

# Rational use of psychotropic medications in youth

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## **This article examines a holistic approach to youth mental health care and discusses the concept of ‘deprescribing’ as a systematic method for assessing the necessity and risks associated with the continued use of medication**

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Systems models have long been considered when trying to understand individual differences in child health and development. <sup>(1-4)</sup> Within these models, it is posited that child outcomes are produced through complex dynamic interactions between the child’s biological characteristics and multiple levels of environmental influences. For example, immediate environments (microsystems) consist of family, peers, teachers, and neighborhoods, whereas more distal influences such as cultural values, beliefs, laws, and customs (macrosystems) provide a broader context within which the child and family live. <sup>(2)</sup> Other levels include mesosystems, ecosystems, and chronosystems. <sup>(2)</sup> This is important when thinking about childhood mental health. These complex system interactions must be considered when diagnosing and treating childhood mental health disorders because adverse environmental conditions have been associated with adverse mental health outcomes. Similarly, positive environmental interactions may have a protective influence on outcomes.

Therefore, interventions to prevent and/or treat mental health conditions in childhood must take a holistic approach in considering the many factors that may contribute to the problem or exacerbate an existing problem.

Evidence suggests that psychotropic medication use in children is common and that use varies across groups such as those in out-of-home care, living in poverty, and those of racial/ethnic minority status. <sup>(5-8)</sup> Psychotropic medication use is endorsed, <sup>(9)</sup> as it has been shown to be effective in treating mental health problems in children. However, given the complex etiology, as described above, the American Academy of Child and Adolescent Psychiatry (AACAP) has recommended a holistic approach that combines the judicious use of medication in combination with other evidence-based interventions except in the most basic conditions. <sup>(9)</sup> The AACAP suggests that the key to optimal child and adolescent mental health treatment is the commitment to ‘the biopsychosocial perspective, trauma-informed care principles, and system of care values and principles.’ <sup>(9)</sup> They go on to say that the care needs to be child- and family- focused and built around therapeutic relationships as well as medical expertise. <sup>(9)</sup> Input from parents and youth is an essential component of best practices. <sup>(9)</sup>

## Deprescribing in youth mental health care

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‘Deprescribing’ is a term that has been used to describe the process by which clinicians can determine the optimal ratio between effectiveness and risk reduction when considering psychotropic medications. <sup>(10)</sup> Deprescribing has its origin in geriatric medicine, but has recently been applied to the treatment of youth with mental health diagnoses. <sup>(10, 11)</sup>

Deprescribing has been defined as a systematic and structured process of evaluating the risk-to-benefit ratio of continued medication use. <sup>(10, 11)</sup>

The goal of the process is to ensure that the [child is on the most effective medication](#) or combination of medications with the least harm. <sup>(10, 11)</sup> Reasons for considering deprescribing vary but may include concerns about exposure to polypharmacy, changes in environmental exposures at multiple levels (as described above), changes in child biological functioning or co-morbidities, and/or changes in youth or parent preferences; to name a few. <sup>(10, 12)</sup> The result may or may not result in a medication change. The critical outcome is that a structured process was used to carefully evaluate the youth’s current symptoms, needs, risks, and preferences to determine the individual’s optimal treatment. Sample materials will be forthcoming in a future paper.

## The need for further research

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While there is an emerging literature regarding the deprescribing of psychotropic medication for children, much remains unknown. Two recent review papers, <sup>(11,13)</sup> highlight issues that need to be empirically examined for specific mental health diagnoses and specific medications. Some important considerations are determining which patients may benefit most, what ‘rebound’ symptoms can be expected, how to determine the ‘correct’ titration, and how to handle the balance needed when multiple psychotropic medications are in use. <sup>(11, 13)</sup> Additional research is also needed to inform the development of psychological and behavioral interventions to support the changes that may occur with the decrease in medication dosage or the discontinuation of medications. <sup>(13)</sup> In one of these reviews, deprescribing of antidepressants was considered. <sup>(13)</sup> The authors found very little evidence supporting the optimal process for conducting deprescribing of antidepressants in children, and some of that knowledge has come from studies in adults that have been applied to children and youth without validation. <sup>(13)</sup> So, while the concept of deprescribing has merit, much work is needed to determine the best path forward that is evidence-based and youth- and family-focused.

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