The Ethics of Wegovy in Pediatric Mental Health

Preprint*

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Abstract

Semaglutide (Wegovy), a glucagon-like peptide-1 receptor agonist (GLP-1 RA), has attracted global attention for its appetite-suppressing and weight-loss effects. Approved by the U.S. FDA in 2022 for adolescents aged 12 and older, it has since been authorized in several other countries. Despite this, its use among youth remains limited, with ongoing concerns about its long-term safety, efficacy, and suitability during periods of growth and development. Advocates see Wegovy as an important tool for addressing pediatric obesity and its psychological burdens, while critics caution against widespread use in such a vulnerable population.

This paper examines an underexplored ethical dimension of Wegovy's use in children: its impact on mental health. We argue that Wegovy may offer mental health benefits for children —such as reducing weight stigma, improving self-esteem, and avoiding invasive interventions such as bariatric surgery. However, these potential benefits are constrained by barriers to access, supply shortages, risks of misuse, and the possibility of reinforcing stigma and class-based discrimination.

In light of these considerations, we argue that while Wegovy offers promising health benefits for children, its long-term effects on growth, development, and mental health remain uncertain, warranting further study before definitive policy decisions are made. If future evidence confirms its value, it is our view that access should be equitable and accompanied by reforms to reduce stigma, regulate prescribing, and prevent misuse. Until then, clinicians should prescribe cautiously, ensuring clear medical need and implementing safeguards against risks such as weight regain, treatment interruption, and bias in care.

Key Words: Wegovy, pediatric obesity, children, mental health, weight stigma, medical ethics, GLP-1 receptor agonists, Ozempic

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1. Introduction

Novo Nordisk's latest innovation in the glucagon-like peptide-1 receptor agonist (GLP-1 RA) family, semaglutide, has rapidly become one of the most discussed pharmaceuticals on the market. Initially developed for the treatment of type 2 diabetes, semaglutide has gained widespread attention for its effects on appetite suppression and weight loss. Semaglutide is marketed as Ozempic, Rybelsus, and Wegovy. In 2022, following the success of the STEP TEEN trial, Wegovy was approved by the U.S. Food and Drug Administration (FDA) for children 12 years and older to treat pediatric obesity.[1] In 2023, similar approvals for pediatric use followed in Germany, the UK, Denmark, and the United Arab Emirates.[2]

Uptake of Wegovy for pediatric use has been considerably slower than for adults. In the United States, despite an estimated 14.7 million children living with obesity, only 464 pediatric patients across five states—including Michigan, Minnesota, and Wisconsin—were prescribed Wegovy following its approval.[3] Some experts argue that prescribing semaglutide to children warrants greater caution given limited data on its long-term safety and efficacy in younger populations. Dan Cooper, a professor of pediatrics at the University of California, Irvine, notes, "We don't really know what these medications do in the context of a growing child."[4] Similarly, Tamara Hannon, a pediatric endocrinologist at Indiana University, warns that "Although adults face many of the same unknowns, the risks for teens could be more severe because of their physiological pubertal development."[5] Teens may also be more vulnerable due to ongoing cognitive development.

Some medical professionals advocate for broader use of weight-loss medications in children, arguing that pharmaceutical intervention is an underutilized tool in combating pediatric obesity. Fatima Cody Stanford, an obesity medicine specialist and associate professor of pediatrics at Harvard emphasizes that, "Weight-loss drugs give doctors the ability to intervene before the effects of obesity snowball…used early enough, semaglutide or other medications could possibly reroute the trajectory of a teenager's entire life..."[6] Others highlight the mental health risks associated with obesity and view medications like Wegovy as part of the solution. Angela Fitch, assistant professor at Harvard and president of the

* Forthcoming 2025 in *Bioethics*.
[1] Daniel Weghuber et al., "Once-Weekly Semaglutide in Adolescents with Obesity," *The New England Journal of Medicine* 387, no. 24 (2022): 24, https://doi.org/10.1056/NEJMoa2208601.
[2] Robin Respuat and Chad Terhune, "Exclusive: Wegovy Fuels Sharp Rise in Use of Weight-Loss Drugs for US Youth," Reuters, February 2024, https://www.reuters.com/business/healthcare-pharmaceuticals/us-families-begin-embrace-weight-loss-drugs-their-children-2024-02-15/.
[3] Respuat and Terhune, "Exclusive: Wegovy Fuels Sharp Rise in Use of Weight-Loss Drugs for US Youth."
[4] Respuat and Terhune, "Exclusive: Wegovy Fuels Sharp Rise in Use of Weight-Loss Drugs for US Youth."
[5] Yasmin Tayag, "Ozempic in Teens Is a Mess," The Atlantic, May 25, 2023, https://www.theatlantic.com/health/archive/2023/05/ozempic-teen-obesity-treatment-health-promises-risks/674204.
[6] Tayag, "Ozempic in Teens Is a Mess."

Obesity Medicine Association, argues that "Teens develop an unhealthy mentality about their body when they don't get help losing weight…explaining to a teen that obesity is not their fault and correcting the underlying biological issue with medication or other treatment helps them develop 'a better body image about themselves.'"[7] Citing a study on suicidal ideation in adolescents with obesity treated with GLP-1 RAs, a *New York Post* article also claims that "obese teens who are given semaglutide weight loss drugs like Ozempic and Wegovy, may see an improvement in their mental health…", describing Wegovy as "a jab for joy."[8]

Prescribing medication to children raises several ethical considerations, including the medication's safety—encompassing risks, side effects, and unknowns—its efficacy, respect for the patient, and alignment with public health goals. This paper focuses on a key ethical dimension of Wegovy's use in children: its potential impact on children's mental health. As noted above, some proponents claim that Wegovy may improve children's mental health by addressing weight stigma and self-esteem. Given the importance of mental health for well-being, such benefits could provide strong justification for its use. However, despite growing interest in this possibility, there has been little sustained analysis of how these mental health benefits might be realized in practice. By shifting attention from physical outcomes to the underexplored mental health dimensions of Wegovy's pediatric use, this paper highlights tensions—such as its potential both to relieve and to reinforce stigma and inequities—that extend beyond existing clinical debates.

We begin by discussing Wegovy's success in facilitating physical health outcomes for children. We propose several ways in which it could positively impact children's mental health, including its ability to reduce the experience of weight stigma, enhance self-esteem by helping children achieve their weight loss goals, and serve as a less invasive, potentially less traumatic alternative to interventions such as bariatric surgery. We articulate several limitations to realizing these benefits, as well as harms that Wegovy may pose to children's mental health, including access barriers, supply shortages, potential misuse, and the risk of reinforcing weight stigma and class-based discrimination. We then present a summary of emerging empirical findings and anecdotal reports concerning Wegovy's impact on mental health. We conclude by arguing that while Wegovy offers promising health benefits for children, its long-term effects on growth, development, and mental health remain uncertain, warranting further study before firm policy is set. If future evidence confirms its value, we argue that access should be equitable and paired with reforms to reduce stigma, regulate prescribing, and prevent misuse. Until then, clinicians should prescribe cautiously, ensuring clear medical need and safeguards against risks such as weight regain, treatment interruption, and bias in care.

Our focus is on children aged 12 years and older, as this is the age group for which Wegovy has been approved. We will also use the terms "youth" and "adolescent" to refer to children between the ages of 12 and 18.

[7] Tayag, "Ozempic in Teens Is a Mess."
[8] Wigle, "Ozempic Could Reduce Suicide Risk in Teens with Obesity: Study," New York Post, October 15, 2024, https://nypost.com/2024/10/15/health/ozempic-could-reduce-suicide-risk-in-teens-with-obesity-study/?utm_source=chatgpt.com.

2. The Science & Potential: Physical Health

Wegovy is approved for adults and children aged 12 years and older with obesity, and for some adults with overweight and weight-related conditions, to aid in weight loss and maintenance.[9] For children over 12, it is administered as a once-weekly pre-filled injection, with the dose gradually increasing—from 0.25 mg per week for the first four weeks to a maintenance dose of 2.4 mg.

Semaglutide promotes weight loss primarily by suppressing appetite, achieved by slowing gastric emptying and influencing brain regions involved in hunger and satiety. However, the exact neural mechanisms remain uncertain. Some suggest that, because GLP-1 RAs circulate for extended periods, they may cross the blood-brain barrier and affect deeper parts of the brain, though evidence for this is limited and speculative.[10] There is some evidence that semaglutide affects the brainstem, septal nucleus, and hypothalamus.[11] In these regions, GLP-1 RAs interact with the brain via circumventricular organs and areas near the ventricles —structures that detect and respond to changes in blood composition. The role and significance of these interactions also remain unclear.

Results in children using semaglutide for weight loss have been significant. In the 68-week STEP TEENS randomized control trial (RCT) of 180 participants aged 12 to <18 years with obesity or overweight and at least one weight-related condition, those receiving Wegovy with diet and exercise lost on average 16.1% of body weight, compared to 0.6% in the placebo group.[12] Additionally, 44% of participants on Wegovy were reclassified to a normal or overweight BMI, versus 12.1% in the placebo group.[13] The trial further reported improvements in cardiometabolic markers—such as waist circumference, glycemic control, lipid profile, and alanine aminotransferase (ALT)—suggesting potential benefits for reducing future cardiovascular risk and pediatric non-alcoholic fatty liver disease (NAFLD).

While these findings are encouraging, clinical trials demonstrate improvements in *risk factors* —not actual health outcomes.[14] There is also evidence of *adverse* effects, including nausea, vomiting, diarrhea, abdominal pain, bloating, constipation, headaches, loss of lean muscle mass, and exercise-related weakness. In the STEP TEENS trial, 62% of participants in the semaglutide group experienced mild or moderate nausea, vomiting and diarrhea, compared to 42% in the placebo group.[15] Serious side effects were reported in 11% from the semaglutide

[9] Novo Nordisk, "Discover the Power of Wegovy," Novo Nordisk, May 2024, https://www.wegovy.com/#:~:text=Wegovy%C2%AE%20is%20an%20injectable,plan%20and%20increased%20physical%20activity.
[10] Sarah Zhang, "The Science Behind Ozempic Was Wrong: The Weight-Loss Effects of GLP-1 Drugs Have Little to Do with the Gut," The Atlantic, March 2024, https://www.theatlantic.com/health/archive/2024/03/ozempic-glp1-weight-loss-brain-gut/677645/.
[11] S. Gabery et al., "Semaglutide Lowers Body Weight in Rodents via Distributed Neural Pathways," *JCI Insight* 5, no. 6 (2020): 6, https://doi.org/10.1172/jci.insight.133429.
[12] Weghuber et al., "Once-Weekly Semaglutide in Adolescents with Obesity."
[13] Aaron S Kelly et al., "Reducing BMI below the Obesity Threshold in Adolescents Treated with Once-Weekly Subcutaneous Semaglutide 2.4 Mg," *Obesity* 31, no. 8 (2023): 8.
[14] For an extended discussion of the health benefits see Nanette Ryan and Julian Savulescu, "The Ethics of Ozempic and Wegovy," *Journal of Medical Ethics*, Institute of Medical Ethics, 2025.
[15] Weghuber et al., "Once-Weekly Semaglutide in Adolescents with Obesity."

group and 9% in the placebo. Adverse events led to trial discontinuation in 5% and 4% of participants respectively.

More serious, though rare, side effects have been documented in adult trials, including gastroparesis (stomach paralysis) and anhedonia (depression), and potential long-term risks such as thyroid C-cell tumors (adenomas and carcinomas), pancreatitis, kidney failure, gallbladder disease, diabetic retinopathy, and weight regain.[16] In the STEP 1 trial extension involving 1961 participants with a BMI ≥ 30 kg/m^2 (or ≥ 27 kg/m^2 with ≥ 1 weight-related co-morbidity) and no diabetes, Wilding *et al.* found that participants receiving once-weekly subcutaneous semaglutide (2.4 mg) and lifestyle intervention regained two-thirds of their prior weight loss within one year of stopping treatment, along with similar reversals in cardiometabolic variables.[17]

Long-term side effects and potential risks for children are not reflected in clinical trials. However, the same risks identified in adults—including weight regain—are listed as product warnings for Wegovy for adolescents.[18] Although not reflected in clinical studies or product information, malnutrition and metabolic harm are also potential risks in both pediatric and adult populations.[19]

To date, no studies have documented Wegovy's impact on children's lifestyle habits, including changes in diet or physical activity. New clinical trials, however, suggest that Wegovy affects eating habits. Masaki *et al.*'s clinical trial examining the impact of semaglutide on eating behavior and glycemic control, for example, found that semaglutide "improves eating control, including the intake of high-fat foods."[20] Several other studies have also shown similar finding, showing reduced intake and cravings for high-fat foods compared with baseline.[21] Bettadapura *et al.*'s (2025) study on changes in food preferences likewise demonstrated a dietary composition shift, with a reduced proportion of calories from high-fat foods.[22]

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[16] Michelle Llamas, "Ozempic Side Effects," *Drug Watch*, May 10, 2024, https://www.drugwatch.com/drugs/ozempic/side-effects/; M. Suran, "As Ozempic's Popularity Soars, Here's What to Know about Semaglutide and Weight Loss," *JAMA* 329, no. 19 (2023): 1627–29.

[17] J.P. Wilding et al., "Impact of Semaglutide on Body Composition in Adults with Overweight or Obesity: Exploratory Analysis of the STEP 1 Study," *Journal of the Endocrine Society* 5, no. Supplement 1 (2021): 16–17.

[18] Novo Nordisk, "Dosing & Administration: Adolescent Dosing," Novo Nordisk, May 2024, https://www.novomedlink.com/obesity/products/treatments/wegovy/dosing-administration/adolescent-dosing.html.

[19] Carla K. Miller, "Medical Nutrition Therapy: Still Relevant in the Era of Pharmacotherapy for Obesity Care," *Journal of the Academy of Nutrition and Dietetics*, ahead of print, June 25, 2024, https://doi.org/10.1016/j.jand.2024.06.222.

[20] Takayuki Masaki et al., "Glucagon-Like Peptide-1 Receptor Agonist Semaglutide Improves Eating Behavior and Glycemic Control in Japanese Obese Type 2 Diabetic Patients," *Metabolites* 12, no. 2 (2022): 147, https://doi.org/10.3390/metabo12020147.

[21] Hanieh Radkhah et al., "The Impact of Glucagon-like Peptide-1 (GLP-1) Agonists in the Treatment of Eating Disorders: A Systematic Review and Meta-Analysis," *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity* 30, no. 1 (2025): 10, https://doi.org/10.1007/s40519-025-01720-9; Malikah Aldawsari et al., "The Efficacy of GLP-1 Analogues on Appetite Parameters, Gastric Emptying, Food Preference and Taste Among Adults with Obesity: Systematic Review of Randomized Controlled Trials," *Diabetes, Metabolic Syndrome and Obesity* 16 (December 2023): 575–95, https://doi.org/10.2147/DMSO.S387116.

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3. Potential Benefits: Mental Health

3.1 Reduction of Experienced Weight Stigma

In addition to its physical health benefits, some commentators—as noted earlier—suggest that Wegovy may also improve children's mental health. One of the most significant ways Wegovy may do so is by reducing children's experience of weight-related stigma.

Tomiyama *et al.* define weight stigma as the social rejection and devaluation of persons who do not conform to prevailing norms of body weight and shape.[23] Stigma, among other things, is often driven by misunderstandings about weight gain, physical health, and personal responsibility. Narratives surrounding weight gain wrongly treat a person's weight as a reliable proxy for health and overlook the social and genetic factors that determine body weight and health. Recent research on genetic predisposition to obesity, for example, demonstrates that "people do not all have the same predispositions to gaining weight and developing obesity," with the genetic influence on body weight being stronger at the higher end of the BMI scale.[24] These findings challenge harmful narratives that cast obesity as solely a matter of lifestyle and reflection of weak willpower.

It is well documented that overweight and obese adults face multiple forms of prejudice and discrimination which can "trigger physiological and behavioral changes linked to poor metabolic health," weight gain, and increased risk of mood or anxiety disorders.[25] Weight stigma is also recognized as a driver of poor employment, healthcare, educational, and public accommodations, compounding physical and mental health challenges.[26]

A growing body of literature also highlights the prevalence of weight stigma among children and adolescents.[27] In their review of the literature on weight stigma and youth mental health in the United States, Puhl and Lessard report a high prevalence of weight stigma among youth with high body weight across sociodemographic groups, with recent prevalence estimates indicating "that nearly a quarter to a half of all youth have been bullied for their body weight, and 13 to 32% of youth report that they have been discriminated against based on their weight." In another study on weight-based victimization toward overweight

[23] A.J. Tomiyama et al., "How and Why Weight Stigma Drives the Obesity 'epidemic and Harms Health," *BMC Medicine* 16 (2018): 1–6; Sahana Bettadapura et al., "Changes in Food Preferences and Ingestive Behaviors after Glucagon-like Peptide-1 Analog Treatment: Techniques and Opportunities," *International Journal of Obesity* 49, no. 3 (2025): 418–26, https://doi.org/10.1038/s41366-024-01500-y.
[24] Claude Bouchard, "Genetics of Obesity: What We Have Learned Over Decades of Research," *Obesity* 29, no. 5 (2021): 802–20, https://doi.org/10.1002/oby.23116.
[25] Tomiyama et al., "How and Why Weight Stigma Drives the Obesity 'epidemic and Harms Health."
[26] Janell L Mensinger et al., "Mechanisms Underlying Weight Status and Healthcare Avoidance in Women: A Study of Weight Stigma, Body-Related Shame and Guilt, and Healthcare Stress," *Body Image* 25 (2018): 139–47.
[27] Rebecca M. Puhl and Leah M. Lessard, "Weight Stigma in Youth: Prevalence, Consequences, and Considerations for Clinical Practice," *Current Obesity Reports* 9, no. 4 (2020): 4, https://doi.org/10.1007/s13679-020-00408-8; Stephen J Pont et al., "Stigma Experienced by Children and Adolescents with Obesity," *Pediatrics* 140, no. 6 (2017): 6; R. M. Puhl and J. D. Latner, "Stigma, Obesity, and the Health of the Nation's Children," *Psychological Bulletin* 133, no. 4 (2007): 4, https://doi.org/10.1037/0033-2909.133.4.557.

adolescents, of 1555 participants across two high schools in central Connecticut, "at least 84% of participants observed overweight students being teased in a mean way and teased during physical activities, and 65% to 77% of students observed overweight and obese peers being ignored, avoided, excluded from social activities, having negative rumors spread about them, and being teased in the cafeteria. Most students also observed verbal threats and physical harassment toward overweight and obese students."[28] In their study on the trajectories of weight status and peer victimization across early adolescence, Lanza *et al.* also explain that not only are overweight and obese youth at greater risk of peer victimization (bullying) than normal weight youth, but adolescents whose weight remains high across middle school report the highest levels and steepest increases in victimization and bullying.[29]

In addition to peer victimization, teachers and parents are also identified as the most common sources of stigma in youth, manifesting as bullying, teasing, violence, and unfair treatment toward overweight and obese children. Research indicates, for example, that teachers often "assign lower grades to students with overweight relative to their "normal" weight counterparts for comparable schoolwork," and that parents are more likely to associate negative words—such as "bad" and "stupid"—with fat children than with those of average weight.[30] In a study on weight-based victimization among treatment-seeking youth, Puhl *et al.* found that, among 361 participants enrolled in two national weight-loss camps, 94% reported being bullied or teased at school because of their weight, 70% reported experiencing such victimization from friends, and 37% from parents.[31]

Weight stigma is also widely recognized to be linked to young people to both psychological consequences—such as depression, anxiety, low self-esteem, poor body image, and substance abuse—and behavioral responses—including emotional or binge eating, decreased physical activity, and social withdrawal—which can reinforce unhealthy weight trajectories. Particularly among youth who face teasing or victimization, this stigma is strongly associated with higher risks of emotional distress and maladaptive coping behaviors.[32] In addition, research suggests that stigma is also correlated with poorer interpersonal relationships and academic performance.[33]

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[28] Rebecca M. Puhl et al., "Weight-Based Victimization Toward Overweight Adolescents: Observations and Reactions of Peers," *Journal of School Health* 81, no. 11 (2011): 696–703, https://doi.org/10.1111/j.1746-1561.2011.00646.x.

[29] H. Isabella Lanza et al., "A Silver Lining: The Role of Ethnic Diversity on Co-Occurring Trajectories of Weight Status and Peer Victimization Across Early Adolescence," *Journal of Adolescent Health* 63, no. 5 (2018): 554–60, https://doi.org/10.1016/j.jadohealth.2018.05.026.

[30] Puhl and Lessard. See also Sarah Nutter et al., "Weight Bias in Educational Settings: A Systematic Review," *Current Obesity Reports* 8 (2019): 185–200; Kristin E. Finn, Clancy M. Seymour, and Anna E. Phillips, "Weight Bias and Grading among Middle and High School Teachers," *British Journal of Educational Psychology* 90, no. 3 (2020): 635–47, https://doi.org/10.1111/bjep.12322; Janet A. Lydecker, Elizabeth O'Brien, and Carlos M. Grilo, "Parents Have Both Implicit and Explicit Biases against Children with Obesity," *Journal of Behavioral Medicine* 41, no. 6 (December 1, 2018): 784–91, https://doi.org/10.1007/s10865-018-9929-4.

[31] Rebecca M. Puhl et al., "Weight-Based Victimization: Bullying Experiences of Weight Loss Treatment–Seeking Youth," *Pediatrics* 131, no. 1 (2013): e1–9, https://doi.org/10.1542/peds.2012-1106.

[32] Pont et al., "Stigma Experienced by Children and Adolescents with Obesity"; Puhl and Lessard, "Weight Stigma in Youth"; J. L. Warnick et al., "Weight Stigma and Mental Health in Youth: A Systematic Review and Meta-Analysis," *Journal of Pediatric Psychology* 47, no. 3 (2022): 3, https://doi.org/10.1093/jpepsy/jsab107.

[33] Puhl and Lessard.

Importantly, as Warnick *et al.* emphasize in their meta-analysis on weight stigma and mental health issues in youth, evidence on the link between stigma and mental health is sufficient to show an association but not *causation*.[34] Nonetheless, given that peer groups are a major source of weight stigma, and that weight stigma is strongly associated with poor mental health, it is highly plausible that weight stigma has a negative causal effect on children's mental well-being. This is especially likely considering that bullying, exclusion, and unfair treatment—common expressions of weight stigma—are well-established risk factors for mental health issues.[35] According to one study, adolescents who were bullied had 64–82% higher odds of suicidal ideation, planning, or attempts, and this is independent of weight status and other factors.[36] As such, if weight stigma does harm children's mental health, it follows that weight loss—and thus medications like Wegovy that facilitate it—could improve children's mental health by reducing their experience of stigma.

In addition, some research suggests obesity itself is associated with poor mental health. In their analysis of the 2019 Youth Risk Behavior Survey (13,871 adolescents), Iwatate *et al.* found that youth with obesity had 65% higher odds of suicide attempts and 27% higher odds of suicide planning compared to peers without obesity, even after adjusting for psychosocial factors such as depression, alcohol and drug use, sexual abuse, and bullying.[37] The authors suggest that one potential explanation may be the biological effects of metabolic syndrome, which is commonly associated with obesity. The upshot is that insofar as Wegovy improves children's metabolic health, it may also then positively influence their mental health—both through biological pathways and by potentially reducing experiences of weight-related stigma.

3.2 Increased Potential for Success

Another way Wegovy may have a positive impact on children's mental health is by supporting the achievement of their health and weight loss goals.

Whyte *et al.* note that different forms of dieting may harm adolescents' self-esteem.[38] Self-esteem—broadly defined as the value one places on oneself—is widely recognized as "fundamentally linked to mental health."[39] Henriksen *et al.*'s study on the role of self-esteem in the development of psychiatric problems in youth found that high self-esteem was correlated cross-sectionally with fewer psychiatric symptoms and also predicted significant

[34] Warnick et al., "Weight Stigma and Mental Health in Youth: A Systematic Review and Meta-Analysis."
[35] On bullying see Dayat Trihadi et al., "Bullying: Analysis of Risk Factors, Protective Factors and Their Impact on Children's Mental Health in the Future," *Journal of Medical and Health Studies* 3, no. 4 (2022): 4, https://doi.org/10.32996/jmhs.2022.3.4.8.
[36] Eriko Iwatate et al., "Association of Obesity, Suicide Behaviors, and Psychosocial Wellness Among Adolescents in the United States," *Journal of Adolescent Health* 72, no. 4 (2023): 526–34, https://doi.org/10.1016/j.jadohealth.2022.11.240.
[37] Iwatate et al., "Association of Obesity, Suicide Behaviors, and Psychosocial Wellness Among Adolescents in the United States."
[38] Hilary EA Whyte et al., "Dieting in Adolescence," *Paediatrics & Child Health* 9, no. 7 (2004): 7, https://doi.org/10.1093/pch/9.7.487.
[39] Ingvild Oxås Henriksen et al., "The Role of Self-Esteem in the Development of Psychiatric Problems: A Three-Year Prospective Study in a Clinical Sample of Adolescents," *Child and Adolescent Psychiatry and Mental Health* 11 (December 2017): 68, https://doi.org/10.1186/s13034-017-0207-y.

reductions in anxiety, depression, and attention problems over a three-year period.[40] According to Whyte *et al.*, adolescents with lower self-esteem are "more likely to diet, often in an attempt to feel better about themselves if weight loss is successful."[41] However, dieting often fails and may worsen self-esteem, as success and failure significantly shape self-worth during adolescence. Clinical psychologist Amy Henke notes that most diets are short-term and unsustainable, with many individuals regaining lost weight—and more.[42] In a three-year prospective study of 14,972 children aged 9–14, Field *et al.* found that dieting not only fails to prevent weight gain but may actually promote it.[43] Henke explains that this weight regain reinforces feelings of failure, lack of willpower, and unworthiness in adolescents.[44]

No studies to date directly examine the impact of Wegovy-assisted weight loss on children's self-esteem. However, key differences between Wegovy and traditional weight loss methods make it difficult to apply existing findings on self-esteem and dieting. Notably, Wegovy has been shown to significantly increase weight loss success: as previously noted, participants in the STEP TEENS trial lost an average of 16.1% of body weight with Wegovy and lifestyle changes, compared to 0.6% with placebo and lifestyle changes. If failed weight loss attempts contribute to low self-esteem, this risk is likely lower with Wegovy. Moreover, its effectiveness may even enhance self-esteem by helping children achieve their healthcare and weight loss goals.

3.3 Less Harmful than Alternatives: Bariatric Surgery

A final way Wegovy may benefit children's mental health is by offering a better alternative to other obesity interventions, such as bariatric surgery.

'Bariatric surgery' refers to a range of procedures including gastric band surgery, gastric bypass, sleeve gastrectomy, and duodenal switch procedures, which alter the digestive system to reduce calorie intake.[45] It is considered the "gold standard" for obesity treatment in both adults and children due to its effectiveness.[46] In the Teen-LABS study—the longest ongoing cohort study of youth undergoing bariatric surgery—participants experienced a 27% mean weight reduction three years post-surgery.[47] In comparison, participants in the STEP TEENS

[40] Henriksen et al., "The Role of Self-Esteem in the Development of Psychiatric Problems"; Denise Mann, "In Study, Almost Half of Obese Teens Were No Longer So After Taking Wegovy/Ozempic," *Southern Iowa Mental Health Center*, July 10, 2023, https://simhcottumwa.org/in-study-almost-half-of-obese-teens-were-no-longer-so-after-taking-wegovy-ozempic/.
[41] Whyte et al., "Dieting in Adolescence."
[42] Amy Henke, "The Dangers of Diet Culture: What Parents Can Do to Be a Positive Influence on Their Children," Children's Hospital New Orleans, April 3, 2025, https://www.manningchildrens.org/news-blog/2023/april/the-dangers-of-diet-culture-what-parents-can-do-/.
[43] Alison E. Field et al., "Relation Between Dieting and Weight Change Among Preadolescents and Adolescents," *Pediatrics* 112, no. 4 (2003): 4, https://doi.org/10.1542/peds.112.4.900.
[44] Henke, "The Dangers of Diet Culture."
[45] Cleveland Clinic, "Bariatric Surgery," Cleveland Clinic, June 9, 2022, https://my.clevelandclinic.org/health/treatments/bariatric-surgery.
[46] Tayag, "Ozempic in Teens Is a Mess."
[47] Sarah C. Armstrong et al., "Pediatric Metabolic and Bariatric Surgery: Evidence, Barriers, and Best Practices," *Pediatrics* 144, no. 6 (2019): 6, https://doi.org/10.1542/peds.2019-3223.

trial using semaglutide lost 16.1% over 68 weeks.[48] Bariatric surgery also demonstrated greater improvements in cardiometabolic markers.

A systematic review by Kubik *et al.* found a trend toward improved psychological health following bariatric surgery, likely attributed to weight loss and related improvements in body image, self-esteem, and self-concept, along with a sense of control over their life and support from healthcare providers.[49]

While bariatric surgery is associated with positive weight loss and mental health outcomes, Wegovy may still offer a better option for promoting mental health.

In a systematic review of clinical trials of bariatric surgery and semaglutide, Klair *et al.* found that bariatric surgery carries a higher risk of complications and adverse effects compared to semaglutide.[50] Surgical risks include bleeding, infection, blood clots, hernias, bowel obstruction, anastomotic leaks, and dumping syndrome—that is, "when your stomach dumps food too fast into your small intestine" resulting in symptoms including "nausea, diarrhea, abdominal cramping, and hypoglycemia"—as well as malabsorption, malnutrition, bile reflux, and gallstones.[51]

Klair *et al.* base their risk assessment on adult populations, making it difficult to determine which intervention carries a higher risk profile for children.[52] This is partly due to differences in how adverse effects are measured. For example, nausea was reported in 62% of participants taking Wegovy in the STEP TEENS trial, compared to 15% following bariatric surgery in the Teen-LABS study.[53] However, broader analyses report rates of dumping syndrome and stomach stenosis—both associated with nausea—at 50% and 20%, respectively.[54] Adverse effects also differ in kind: gastroparesis has been reported with Wegovy but not bariatric surgery, while complications such as hemorrhage, anastomotic leaks, and stomach stenosis are associated with bariatric procedures but not with Wegovy.[55] So, although some adult data exist, pediatric-specific evidence remains limited. It is unclear, then, whether bariatric surgery poses a greater risk for children. Insofar as complications and adverse effects negatively impact physical and mental health, however, a lower risk profile for Wegovy would be a strong reason in its favor.

Another reason to favor Wegovy is that it is minimally invasive and can be easily discontinued. In contrast, bariatric surgery is aggressive and often irreversible, making it

[48] Weghuber et al., "Once-Weekly Semaglutide in Adolescents with Obesity."
[49] Jeremy F. Kubik et al., "The Impact of Bariatric Surgery on Psychological Health," *Journal of Obesity* 2013, no. 1 (2013): 1, https://doi.org/10.1155/2013/837989.
[50] N. Klair et al., "What Is Best for Weight Loss? A Comparative Review of the Safety and Efficacy of Bariatric Surgery Versus Glucagon-Like Peptide-1 Analogue," *Cureus* 15, no. 9 (2023).
[51] Cleveland Clinic, "Bariatric Surgery."
[52] Klair et al., "What Is Best for Weight Loss? A Comparative Review of the Safety and Efficacy of Bariatric Surgery Versus Glucagon-Like Peptide-1 Analogue."
[53] Weghuber et al., "Once-Weekly Semaglutide in Adolescents with Obesity"; Armstrong et al., "Pediatric Metabolic and Bariatric Surgery."
[54] Alan A. Saber and Tarek H. El-Ghazaly, "Bariatric Surgery Treatment & Management," Medscape, March 2023, https://emedicine.medscape.com/article/197081-treatment.
[55] In fact, some studies suggest bariatric surgery for the treatment of gastroparesis. Sergio J. Bardaro et al., "Gastroparesis: An Evidence-Based Review for the Bariatric and Foregut Surgeon," *Surgery for Obesity and Related Diseases* 19, no. 5 (2023): 5, https://doi.org/10.1016/j.soard.2023.02.018.

potentially more traumatic for children. Vertical sleeve gastrectomy (VSG), the most common bariatric procedure in pediatrics, involves removing approximately 80% of the stomach.[56] If the complications, side effects, or toll on mental health of either procedure prove to be too great only Wegovy can be discontinued quickly.[57]

Not all children will require the higher weight loss typically achieved through bariatric surgery, and in such cases, there appear to be good mental health reasons to favor Wegovy.

4. Potential Barriers to Improved Mental Health

4.1 Impact of Limitations on Availability

While Wegovy may have potential benefits for children's mental health, several concerns remain, including issues related to medication availability.

One proposed benefit is its ability to enhance weight loss success. However, as noted earlier, the STEP 1 trial found that participants regained two-thirds of their prior weight loss within a year of discontinuing treatment, suggesting that long-term use is necessary to sustain results. Wegovy is, however, a costly intervention, priced at approximately $1,350 USD per month in the United States, making it "long out of reach for people without insurance or whose insurance refused to cover them."[58] Many national healthcare systems—including those in Australia, Germany, and Singapore—do not subsidize Wegovy for obesity treatment unless it is prescribed for type 2 diabetes, and the United Kingdom's National Health Service (NHS) will only fund Wegovy for a maximum of two years for economic reasons.[59] Global shortages have also restricted access; for example, Australia's Therapeutic Goods Administration reports that Ozempic (semaglutide) supply issues will persist into 2025.[60] As a result, some children may be unable to access the medication—either due to cost, inconsistent supply, or regulation—making the risk of weight regain, and its associated mental health consequences, comparable to those of traditional interventions.

Increased production capacity, eventual patent expirations, and changes to policy will likely ease the issue of availability, and thereby make Wegovy a more attractive healthcare option in the future. Presently, however, the issue remains. Moreover, even if the medication is

[56] Valeria Calcaterra et al., "Bariatric Surgery in Adolescents: To Do or Not to Do?," *Children* 8, no. 6 (2021): 6, https://doi.org/10.3390/children8060453.
[57] Ryan and Savulescu, "The Ethics of Ozempic and Wegovy."
[58] According to one study, "About half (54%) of all adults who have taken GLP-1 drugs say it was difficult to afford the cost, including one in five (22%) who say it was "very difficult." While most insured adults who have taken these drugs say their insurance covered at least part of the cost, even among insured adults about half (53%) say the cost was difficult to afford." See Alex Montero et al., "KFF Health Tracking Poll May 2024: The Public's Use and Views of GLP-1 Drugs," KFF, May 10, 2024, https://www.kff.org/health-costs/kff-health-tracking-poll-may-2024-the-publics-use-and-views-of-glp-1-drugs/.
[59] Michael Erman et al., "Novo's Ozempic, Wegovy Picked for US Medicare Price Negotiations," Healthcare & Pharmaceuticals, *Reuters*, January 17, 2025, https://www.reuters.com/business/healthcare-pharmaceuticals/us-targets-novo-nordisks-diabetes-drug-ozempic-medicare-price-talks-2025-01-17/; Fergus Walsh, "'I Feel Blessed to Get Wegovy Weight-Loss Jab' - but Can the NHS Afford It for All?," BBE News, January 13, 2025, https://www.bbc.com/news/articles/clyn92j4nn2o.
[60] Therapeutic Goods Administration (TGA), "Ozempic (Semaglutide) Shortage 2022 - 2025 | Therapeutic Goods Administration (TGA)," text, Therapeutic Goods Administration (TGA), December 8, 2022, https://www.tga.gov.au/safety/shortages/information-about-major-medicine-shortages/ozempic-semaglutide-shortage-2022-2025.

made widely accessible not all children who take Wegovy will achieve their healthcare goals with this medication. Some may find the side effects intolerable or experience little to no weight loss. In the STEP TEENS trial, 27% of participants in the semaglutide group lost less than 5% of their body weight, 5% discontinued due to adverse events, and a total of 792 adverse events were reported among the 131 participants.[61] In such cases, treatment with semaglutide may harm rather than support a child's mental health.

4.2 The Ease of Wegovy and Potential for Abuse

Another concern raised by commentators is the potential for Wegovy misuse among children. Cooper *et al.* argue that the rapid development of oral GLP-1RA formulations and adolescents' tendency toward risk-taking create a "perfect storm" for abuse.[62] They highlight several contributing factors: the fragility of adolescent self-esteem, the pervasive marketing of Wegovy on social media, and the high prevalence of eating disorders among U.S. youth. Since 2010, 2.7% of children in the United States have experienced an eating disorder. Additionally, the 2011 Youth Risk Behavior Surveillance System (YRBSS) found that 4.3% of high school students reported self-induced vomiting or using laxatives to control weight.[63]

Wegovy misuse is particularly concerning due to its potential to contribute to or worsen eating disorders such as anorexia nervosa; if Wegovy silences intrusive thoughts about food, it may make it easier to engage in restrictive eating.[64] Abuse may also result in excessive weight loss, loss of lean muscle mass, malnutrition, and complications from improper use, including incorrect injection or overdose. These risks not only pose physical dangers but may also harm mental health by increasing stress, anxiety, psychological trauma, and body dysmorphia. In such cases, misuse is more likely to damage than improve children's mental well-being.

Current risks may be partially mitigated by Wegovy's high cost, limited supply, and prescription-only status. Moreover, concerns about medication abuse arising from clinicians prescribing Wegovy could be addressed through enhanced regulatory frameworks, such as

[61] Weghuber et al., "Once-Weekly Semaglutide in Adolescents with Obesity."
[62] Dan M. Cooper et al., "Unintended Consequences of Glucagon-like Peptide-1 Receptor Agonists Medications in Children and Adolescents: A Call to Action," *Journal of Clinical and Translational Science* 7, no. 1 (2023): 1, https://doi.org/10.1017/cts.2023.612.
[63] Danice K. Eaton et al., "Youth Risk Behavior Surveillance — United States, 2011," *Morbidity and Mortality Weekly Report* 61, no. 4 (2012): 4.
[64]One might think that Wegovy could help reduce the risk of anorexia in children by enabling weight loss without the need for restrictive dieting behaviors. It is important to note, however, that children eligible for Wegovy typically have a high BMI and are likely to have already attempted restrictive eating for weight loss prior to seeking medical interventions. Moreover, existing evidence does not suggest that children lose weight with Wegovy without accompanying dietary modifications. Prescribing guidelines specify that Wegovy should be used in combination with diet and exercise; as Novo Nordisk states, "Wegovy should be used with a reduced-calorie meal plan and increased physical activity." Consistently, clinical trials evaluated Wegovy only in conjunction with diet and exercise, compared to diet and exercise alone. See Novo Nordisk, "Wegovy Patient Brochure," 2021, https://www.wegovy.com/content/dam/obesity/wegovy/images/pdf/Wegovy_Patient_Brochure_Digital_REL_01.pdf.

prescription monitoring programs or legislation targeting “pill mills” that hold clinics accountable for irresponsible prescribing. Importantly, however, while these barriers may reduce abuse of prescribed medications, they may also increase the likelihood that children and their families turn to counterfeit or unregulated alternatives, heightening both physical and psychological risks—potentially calling for even further regulation.[65]

4.3 Failure to Address Core Issues: Weight Stigma and Discrimination

A final concern is that Wegovy does not address the underlying causes of childhood obesity and mental health issues, and may even exacerbate them. One of those issues is weight stigma and discrimination.

As discussed earlier, Wegovy may improve mental health by reducing children’s exposure to stigma through weight loss. However, this approach does not challenge the stigma itself. This is problematic, first, because it leaves children in a position where their mental health rests on weight loss maintenance. This is a precarious position to occupy, as we have explained, given the limitations on availability. It is also one that may cause a child additional distress due to their vulnerability.

Another reason it is problematic is that if weight stigma remains unchallenged, the mental health benefits of successful weight loss may only be superficial. Consider, for example, a child who experiences improved self-esteem upon losing weight, but whose improvement reflects internalized weight stigma (e.g., “I am no longer that bad, lazy, or unworthy person”). Here, the child feels positive, but the underlying issue remains unresolved. Importantly, a genuine improvement in mental health would seem to require not only improvements in self-esteem, but also the presence of *self-respect*. Self-respect calls for a person to hold self-directed attitudes that are incompatible with stigma. Self-esteem built on a foundation of self-respect would take on a form of self-value that would reflect a positive view of oneself in combination with an acknowledgement of one’s inherent, unconditional worth as a person; that is, regardless of weight or size.[66] It is also a stable basis from which to support mental health. If what we want for persons is an enduring and robust form of mental health, interventions must go beyond weight loss and actively challenge weight stigma to be genuinely effective.

Many commentators, including Shanouda and Orsini, have also raised concerns that the widespread use of Wegovy not only fails to address weight stigma but may actually exacerbate it by reinforcing fatphobic discourse.[67] This discourse frames obesity as a “vice of

[65] On counterfeiting see Arianna Johnson, “Counterfeit Ozempic, Wegovy, Mounjaro Pens Reported To FDA: How To Spot A Fake,” Forbes, November 9, 2024, https://www.forbes.com/sites/ariannajohnson/2023/11/09/counterfeit-ozempic-wegovy-mounjaro-pens-reported-to-fda-how-to-spot-a-fake/?sh=d7192d414395; Administration (TGA), “Ozempic (Semaglutide) Shortage 2022 - 2025 | Therapeutic Goods Administration (TGA)”; Ryan and Savulescu, “The Ethics of Ozempic and Wegovy.”

[66] On self-esteem and self-respect in childhood see Nanette Ryan, “Self-Respect & Childhood: Philosophy and Ethics of Childhood Special Issue,” *The Journal of Ethics* 27, no. 1 (2023): 1.

[67] Fady Shanouda and Michael Orisini, “Ozempic: The Miracle Drug and the Harmful Idea of a Future without Fat,” The Conversation, 2023, https://theconversation.com/ozempic-the-miracle-drug-and-the-harmful-idea-of-a-future-without-fat-211661.

the lazy" that must be "stamped out" and "cured."[68] With Wegovy on the market, they argue, this discourse shifts from common fat-shaming to an unprecedented level, dominating media and interpersonal narratives through moralized discussions of Wegovy as a "miracle drug" that will "end obesity." Fiona Oswald further argues that, with Wegovy on the market, "the belief that people are obligated to work hard to lose fat may transition slightly to a belief that those who remain fat are obligated to work hard to earn money in order to access fat loss."[69] Both beliefs are stigmatizing and oppressive insofar as they reject and devalue people who do not comply with prevailing social norms of adequate body weight and shape.[70] The revised belief, however, compounds this stigmatization by unifying body shame with oppressive economic class structures.

As discussed, children already face harmful weight stigma from peers, teachers, and parents. If Shanouda and Orsini, and Oswald are correct, and stigma remains unaddressed, the widespread use of Wegovy may not only reinforce existing stigma some people experience but also intensify economic stigma—especially for children whose families cannot afford the medication.

One may argue that if fewer individuals experience obesity due to effective treatment, this would logically reduce the number of people subject to weight-based discrimination. While this may be correct, current access limitations make widespread reductions through treatment unlikely for the reasons described earlier. Moreover, even if access expands, this will not address the stigma experienced by people for whom Wegovy is unsuitable or intolerable—and for whom stigma may even intensify. Nor would it support a robust conception of mental health that emphasizes self-respect; treatment may reduce instances of external discrimination while doing little to diminish internalized stigmatization. At the population level then, overall experiences of discrimination might decrease, while simultaneously increasing for particular individuals and leaving internalized stigmatization untouched. This is not to suggest that prescribing under such conditions should be prohibited, but rather that stigma-related harms at the individual level constitute an important moral consideration that ought to inform sound policy interventions.

4.4 Failure to Address Core Issues: Health and Social Reform

Another underlying issue that Wegovy does not address—and may even exacerbate—is the root causes of the physical and mental health problems associated with childhood obesity. This is a concern for users because the extent to which Wegovy alone supports health improvements is unclear. Clinical trials evaluated the medication only in conjunction with diet and exercise, compared with diet and exercise alone, meaning its causal effects cannot be isolated. Moreover, prescribing recommendations explicitly call for Wegovy to be taken in conjunction with diet and exercise. Yet even in wealthy nations such as the United States, food access remains uneven—particularly in low-income and minority communities—health literacy is often limited, and opportunities for physical activity are constrained by structural

[68] Shanouda and Orisini, "Ozempic: The Miracle Drug and the Harmful Idea of a Future without Fat."
[69] F. Oswald, "Anti-Fatness in the Ozempic Era: State of the Landscape and Considerations for Future Research," *Fat Studies* 1–7 (2024).
[70] Tomiyama et al., "How and Why Weight Stigma Drives the Obesity 'epidemic and Harms Health."

and environmental barriers.[71] If it is the case that Wegovy is effective to the levels seen in trials only when paired with diet and exercise, these structural conditions may considerably limit its health benefits. Given the well-established bidirectional link between physical and mental health, this poses concerns for both domains.

As we discussed in a previous paper, many commentators have also raised concerns that governments may view Wegovy as a quick fix for population-level obesity, diverting attention from the structural reforms needed to improve public health and ultimately undermining it.[72] Professor Giles Yeo, a geneticist at the University of Cambridge, warns that "not only our government, but many governments and policymakers, may very well use [these drugs] as a cop-out not to make the hard policy decisions."[73] Journalist Sarah Boseley similarly observes, "Governments want a quick fix, and these drugs seem to offer one."[74]

In line with these concerns, many have argued that a broader "paradigm shift" in medicine and social policy is required to improve public health more widely—one that addresses the institutional causes of poor health, including bureaucratic inefficiencies, structural inequality and discrimination, profit-driven healthcare models, and poor working conditions.[75]

While the current cost of Wegovy renders it economically unfeasible for many countries to adopt as a quick fix, future price reductions may alter this, posing a legitimate and pressing public health concern if broader improvements in population health ultimately depend on structural change. Moreover, given that pharmaceutical companies act in pursuit of corporate interests and that political and industry pressures have historically derailed otherwise effective structural reforms—such as the United States' Healthy, Hunger-Free Kids Act of

[71] Roni A. Neff et al., "Food Systems and Public Health Disparities," *Journal of Hunger & Environmental Nutrition* 4, nos. 3–4 (2009): 282–314, https://doi.org/10.1080/19320240903337041; "National Action Plan to Improve Health Literacy | Odphp.Health.Gov," accessed September 2, 2025, https://odphp.health.gov/our-work/national-health-initiatives/health-literacy/national-action-plan-improve-health-literacy?utm_source=chatgpt.com; CDC, "Adult Physical Inactivity Outside of Work," Physical Activity, March 21, 2025, https://www.cdc.gov/physical-activity/php/data/inactivity-maps.html.
[72] Ryan and Savulescu, "The Ethics of Ozempic and Wegovy."
[73] Nicola Davis, "Weight-Loss Jabs Shouldn't Be Quick-Fix Solution for Governments, Says Expert," *The Guardian*, May 25, 2024, https://www.theguardian.com/society/article/2024/may/25/weight-loss-jabs-shouldnt-be-quick-fix-solution-for-governments-says-expert.
[74] Sarah Boseley, "A 'Skinny Jab' Is No Quick Fix for Obesity – and No Excuse to Let Junk Food Companies off the Hook," *The Guardian*, April 25, 2023, https://www.theguardian.com/commentisfree/2023/apr/25/skinny-jab-obesity-junk-food-britain-tax.
[75] Helena Hansen and Jonathan Metzl, "Structural Competency in the U.S. Healthcare Crisis: Putting Social and Policy Interventions Into Clinical Practice," *Journal of Bioethical Inquiry* 13, no. 2 (2016): 2, https://doi.org/10.1007/s11673-016-9719-z. See also Jessica Acolin and Paul Fishman, "Beyond the Biomedical, towards the Agentic: A Paradigm Shift for Population Health Science," *Social Science & Medicine (1982)* 326 (June 2023): 115950, https://doi.org/10.1016/j.socscimed.2023.115950; Jonathan M. Metzl and Helena Hansen, "Structural Competency: Theorizing a New Medical Engagement with Stigma and Inequality," *Social Science & Medicine*, Structural Stigma and Population Health, 103 (February 1, 2014): 126–33, https://doi.org/10.1016/j.socscimed.2013.06.032; Sandra Monteiro et al., "Shifting Paradigms: A Collective and Structural Strategy for Addressing Healthcare Inequity," *Journal of Evaluation in Clinical Practice* 30, no. 6 (September 2024): 887–93, https://doi.org/10.1111/jep.14013.

2010, which improved the nutritional quality of school meals[76] and reduced obesity risk among children in poverty[77]—this concern is particularly worrisome. [78]

5. *Anecdotal and Empirical Evidence of the Effect on Mental Health*

Anecdotal evidence from youths' own testimony about taking Ozempic supports the view that Wegovy is beneficial for children's mental health. In an article for *Today*, Demi, a 16-year-old taking Wegovy shares her experience, stating, "I've always been dependent on antidepressants, and being on this medicine, I feel like I don't need to be on antidepressants… Now that I'm confident in my body … I can be confident in my mind."[79] In an article for *Reuters*, Billy Small III, father of a teen who weighed 176 kg at 15 when he started taking Wegovy, describes how his son's weight was "hard on his confidence" and that after taking Wegovy his son's quality of life was "100 times better than it was."[80] In an article for *Teen Vogue*, another teen, Natalie, also describes their experience taking Wegovy explaining that "It's not something that happens really quickly. It doesn't sound like a lot, but I look a lot littler and I feel better. It doesn't just help with your weight, it can help with your confidence, too."[81]

While anecdotal reports suggest that Wegovy may improve mental health, empirical studies directly examining its impact on children remain limited. One study that does examine this relationship—and the study that the article in the *New York Post* refers to above—is an observational study published in JAMA Pediatrics by Kerem and Stokar.[82] The study followed 6,912 adolescents aged 12 to 18 with obesity and found that those who initiated treatment with a GLP-1 RA had a 33% lower risk of suicidal ideation or attempts over a three-year period compared to propensity score–matched controls who received only behavioral interventions.[83]

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[76] Donna B. Johnson et al., "Effect of the Healthy Hunger-Free Kids Act on the Nutritional Quality of Meals Selected by Students and School Lunch Participation Rates," *JAMA Pediatrics* 170, no. 1 (2016): e153918, https://doi.org/10.1001/jamapediatrics.2015.3918.

[77] Erica L. Kenney et al., "Impact Of The Healthy, Hunger-Free Kids Act On Obesity Trends," *Health Affairs (Project Hope)* 39, no. 7 (2020): 1122–29, https://doi.org/10.1377/hlthaff.2020.00133.

[78] Jordan Baker, "USDA's Rule on Nutrition Standards Once Again Attempts to Undermine Healthy School Meals Nutrition Standards," *Food Research & Action Center*, n.d., accessed September 3, 2025, https://frac.org/news/usda-rule-nutritionstandards-undermines-healthyschoolmeals. Other examples of effective but weakened structural interventions include the United States' Affordable Care Act and Mental Health Parity Laws, as well as global tobacco control policies and nutrition and food labeling standards. See Steven Brill, *America's Bitter Pill: Money, Politics, Backroom Deals, and the Fight to Fix Our Broken Healthcare System* (Random House Trade Paperbacks, 2015).

[79] Holohan, "Thousands of Weight Loss Drug Prescriptions Have Been Written for Kids: 1 Teen Speaks Out," TODAY.Com, February 9, 2024, https://www.today.com/health/diet-fitness/wegovy-for-teens-weight-loss-rcna137958.

[80] Respuat and Terhune, "Exclusive: Wegovy Fuels Sharp Rise in Use of Weight-Loss Drugs for US Youth."

[81] Brittney McNamara, "What the Conversation on Teens and Wegovy Is Missing," Teen Vogue, January 25, 2024, https://www.teenvogue.com/story/teens-taking-wegovy-mental-health.

[82] Liya Kerem and Joshua Stokar, "Risk of Suicidal Ideation or Attempts in Adolescents With Obesity Treated With GLP1 Receptor Agonists," *JAMA Pediatrics* 178, no. 12 (2024): 12, https://doi.org/10.1001/jamapediatrics.2024.3812.

[83] Kerem and Stokar, "Risk of Suicidal Ideation or Attempts in Adolescents With Obesity Treated With GLP1 Receptor Agonists."

While the findings of Kerem and Stokar appear promising, they indicate only a reduced risk of suicidal ideation—not direct improvements in mental health. As the authors acknowledge, the results also rely on self-reported disclosures to healthcare providers, which may be unreliable due to the sensitivity of the subject and potential mandatory reporting requirements. Moreover, the study does not address the underlying mechanisms behind the reduced risk—whether it is driven by physical, social, or other factors—and does not clarify the specific role of GLP-1 RAs like Wegovy. This limitation is compounded by the absence of data on treatment adherence and changes in BMI over time. As a result, it remains difficult to determine whether the observed outcomes can be attributed to Wegovy at all.

Additional studies have examined the relationship between GLP-1 RAs (including Wegovy) and mental health, but they focus solely on adults and yield mixed results with notable limitations.[84]

An observational study by Kornelius *et al.* used data from the TriNetX Analytics Network, spanning nearly nine years, to assess the risk of depression, anxiety, and suicidal behavior in patients with obesity undergoing GLP-1 RA therapy.[85] Analyzing data from 324,506 propensity-matched adults (162,253 receiving GLP-1 RAs and 162,253 controls), the study found a significant association between GLP-1 RA use and a 98% increased risk of psychiatric disorders. Specifically, patients exhibited a 195% higher risk of major depression, a 108% increased risk of anxiety, and a 106% higher risk of suicidal behavior.[86] Risk appeared to escalate with prolonged exposure and higher doses; in subgroup analysis, those treated with semaglutide—particularly at the 2.4 mg Wegovy dose—had a higher incidence of psychiatric outcomes than non-users.[87]

In contrast to Kerem and Stokar's study, the risks reported by Kornelius *et al.* appear alarming. However, the study has several limitations. Like Kerem and Stokar, it did not collect data on BMI changes, treatment adherence, or medication availability. Participants were required to have only one follow-up, and missing data were addressed through available case analysis. The results at the end point then do not necessarily reflect those variables for all participants, but only those with results at ~9 years (and only ~ 3 years for Wegovy). Without information on how many participants remained in the study to its conclusion, the

[84] For other studies see Takashi Kadowaki et al., "Semaglutide Once a Week in Adults with Overweight or Obesity, with or without Type 2 Diabetes in an East Asian Population (STEP 6): A Randomised, Double-Blind, Double-Dummy, Placebo-Controlled, Phase 3a Trial," *The Lancet Diabetes & Endocrinology* 10, no. 3 (2022): 3, https://doi.org/10.1016/S2213-8587(22)00008-0; Melanie Davies et al., "Semaglutide 2·4 Mg Once a Week in Adults with Overweight or Obesity, and Type 2 Diabetes (STEP 2): A Randomised, Double-Blind, Double-Dummy, Placebo-Controlled, Phase 3 Trial," *The Lancet* 397, no. 10278 (2021): 10278, https://doi.org/10.1016/S0140-6736(21)00213-0; Edy Kornelius et al., "The Risk of Depression, Anxiety, and Suicidal Behavior in Patients with Obesity on Glucagon like Peptide-1 Receptor Agonist Therapy," *Scientific Reports* 14, no. 1 (2024): 1, https://doi.org/10.1038/s41598-024-75965-2; Wen-Hsuan Tsai et al., "Decreased Risk of Anxiety in Diabetic Patients Receiving Glucagon-like Peptide-1 Receptor Agonist: A Nationwide, Population-Based Cohort Study," *Frontiers in Pharmacology* 13 (February 2022), https://doi.org/10.3389/fphar.2022.765446.
[85] Kornelius et al., "The Risk of Depression, Anxiety, and Suicidal Behavior in Patients with Obesity on Glucagon like Peptide-1 Receptor Agonist Therapy."
[86] Kornelius et al., "The Risk of Depression, Anxiety, and Suicidal Behavior in Patients with Obesity on Glucagon like Peptide-1 Receptor Agonist Therapy."
[87] Kornelius et al., "The Risk of Depression, Anxiety, and Suicidal Behavior in Patients with Obesity on Glucagon like Peptide-1 Receptor Agonist Therapy."

reliability of the findings is unclear. Additionally, since all enrolled participants were 18 years or older (with a mean age of 52.4 years), the applicability of these findings to children remains uncertain.

Existing studies on the relationship between GLP-1 RAs and mental health use varied methodologies and yield inconsistent, limited findings. Collectively, then they fail to offer a cohesive—let alone conclusive—understanding of the medications' mental health effects. Given Wegovy's potential to both benefit and harm children's mental health, there is a clear need for substantially more research, particularly focused on pediatric populations.

6. Wegovy for Children's Mental Health?

In this paper, we have proposed several ways in which Wegovy could positively impact children's mental health. These include reducing experiences of weight stigma, enhancing self-esteem by supporting weight loss goals, and serving as a less invasive and potentially less traumatic alternative to more extreme interventions such as bariatric surgery. We have also highlighted several limitations that may hinder these benefits, as well as potential harms Wegovy may pose to children's mental health. The limitations identified include supply shortages, high cost, user intolerance, and the absence of long-term mental health data. Potential harms include reinforcing weight stigma, exacerbating socioeconomic stress, increasing the risk of misuse, and obscuring the underlying causes of physiological and psychological harm.

Given these concerns, as well as the lack of clear empirical data on Wegovy's impact on mental health and the long-term physical health and development of children, when—if at all—should Wegovy be prescribed? The physical health benefits of Wegovy, particularly its potential to reduce the risk of cardiovascular events, liver disease, and type 2 diabetes, are highly promising. These findings, however, remain preliminary and, like the long-term effects on children's growth, development, and mental health, require further investigation. Accordingly, a more comprehensive evidence base must be established before definitive policy recommendations can be made.

If future evidence substantiates these promising health benefits, we argue that governments should ensure Wegovy is financially accessible to all children aged 12 years and older for whom it may represent a welcome and much-needed healthcare intervention—particularly in cases where lifestyle measures have failed and surgical options are deemed too aggressive. Such provisions should be accompanied by broader structural reforms to strengthen public health, including targeted initiatives to reduce weight stigma and discrimination, supply-chain oversight to prevent counterfeit products, and prescription monitoring and clinic regulation to deter irresponsible prescribing and prevent abuse.

At the clinical level, given that Wegovy is already approved, it is of course possible to prescribe Wegovy without the described level of support and reform—and indeed it may be in some children's interests to take Wegovy even under these conditions, especially if previous interventions have failed. In our view, healthcare policy and practice should aim to ensure that families are not forced to choose between inadequate options. In service to this aim, and in view of the concerns we have articulated, clinicians should exercise great caution

in determining whether an individual child has a clear medical indication for its use and whether the potential benefits outweigh the risks—including treatment interruption due to cost or supply shortages, possible metabolic harms, and the potential for misuse. Where prescription is deemed appropriate, clinicians should implement strategies to manage weight regain in the event of treatment discontinuation, closely monitor both the physical and mental health impacts of Wegovy, and actively reflect on and address any weight bias that may compromise their duty of care.[88] The concrete implementation of these strategies and what they amount to must be guided by the individual needs of the patient and the resources of the healthcare provider—considerations that should likewise inform whether Wegovy is an appropriate intervention for a given patient.

This paper has focused primarily on children's mental health. However, this is only one aspect of the broader ethical debate surrounding Wegovy's use in children. Other key concerns include what we call the "argument from unknowns"—the view that Wegovy should not be prescribed due to unknown risks, side effects, and long-term consequences. The medication's impact on children's autonomy also warrants attention: does Wegovy enhance or undermine autonomy, and what role should children play in decisions about their treatment? These questions will be the focus of future research.

[88] For methods to address weight stigma in clinical practice see Kasuen Mauldin et al., "The Consequences of a Weight-Centric Approach to Healthcare: A Case for a Paradigm Shift in How Clinicians Address Body Weight," *Nutrition in Clinical Practice* 37, no. 6 (2022): 1291–306, https://doi.org/10.1002/ncp.10885.

Table 3. Semaglutide (STEP TEENS) compared to Bariatric Surgery (Teen-LABS)

Intervention	BMI Change (%)	Total Cholesterol Reduction	Systolic Blood Pressure Reduction (mm Hg)	Diastolic Blood Pressure Reduction (mm Hg)	Changes in glycated hemoglobin level (%)	Other Considerations
Semaglutide (STEP TEENS)	-16.1 %	-8.3%	-2.7	-1.4	-0.3	Minimally invasive Easily discontinued
Bariatric Surgery (Teen-LABS)*	-27%	LDL ↓ ~10 mg/dL (TC % not given)	-6.0	-5.0	-0.3	Higher risk profile Difficult/Impossible to reverse

*Results at 36-monts (3-year) follow-up data.

TABLE 2. Argument: Effects of Wegovy on Children's Mental Health

Supporting Points	Limitations/Challenges	Potential Harms
Potential to reduce a child's experience of weight stigma.	Definitive data on the impact is lacking.	May exacerbate the experience of weight stigma.
Potential to enhance self-esteem through achievement of weight loss goals.	Realizing benefits may be challenging due to supply shortages, high cost, and intolerability for users.	Can increase socio-economic disparity-related stress in childhood.
Offers a less traumatic alternative to bariatric surgery.		Potential for abuse. Obscures underlying causes of poor physical and mental health.

TABLE 3. Recommendations: Future Steps to Promote Mental Health in Childhood

Recommendation	Details	Rationale	Challenges
Role of Government	Make Wegovy financially accessible to children aged 12 and older with a medical need. Accompany accessibility with structural reforms to improve public health, combat weight stigma, and fund research.	Ensures equitable access to necessary treatment for children. Supports long-term research into the effects of Wegovy for children.	High costs associated with initiatives. Requires significant political will and governmental investment. Potential delays in policy implementation.
Role of Healthcare Providers	Healthcare providers should determine if a child has a medical need for Wegovy and assess whether benefits outweigh risks (e.g., cost or shortage). Ensure treatment is provided in a supportive, stigma-free environment. Provide government-supported resources including nutrition, exercise, mental health support, and education.	Ensures that treatment decisions are medically sound and compassionate. Focuses on holistic support, not just medication. Aims for stable, long-term improvements in children's health.	Resource constraints in healthcare systems. Challenges in ensuring all healthcare providers have access to necessary support and resources.
Addressing Healthcare Dilemmas	Strive to eliminate situations where families must choose between inadequate options (e.g., lack of access to essential support or suboptimal healthcare solutions).	Prevents families from having to make difficult, often unfair decisions. Encourages comprehensive and balanced healthcare policies that address both immediate and long-term needs.	Financial and systemic constraints in healthcare. Requires broad, systemic policy changes and coordination across different sectors.