosocial supports. Achieving proportionate prescribing therefore requires systems capable of supporting evidence-informed, ethically grounded, and developmentally informed care, ensuring treatment is neither too much nor too little, but ultimately “just right.”

Introduction

Psychotropic prescribing in child and adolescent psychiatry increasingly sits at the centre of public debate. Public discourse frequently oscillates between concerns regarding overmedicalisation and concerns about unmet mental health needs among young people. In Ireland, recent scrutiny of CAMHS prescribing practices brought prescribing and medication safety into particular focus, highlighting concerns regarding inappropriate prescribing, poor monitoring, polypharmacy, and off-label use.¹ However, prescribing practices cannot be interpreted in isolation from the broader clinical and service context in which they occur, including access to psychological therapies, multidisciplinary supports, clinician oversight, and healthcare resources. Simplistic narratives of “too much” or “too little” medication therefore fail to capture the complexity of real-world clinical practice.

This paper proposes that psychotropic prescribing in youth is best understood as a dynamic balance rather than a binary phenomenon. Prescribing decisions are shaped not only by scientific evidence and patient need, but also by clinician training, healthcare systems, regulatory environments, and public discourse. The central question is therefore not simply whether prescribing is increasing, but whether treatment is proportionate, appropriately monitored, and aligned with the overall clinical needs of the young person.

Evidence and Uncertainty: What Are We Prescribing and How Well Does It Work?

Over the past two decades, both the evidence base for psychotropic medications and their clinical use in young people have expanded.² Stimulants for ADHD have among the strongest evidence bases in paediatric psychopharmacology, whereas antidepressants and antipsychotics involve more complex risk–benefit considerations and less certainty regarding long-term outcomes.³

Across countries, stimulant prescribing patterns appear relatively consistent, reflecting broad agreement regarding their role in ADHD treatment.⁴ Antidepressant prescribing is also broadly aligned internationally, with SSRIs predominating in youth depression and anxiety. In contrast, antipsychotic prescribing demonstrates far greater variability, reflecting differences in licensing, prescribing cultures, and off-label use.⁴

Are We Prescribing Too Much, or Too Little?

International data consistently demonstrate increasing psychotropic prescribing in children and adolescents, although often from historically low baseline rates. In Ireland, psychotropic prescribing increased between 2017 and 2021 but remained comparatively low internationally.⁵ In the United States, psychotropic medication use increased from 5.3% in 2001 to 8.3% by 2020.⁶

ADHD illustrates the limitations of simplistic overprescribing narratives. Prescribing rates vary substantially across countries and regions. Even across Europe, significant variations exist. ADHD medication prevalence is higher in Nordic countries and the Netherlands, while lower rates occur in Ireland, France, Spain, and Slovenia.⁷

Despite increasing stimulant prescribing internationally, undertreatment appears to coexist. Findings from the Adolescent Brain Cognitive Development (ABCD) Study, involving over 11,000 children in the United States, found that only 26.2% had ever received outpatient mental health care, and 12.9% were currently receiving ADHD medication.⁸ Patterns of use varied significantly depending on sex and race, with some demographic groups experiencing higher discontinuation rates. Approximately one-third of children and half of adolescents discontinue ADHD medication within 12 months of initiation.⁸

Are We Prescribing Safely?

Safety in child psychopharmacology cannot be reduced simply to prescribing rates, but also encompasses monitoring, informed consent, physical health surveillance, and senior clinical oversight. The National CAMHS prescribing audit, published in 2023, concluded there was little evidence of overprescribing, with generally high adherence to consultant-led prescribing practices (95.1%) and monotherapy predominating (70.6%) in most cases.⁹ Among the 3,528 young people attending CAMHS, medications were generally prescribed within recommended dose ranges. However, the audit also identified important areas for improvement, particularly regarding informed consent, baseline physical assessment, and ongoing physical health monitoring.

Similar concerns were highlighted in a second CAMHS Look Back Review, which identified deficiencies in physical health monitoring and described polypharmacy as “a concerning feature”, particularly in clinically complex populations.¹⁰

Nevertheless, polypharmacy does not, in itself, imply inappropriate prescribing. Clinically complex presentations, including neurodevelopmental disorders and intellectual disability,

may require carefully considered combination pharmacotherapy. Polypharmacy may also occur strategically to reduce adverse effects or target specific symptom domains. One example is adjunctive use of metformin to mitigate antipsychotic-associated weight gain. In such contexts, combination prescribing reflects structured clinical reasoning rather than indiscriminate overuse.

A further complexity relates to off-label prescribing. Many medications used in child psychiatry lack formal paediatric licensing, partly due to limited commercial incentives for paediatric trials. Irish CAMHS data identified high rates of off-label antipsychotic prescribing, with 75% of prescriptions directed towards target symptoms rather than formal diagnostic categories.¹¹ While such variability may raise concerns regarding diagnostic inconsistency, contemporary psychopharmacological models increasingly recognise syndromic and symptom-level presentations, suggesting a move toward more dimensional and clinically targeted treatment approaches.

Safe prescribing depends less on licensing status alone and more on careful assessment, informed consent, monitoring, and transparent clinical reasoning.

How System Forces Influence Practice

Prescribing behaviour reflects not only the evidence base, but also broader systemic, regulatory, and societal influences. Healthcare funding structures, service configuration, and access to non-pharmacological interventions all shape prescribing patterns. In under-resourced systems, medication may become the most accessible intervention despite clinician preference for multimodal treatment approaches. In the North Kerry CAMHS audit, reviewers identified disproportionately low rates of psychotherapeutic intervention relative to medication treatment, raising the possibility that higher rates of psychotropic prescribing within the service may partly reflect limited access to psychological and multidisciplinary therapeutic supports rather than prescribing practice alone.¹⁰

At the same time, increasing governance, media scrutiny, and regulatory oversight may influence prescribing in the opposite direction. While enhanced monitoring and accountability may improve prescribing safety, they may also heighten clinician risk aversion and contribute to hesitancy or delayed treatment.¹² In the Bond study, psychiatrists reported improvements in medical record keeping, consent documentation, and physical health monitoring, but 43.1% described increased reluctance to prescribe medication even when clinically indicated, while 50% reported greater avoidance of off-label prescribing.¹² These findings suggest that when prescribing practices are evaluated in isolation from the broader clinical and service context,

governance processes may unintentionally promote defensive prescribing behaviours, with the potential consequence of delaying or denying clinically indicated treatment for vulnerable young people.

Public discourse and increasing awareness of neurodevelopmental and mental health disorders introduce a further complexity. Greater recognition of the effectiveness of psychotropic medication may improve help-seeking behaviours and access to care but may also contribute to heightened expectations regarding diagnosis and pharmacological treatment. In some healthcare settings, particularly where direct-to-consumer advertising and private prescribing are more prominent, patients and families may increasingly approach treatment from a consumer perspective, with strong expectations regarding specific diagnoses or medications. Public clinicians may subsequently inherit prescribing initiated elsewhere and face complex decisions regarding the continuation of treatment where concerns exist regarding appropriateness, monitoring, or evidence base. In this context, clinicians must balance evolving evidence, legitimate clinical need, patient expectations, and prescribing safety, while avoiding both under-treatment and unnecessary prescribing. These tensions demonstrate that psychotropic prescribing is shaped as much by system architecture and societal forces as by scientific evidence alone.

Table 1 proposes a “Goldilocks model” of psychotropic prescribing in youth. In this framework, optimal prescribing lies between the extremes of under- and over-prescribing and emerges through the interaction of three domains: evidence, patient factors, and service context. The balance is not static; increased governance may shift practice toward greater caution, while increased awareness and service access may increase prescribing rates. The aim is therefore not to eliminate tensions within child psychopharmacology, but to achieve prescribing that is proportionate, developmentally informed, and balanced between therapeutic benefit, safety, and access to care.

Conclusion

Debates surrounding psychotropic prescribing in youth are often framed in absolutes: too much or too little. The Goldilocks model conceptualises prescribing as a dynamic equilibrium shaped by evidence and clinician judgement, patient need, and healthcare context. The model recognises that prescribing decisions do not occur in isolation but are influenced by wider service, regulatory, and societal factors that may shift practice towards either over- or under-prescribing. Both extremes carry ethical and clinical risks. The challenge for clinicians, policymakers, and researchers is therefore not simply to increase or reduce prescribing, but

to create systems that support prescribing that is proportionate, monitored, evidence-informed, and developmentally appropriate, ultimately achieving care that is neither too much nor too little, but "just right.

Declarations of Conflicts of Interest:

None declared.

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References:

1. Maskey S. Report on the look-back review into child and adolescent mental health services county MHS area A [Internet]. Cork and Kerry Mental Health Services; 2022 Jan [cited 2026 May 21]. Available from: <https://www.hse.ie/eng/services/news/newsfeatures/south-kerrycamhs-review/report-on-the-look-back-review-into-camhs-area-a.pdf>
2. Solmi M, Fornaro M, Ostinelli EG, Zangani C, Croatto G, Monaco F, et al. Safety of 80 antidepressants, antipsychotics, anti-attention-deficit/hyperactivity medications and mood stabilizers in children and adolescents with psychiatric disorders: a large scale systematic meta-review of 78 adverse effects. *World Psychiatry*. 2020;19(2):214-32.
3. Vitiello B, Davico C. Twenty years of progress in paediatric psychopharmacology: accomplishments and unmet needs. *Evid Based Ment Health*. 2018;21(4):148-50.
4. Altuwairqi Y. Trends and prevalence of psychotropic medication use in children and adolescents in the period between 2013 and 2023: a systematic review. *Cureus*. 2024;16(3):e55452.
5. Parkin R, Bennett K, McNicholas FM, et al. Recent trends in psychotropic medication use in children and adolescents in Ireland. *Eur Child Adolesc Psychiatry*. 2025;34:997-1009.

6. Meng LC, Leonard CE, Candon M, Mandell DS, Hennessy S. Trends in psychotropic medication use, polypharmacy, and potential major drug-drug interactions among US youth. *J Am Acad Child Adolesc Psychiatry*. 2025.
7. Rzeszutek M, Wolańczyk T. Global trends in ADHD medication use: multiple contexts and rising concerns—a narrative review. *J Clin Med*. 2025;14(20):7338.
8. Olfson M, Wall MM, Wang S, Laje G, Blanco C. Treatment of US children with attention-deficit/hyperactivity disorder in the Adolescent Brain Cognitive Development Study. *JAMA Netw Open*. 2023;6(4):e2310999.
9. Halpin C, Whyte I, McCarthy S. Prescribing in child and adolescent mental health services (CAMHS) [Internet]. Health Service Executive; 2023 [cited 2026 May 21]. Available from: <https://www.hse.ie/eng/services/list/4/mental-health-services/camhs/publications/prescribing-in-child-and-adolescent-mental-health-services-audit-2023.pdf>
10. Health Service Executive. Publication of the report of a review into child and adult mental health services in North Kerry CAMHS [Internet]. HSE; 2024 [cited 2026 May 21]. Available from: <https://about.hse.ie/publications/publication-of-the-report-of-a-review-into-child-and-adult-mental-health-services-in-north-kerry-camhs/>
11. O'Driscoll DJ, McCarthy S. Antipsychotic prescribing: national findings of children and adolescents attending mental health services in Ireland. *Eur Child Adolesc Psychiatry*. 2024;33(11):3861-70.
12. Bond L, Ong JZ, McNicholas F. Impact of a national audit on child and adolescent psychiatrists' prescribing practices. *Ir J Psychol Med*. 2025;42(1):28-33.

Appendix:

Table 1: The Goldilocks Model of Child Psychopharmacology: Balancing Evidence, Patient Need, and Context in Prescribing Decisions

Domain	Core Question	Key Components	Potential Risk if Over-Emphasised	Potential Risk if Under-Emphasised
Evidence	<i>What do we know?</i>	Efficacy data, safety profiles, long-term outcomes, clinical trials, guideline recommendations, licensing evidence	Rigid protocol-driven care, reduced individualisation, therapeutic inertia	Unsafe or ineffective prescribing, excessive off-label use, inconsistent practice
Patient	<i>What does this young person need?</i>	Diagnosis, symptom profile, severity, developmental stage, comorbidity, neurodevelopmental factors, family values and preferences	Over-medicalisation, excessive medication reliance, diagnostic inflation	Undertreatment, unmet clinical need, poor engagement, symptom persistence
Context	<i>What influences treatment delivery in practice?</i>	Clinician judgement, professional culture, training, governance, healthcare policy, service availability, access to psychological therapies, societal influences	Defensive prescribing, bureaucratic burden, delayed treatment, medication hesitancy	Poor oversight, inadequate monitoring, over use, inconsistent prescribing governance
Goldilocks Balance	<i>What constitutes "just right" prescribing?</i>	Integration of evidence, individual patient need, and contextual realities through shared clinical decision-making	Over-prescribing	Under-prescribing