

# Predicting weight gain in children using second generation anti-psychotic medication

March 28 2024, by Laurie Fickman

---



Credit: CC0 Public Domain

A new study from University of Houston College of Pharmacy researchers examined the development and predictors of clinically significant weight gain (CSWG) among pediatric patients using second-

generation antipsychotic (SGA) medication.

The use of SGAs in pediatric patients has seen a notable increase over time, used to treat various psychiatric conditions, including [attention-deficit hyperactivity disorder](#), [autism spectrum disorder](#), and disruptive behavior disorders such as [conduct disorder](#) and oppositional defiant disorder. While the SGAs have fewer side effects and increased performance than their first-generation counterparts, they do cause weight gain in 60% of children and [adolescent patients](#) taking them.

"Our research indicates that preventing clinically significant weight gain may be possible," said graduate researcher Ning Lyu. "Using patient's characteristics at the initiation of SGA treatment could help clinicians in prescribing to certain patients."

Lyu works under the supervision of Hua Chen, professor and assistant department chair of the Department of Pharmaceutical Health Outcomes and Policy at the UH College of Pharmacy.

Lyu examined the records of over 16,000 [pediatric patients](#) aged 5 -19 from 2016 to 2021 and identified four distinctive weight-gain trajectories: (1) Rapid, (2) Gradual, (3) Transit, and (4) None.

Factors associated with a higher likelihood of having rapid or gradual CSWG versus nonsignificant weight gain were being younger (5–11 vs. 12–17), male, non-Hispanic white, with lower baseline body mass index scores.

"There may be different trajectories of [weight gain](#), such as those gaining a modest degree of weight gradually, relative to those gaining a lot of weight rapidly. Children and adolescents in such differing trajectories may be different, clinically, and so might require different responses to address CSWG," said Lyu. "We also noted a range of

demographic, clinical, and provider characteristics that distinguish between trajectory group membership."

"This insight highlights the importance of personalized monitoring and timely intervention strategies for at-risk individuals who experienced persistent CSWG in real practice," said Chen.

The study is [published](#) in the *Journal of Child and Adolescent Psychopharmacology*.

**More information:** Ning Lyu et al, Trajectories and Predictors for the Development of Clinically Significant Weight Gain in Children and Adolescents Prescribed Second-Generation Antipsychotics, *Journal of Child and Adolescent Psychopharmacology* (2024). [DOI: 10.1089/cap.2023.0071](#)

Provided by University of Houston

Citation: Predicting weight gain in children using second generation anti-psychotic medication (2024, March 28) retrieved 10 May 2024 from <https://medicalxpress.com/news/2024-03-weight-gain-children-generation-anti.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--