Studies

Evaluation of Anxiety and Depression in a Community Sample of Transgender Youth https://doi.org/10.1001/jamanetworkopen.2021.4739

These results demonstrate that many socially transitioned transgender youth experience levels of anxiety and depression in the normative range and equal to or only slightly higher than siblings and cisgender peers. Whether their generally strong mental health is because of their early social transition, the high levels of support they receive, or other factors is as yet unknown

Mental Health Outcomes in Transgender and Nonbinary Youths Receiving Gender-Affirming Care

https://doi.org/10.1001/jamanetworkopen.2022.0978

Our study provides quantitative evidence that access to PBs or GAHs in a multidisciplinary gender-affirming setting was associated with mental health improvements among TNB youths over a relatively short time frame of 1 year. The associations with the highest aORs were with decreased suicidality

We observed 60% lower odds of depression and 73% lower odds of suicidality among youths who had initiated PBs or GAHs compared with youths who had not. There was no association between PBs or GAHs and anxiety.

Early Access to Testosterone Therapy in Transgender and Gender-Diverse Adults Seeking Masculinization

https://doi.org/10.1001/jamanetworkopen.2023.31919

Compared with standard care, the intervention group had a decrease in gender dysphoria, a clinically significant decrease in depression, and a significant decrease in suicidality. Resolution of suicidality assessed by PHQ-9 item 9 occurred in 11 individuals (52%) with immediate testosterone commencement compared with 1 (5%) receiving standard care.

In this open-label randomized clinical trial of testosterone therapy in transgender and gender-diverse adults, immediate testosterone compared with no treatment significantly reduced gender dysphoria, depression, and suicidality in transgender and gender-diverse individuals desiring testosterone therapy.

Gender-Affirming Hormone Therapy and Depressive Symptoms Among Transgender Adults https://doi.org/10.1001/jamanetworkopen.2025.0955

The TGD patients prescribed GAHT had a 15% lower risk of past 2-week moderate-to-severe depressive symptoms across follow-up, compared with those not prescribed GAHT.

In this cohort study, being prescribed GAHT was associated with lower rates of moderate-to-severe depressive symptoms in this study of diverse TGD primary care patients from FQHCs. Findings support the mental health–promoting role of GAHT and contribute to the evidence base that GAHT is a medically necessary treatment that improves mental health outcomes longitudinally for TGD people for those who want it

Top Surgery and Chest Dysphoria Among Transmasculine and Nonbinary Adolescents and Young Adults

https://doi.org/10.1001/jamapediatrics.2022.3424

We found that top surgery was associated with significant improvement in chest dysphoria (measured by the CDM) 3 months postoperatively; patients receiving surgery exhibited substantial decreases in CDM from presurgery to postsurgery and their reductions in CDM were significantly greater than those for patients who did not undergo top surgery. Top surgery also led to significant improvements in gender congruence (TCS) and body image satisfaction (BIS) at 3 months postoperatively. Surgical complications were minimal and comparable with those in adult patients

Top surgery in TGNB DFAB AYA is associated with low complication rates. Top surgery is associated with improved chest dysphoria, gender congruence, and body image satisfaction in this age group.

Association Between Gender-Affirming Surgeries and Mental Health Outcomes https://doi.org/10.1001/jamasurg.2021.0952

Our results demonstrate that undergoing gender-affirming surgery is associated with improved past-month severe psychological distress, past-year smoking, and past-year suicidal ideation.

Sex reassignment surgery: A study of 141 dutch transsexuals https://doi.org/10.1007/BF01542484

It is concluded that there is no reason to doubt the therapeutic effect of sex reassignment surgery.

Suicide Protective Factors Among Trans Adults https://doi.org/10.1007/s10508-013-0099-8

Results indicated that perceived social support from family, emotional stability (an aspect of suicide resilience), and child-related concerns (a reason for living) were associated with lower suicidal behavior scores in trans individuals

Gender affirming medical care of transgender youth https://doi.org/10.1016/j.cppeds.2019.100683

Timely administration of gender affirming medical care correlates with improved mental health outcomes and,^{2,3} conversely, a delay in medical care may lead to worse mental health outcomes.⁴

Provision of gender-affirming care for trans and gender-diverse adults: a systematic review of health and quality of life outcomes, values and preferences, and costs https://doi.org/10.1016/j.eclinm.2025.103458

Twenty-eight studies, including four randomized controlled trials and 24 longitudinal studies, evaluated health outcomes following gender-affirming care. Moderate to very low certainty evidence from these studies suggests gender-affirming care may improve quality of life, stigma, utilization of health services, and mental health. No studies identified significant negative outcomes or harms.

Mental Health and Self-Worth in Socially Transitioned Transgender Youth https://doi.org/10.1016/j.jaac.2016.10.016

Transgender children reported depression and self-worth that did not differ from their matched-control or sibling peers, and they reported marginally higher anxiety. Compared with national averages, transgender children showed typical rates of depression and marginally higher rates of anxiety. Parents similarly reported that their transgender children experienced more anxiety than children in the control groups and rated their transgender children as having equivalent levels of depression

These findings are in striking contrast to previous work with gender-nonconforming children who had not socially transitioned, which found very high rates of depression and anxiety.

The Mental Health of Transgender Youth: Advances in Understanding https://doi.org/10.1016/j.jadohealth.2016.06.012

Studies from a variety of settings have demonstrated that transgender youth have increased rates of depression, suicidality and self-harm, and eating disorders. While these results are troubling, the first longitudinal study of patients undergoing comprehensive therapy for gender dysphoria has shown promising data to support the notion that appropriate medical treatment for gender-variant youth can lead to improved psychological functioning. Indeed, in clinical observations outlined by Spack et al. [6], psychological functioning for these patients improved with medical intervention, suggesting that "psychiatric symptoms might be secondary to a medical incongruence between mind and body, not primarily psychiatric" (p423).

Chosen Name Use Is Linked to Reduced Depressive Symptoms, Suicidal Ideation, and Suicidal Behavior Among Transgender Youth https://doi.org/10.1016/j.jadohealth.2018.02.003

An increase by one context in which a chosen name could be used predicted a 5.37-unit decrease in depressive symptoms, a 29% decrease in suicidal ideation, and a 56% decrease in suicidal behavior. Depressive symptoms, suicidal ideation, and suicidal behavior were at the lowest levels when chosen names could be used in all four contexts.

For transgender youth who choose a name different from the one given at birth, use of their chosen name in multiple contexts affirms their gender identity and reduces mental health risks known to be high in this group.

Association of Gender-Affirming Hormone Therapy With Depression, Thoughts of Suicide, and Attempted Suicide Among Transgender and Nonbinary Youth https://doi.org/10.1016/j.jadohealth.2021.10.036

Use of GAHT was associated with lower odds of recent depression and seriously considering suicide compared to those who wanted GAHT but did not receive it. For youth under age 18, GAHT was associated with lower odds of recent depression and of a past-year suicide attempt.

Findings support a relationship between access to GAHT and lower rates of depression and suicidality among transgender and nonbinary youth.

Our results indicate significant relationships between receipt of GAHT and lower suicidality among transgender and nonbinary youth.

Scientific Misinformation and Gender Affirming Care: Tools for Providers on the Front Lines https://doi.org/10.1016/j.jadohealth.2022.06.008

The World Health Organization and the American Psychiatric Association no longer classify gender dysphoria as a mental health disorder

The vast majority of TGE youths who transitioned socially remain stable in their gender identity during adolescence [16]. Likewise, most adolescents who receive hormone therapy for gender dysphoria continue to use these medications in adulthood [8]. Post-GAC regret is rare, occurring in approximately 0.3% of individuals [18].

Puberty blockers stall development of secondary sex characteristics and limit reproductive capacity while in use. When stopped, the effects are fully reversible and sexual development catches up to chronological age quickly [21–24].

Body dissatisfaction related to gender is correlated with disordered eating, whereby food restriction and low body weight may forestall distressing physical change [29–32]. Comorbid eating disorders and gender dysphoria are associated with up to a 75% risk of suicidality [29]. Medical aspects of gender-affirming care have a distinct impact on reducing suicidal ideation and remission of eating disorders [13,22,33].

Gender Identity 5 Years After Social Transition https://doi.org/10.1542/peds.2021-056082

Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People, Version 7

https://doi.org/10.1080/15532739.2011.700873

Guiding the conversation-types of regret after gender-affirming surgery and their associated etiologies

https://doi.org/10.21037/atm-20-6204

Final height, gonadal function and bone mineral density of adolescent males with central precocious puberty after therapy with gonadotropin-releasing hormone analogues https://doi.org/10.1007/s004310051289

Puberty suppression in adolescents with gender identity disorder: a prospective follow-up study

https://doi.org/10.1111/j.1743-6109.2010.01943.x

Long-term GnRH agonist treatment for female central precocious puberty does not impair reproductive function

https://doi.org/10.1016/j.mce.2006.04.012

Resumption of puberty after long term luteinizing hormone-releasing hormone agonist treatment of central precocious puberty

https://doi.org/10.1210/jcem-67-2-368

Prevalence of Self-Injurious Thoughts and Behaviors in Transgender Individuals With Eating Disorders: A National Study

https://doi.org/10.1016/j.jadohealth.2018.07.016

Disordered Weight Management Behaviors, Nonprescription Steroid Use, and Weight Perception in Transgender Youth

https://doi.org/10.1016/j.jadohealth.2016.08.027

Eating Disorder Diagnoses and Symptom Presentation in Transgender Youth: a Scoping Review

https://doi.org/10.1007/s11920-019-1097-x

Eating Disorder Screening in Transgender Youth https://doi.org/10.1016/j.jadohealth.2019.06.011

START

Gender Affirming Care Is Evidence Based for Transgender and Gender-Diverse Youth https://doi.org/10.1016/j.jadohealth.2024.09.009

Gender-affirming care is preventative care https://doi.org/10.1016/j.lana.2023.100544

Long-term follow-up: psychosocial outcome of Belgian transsexuals after sex reassignment surgery

https://doi.org/10.1016/j.sexol.2006.04.002

Sex reassignment: outcomes and predictors of treatment for adolescent and adult transsexuals

https://doi.org/10.1017/S0033291704002776

Factors Associated with Satisfaction or Regret Following Male-to-Female Sex Reassignment Surgery

https://doi.org/10.1023/A:1024086814364

Well-Being and Suicidality Among Transgender Youth After Gender-Affirming Hormones https://doi.org/10.1037/cpp0000288

Psychosocial Functioning in Transgender Youth after 2 Years of Hormones https://doi.org/10.1056/NEJMoa2206297

In our U.S.-based cohort of transgender and nonbinary youth treated with GAH, we found decreases in depression and anxiety symptoms and increases in positive affect and life satisfaction.

Gender minority stress is consistently associated with more negative mental health outcomes.

Youth who had not undergone substantial gender-incongruent puberty had higher scores for appearance congruence, positive affect, and life satisfaction and lower scores for depression and anxiety at baseline than youth who had undergone substantial endogenous puberty.

In this 2-year study involving transgender and nonbinary youth, GAH improved appearance congruence and psychosocial functioning.

Regret after Gender-affirmation Surgery: A Systematic Review and Meta-analysis of Prevalence

https://doi.org/10.1097/GOX.000000000003477

Long-term Outcomes After Gender-Affirming Surgery: 40-Year Follow-up Study https://doi.org/10.1097/SAP.000000000003233

Gender-affirming surgery is a durable treatment that improves overall patient well-being. High patient satisfaction, improved dysphoria, and reduced mental health comorbidities persist decades after GAS without any reported patient regret.

Hormonal therapy and sex reassignment: a systematic review and meta-analysis of quality of life and psychosocial outcomes

https://doi.org/10.1111/j.1365-2265.2009.03625.x

Reduction in Mental Health Treatment Utilization Among Transgender Individuals After Gender-Affirming Surgeries: A Total Population Study https://doi.org/10.1176/appi.aip.2019.19010080

The Impact of Gender-affirming Surgeries on Suicide-related Outcomes: A Systematic Review

https://doi.org/10.1177/26318318231189836

Intervenable factors associated with suicide risk in transgender persons: a respondent driven sampling study in Ontario, Canada https://doi.org/10.1186/s12889-015-1867-2

Access to gender-affirming hormones during adolescence and mental health outcomes among transgender adults

https://doi.org/10.1371/journal.pone.0261039

Young adult psychological outcome after puberty suppression and gender reassignment https://doi.org/10.1542/peds.2013-2958

Mental Health of Transgender Children Who Are Supported in Their Identities https://doi.org/10.1542/peds.2015-3223

Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation https://doi.org/10.1542/peds.2019-1725

There is a significant inverse association between treatment with pubertal suppression during adolescence and lifetime suicidal ideation among transgender adults who ever wanted this treatment. These results align with past literature, suggesting that pubertal suppression for transgender adolescents who want this treatment is associated with favorable mental health outcomes.

Combating Scientific Disinformation on Gender-Affirming Care https://doi.org/10.1542/peds.2022-060943

Prohibition of Gender-Affirming Care as a Form of Child Maltreatment: Reframing the Discussion

https://doi.org/10.1542/peds.2023-064292

Gender-Affirming Care of Transgender and Gender-Diverse Youth: Current Concepts https://doi.org/10.1146/annurev-med-043021-032007

https://www.scottishtrans.org/wp-content/uploads/2013/03/trans_mh_study.pdf