Do No Harm

UNPROVEN AND UNSAFE:

THE EVIDENCE GAP IN SO-CALLED "GENDER-AFFIRMING CARE"

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Claims abound regarding the benefits of so-called "gender-affirming care" (GAC) for minors, which includes medical interventions such as puberty blockers, cross-sex hormones, and surgical procedures to foster alignment with an individual's perceived gender identity when it differs from one's biological sex. Yet, the reality is quite different. The evidence simply does not support GAC. More so, the danger is great given the resulting permanent, irreversible harm caused by such interventions.

Reasons given to support the provision of GAC in minors often, and very definitively, assert benefits in improving quality of life (QOL) and mental health. Yet even the 2021 systematic review conducted to inform the eighth edition of the World Professional Association for Transgender Health (WPATH) Standards of Care proves this claim cannot stand. Regarding QOL, the systematic review included just one trial of 50 adolescents that showed "no difference in QOL scores after a year of endocrine interventions." And while just three studies on depression showed some improvement, the risk of bias in these studies was determined to be either "moderate" or "serious." For anxiety, one study of 23 minors showed improvement and another study of 32 adolescents found no change in symptoms after two years of puberty blockers and four years of hormones. Overall, the systematic review notes a "high risk of bias in study designs, small sample sizes, and confounding with other interventions."[1]

Additionally, this systematic review offers no evidence that GAC decreases suicidality, which is often another claim made by proponents of GAC. In fact, the review comments on just one study and specifically states, "We cannot draw any conclusions on the basis of this single study about whether hormone therapy affects death by suicide among transgender people."[2] Yet, the assertion that GAC decreases suicidality suggest there would be a large rise in suicides if puberty blockers and cross-sex hormones are not provided. This, too, is not true, as evidenced by an independent review from England and Wales in 2024.[3]

Systematic reviews published by Jo Taylor, et al, are also enlightening. One such review focused on puberty blockers in adolescents and included 50 studies, of which only one was high quality. Consequently, the review found "insufficient and/or inconsistent evidence about the effects of puberty suppression on gender-related outcomes, mental and psychosocial health, cognitive development, cardiometabolic risk, and fertility." However, there was moderate-quality evidence that "bone density and height may be compromised during treatment."[4] The evidence reveals harms from puberty blockers more than it finds benefit.

Similarly, a systematic review assessing hormonal interventions included 53 studies, of which only one was high quality. The result: "a lack of high-quality evidence to support the initiation of hormones for masculinization or feminization in adolescents experiencing gender dysphoria/incongruence."[5]

The pattern is clear: the evidence supporting GAC in minors is nonexistent. The Cass Review, published in April 2024 using this peer-reviewed systematic evidence, confirmed the weakness of evidence and specifically stated that "we have no good evidence on the long-term outcomes of interventions to manage gender-related distress."[6] Studies related to GAC in minors – outside of systematic reviews which provide the most reliable evidence – are often of low quality given small sample sizes, significant attrition of enrollees, and relatively short follow up periods. Many of these studies are also significantly limited by selection bias, uncontrolled confounding variables, and the absence of a proper comparison group. All this leads to low quality evidence, which simply should not be used to make clinical decisions – especially those that are life-altering, as in the case of GAC.

Worse, some of the data is not being published in a timely manner. In October 2024, The New York Times reported that Dr. Johanna Olson-Kennedy, a proponent of GAC in adolescents, had yet to publish a "long-awaited study of puberty-blocking drugs." This study began in 2016 and was funded by an NIH grant. As per the Times' article, Olson-Kennedy's study of 95 children did not find improvements in mental health from puberty blockers. Finally, in May 2025, after many years of waiting, a preprint was posted confirming this to be the case.[7] Similarly, findings from England's youth gender clinic in 2011 showed that puberty blockers had "not changed volunteers' well-being, including rates of self harm." It was not until 2020 that those results were formally published.[8] Such delays and lack of transparency are unacceptable in the face of the harms posed by these interventions. The medical establishment simply needs to do better, especially when taxpayer dollars are funding the research.

The harms caused by cross-sex hormones also cannot be ignored. Outside of the cardiovascular risks and various cancer risks associated with taking exogenous hormones, the risk of infertility is real.[9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20] It is for this reason that even the Endocrine Society's guidelines recommend that "all transsexual individuals be informed and counseled regarding options for fertility" before starting medications to suppress puberty or opposite sex hormones.[21] Likewise, the American Academy of Pediatrics' Policy Statement – in a footnote – acknowledges "the effect of sustained puberty suppression on fertility is unknown." It further states "when cross-sex hormones are initiated without endogenous hormones, then fertility may be decreased."[22] Never mind the additional surgical complications which, in the case of genital surgeries, range from wound-related to urological, including, but not limited to, infection, "wound dehiscence," "trauma from intercourse/dilation," "change in voiding function," and "urethral stenosis."[23]

Given the weak quality of evidence and the obvious harms of GAC to minors, countries throughout the world, as well as states here at home, have taken a stance to protect children by stopping these sex change interventions from occurring. In May 2024 England, for example, banned the use of puberty blockers in those under 18 years of age.[24] Similarly, over the past few years, Norway, Sweden, and Finland have introduced limits on GAC in minors.[25] Their actions are based on evidence – or rather the lack of evidence – for GAC. In a systematic review born out of Sweden, the evidence for hormone treatment in minors was found to be "insufficient," noting that the "long-term effects of hormone therapy on psychosocial health are unknown." To this end, the study authors deemed puberty blockers to be "experimental treatment."[26]

Fortunately, the United States is waking up to the concerns many of our European counterparts have recognized for far longer. There are now 27 states that have enacted laws to keep kids safe from sex change interventions.[27] Such laws echo common sense and the public sentiment. In a recent New York Times/Ipsos survey, 71% of respondents agreed that "no one under age 18 should have access [to puberty-blocking drugs or hormone therapy]" when used for transgender care.[28]

It is also important to recognize that the "likelihood of regret, detransition, and discontinuation is unknown." While low regret from GAC is frequently cited in the popular press, this conclusion is based on flawed studies with narrow windows of time for follow-up, high rates of attrition (i.e., individuals "lost to follow-up" who simply stopped coming to their appointments), and biased samples or those that cannot be generalized.[29] Older samples, for instance, are not generalizable to many of the youth currently seen with gender dysphoria, many of whom have a "rapid onset gender dysphoria," as observed by Lisa Littman in 2018, and were impacted by peer and socio-cultural influences through social media and the like. These are individuals who unfortunately struggle with significant mental health or neurodevelopmental co-morbidities in addition to their gender confusion.[30, 31] It is these co-morbid psychiatric challenges which should be the focus of treatment.

Instead, the rush has been to treat gender dysphoria with an "affirming" model that paves the way for medications and surgeries. Supply in this case has unfortunately created its own demand. Having a gender specialist is a significant factor in determining if a child undergoes social and medical transitioning.[32] Yet, in one study of boys with gender identity disorder, the rate of desistance surpassed 87%; that is, the vast majority of boys who expressed gender confusion in childhood no longer had such feelings and thoughts when assessed in early adulthood.[33] Even the DSM-5, the psychiatrist's diagnostic manual published before the recent rise of rapid onset gender dysphoria, found rates of persistence for gender dysphoria from childhood to adolescence or adulthood to be anywhere from 2.2% to 50%.[34] Again, the majority desisted.

Desistance is real and psychotherapy can be beneficial to youth struggling with gender confusion, particularly when depression, suicidal thoughts, and self-harm coexist. These children need good behavioral healthcare, not GAC. We should follow the Finnish recommendation which recognizes that "first-line treatment for gender dysphoria is psychosocial support and, as necessary, psychotherapy and treatment of possible comorbid psychiatric disorders."[35]

This is particularly important as our ability to determine "who will benefit from medical transition and who will be harmed is limited."[36] Thus, the evidence for GAC is not only weak, but its societal benefit is simply impossible given its shotgun approach. Even recent guidelines from Germany provide no criteria to differentiate between those with "temporary 'gender non-contentedness'" and "stable/persistent cases."[37] Consequently, medical and surgical interventions can only result in harm for the many who would have otherwise desisted on their own. And for those who may have persistent gender dysphoria, psychotherapy is a mainstay of treatment, particularly in those under 18 years of age who simply do not have the capacity to consent to life-altering procedures.

If a hospital system is committed to providing evidence-based, patient-centered care to minors, then GAC would clearly not be offered. The evidence is weak, and systematic reviews provide no data to support GAC. Even WPATH in its Standards of Care Version 8 acknowledges that "a key challenge in adolescent transgender care is the quality of evidence evaluating the effectiveness" of these interventions.[38] No longer should we pressure children into life-altering drugs and surgeries, particularly by telling their parents that their loved one will commit suicide if "unaffirmed." Such fearmongering is not supported by the data and only erodes the trust placed in physicians.

For the sake of our children, the medical community should no longer continue GAC in minors. It is an injustice contrary to the current science. It is far removed from best practice. And it is destroying the lives of countless youths through social affirmation, hormonal manipulation, and surgical removal of healthy body parts. The evidence behind these sex trait modifications is extremely weak, while the danger posed is extremely great. If one wishes to look beyond the evidence, then please listen to those who have detransitioned; their stories are powerful reminders of the compassion we must have in caring for gender dysphoric youth as well as the strength we need to end the malpractice of GAC in minors.

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