‘Trust the Experts’ Is Not Enough: U.S. Medical Groups Get the Science Wrong on Pediatric ‘Gender Affirming’ Care

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The Claim: Most major American medical organizations support “gender affirming care.”

The Response:

Guidelines Based on No Solid Evidence

- The three main organizations to have released guidelines are the American Academy of Pediatrics (AAP), the Endocrine Society, and the World Professional Association for Transgender Health (WPATH). Other organizations, including the American Medical Association, have either made public statements in support of “affirming” medicine without citing evidence, or have deferred to one or more of these three.

- None of these organizations have done systematic reviews of the evidence, a method of review designed to prevent cherry-picking of studies and biased analysis.

- WPATH is an explicitly ideological organization that now includes “eunuch” as a valid “gender identity” that children can supposedly know they have at a very early age.

- Sweden, Finland, the U.K., and Florida have done systematic reviews, and all four reached the same conclusion: there is no evidence that the benefits of hormones for treating gender-related distress in youth outweigh the risks.
European Nations Reversing Gender Transition Policies

- Sweden and Finland have since placed severe restrictions on eligibility for hormones, recommending instead that minors with gender development problems be given psychotherapy as a first, and ideally only, line of treatment.

- Sweden is consistently ranked one of the friendliest countries to LGBT people.

- The U.K. has closed its main gender clinic, the Tavistock, after an independent report cited the "affirmative model" of care (which it said "originated in the USA") as a main reason for the lack of child "safeguarding."

- The AAP explicitly supports the affirmative model and rejects the Scandinavian model.

Uncontrolled Experimentation on Children with Dangerous Substances

- Finland has called hormonal interventions for gender dysphoria "experimental."

- The U.S. Food and Drug Administration has never approved the use of drugs like Lupron for youth with gender dysphoria.

- Puberty blockers may have serious side-effects, including lower IQ, osteoporosis, early and aggressive menopause, infertility, and depression.

- Puberty blockers are used for chemical castration of sex offenders, a practice constitutional lawyers and ethicists have described as cruel and unconstitutional due, in part, to its side-effects.

Deeply Flawed Science

- The AAP’s position is based on a single non-peer-reviewed policy statement published in 2018 in its own journal, Pediatrics. A peer-reviewed fact-check of that article revealed that it completely misrepresents the research and omits all the studies that undermine the affirmative model.

- The AAP has consistently suppressed efforts by member pediatricians to get it to conduct a systematic review of the research.

- The Endocrine Society has rated its own recommendations as resting on “low” or “very low” quality research.

- WPATH’s recommendations rely on a single study from the Netherlands, which scholars have shown contains fatal flaws in methodology and is anyway inapplicable to the vast majority of teenagers seeking hormones and surgeries today.

- One of the authors of the Dutch study said in 2021 that other countries, notably the U.S., were "blindly adopting our research."

- A peer-reviewed, systematic review of clinical guidelines published in 2021 gave Endocrine Society’s guidelines a score of 1 out of 6, and WPATH’s guidelines a score of 0 out of 6.
There are plenty of examples of American medical organizations being wrong on the science. Recent examples from the AAP alone include guidelines on peanut allergies, Covid masking, and school closures. Another example: the American Medical Association played a large role in fueling the opioid epidemic when it adopted pain as a “5th vital sign” and agreed that the risk of addiction is very low, despite the paucity of evidence for these claims.

Introduction

This memo addresses the frequently made claim that “gender affirming” hormonal and surgical interventions for minors are appropriate because most major medical organizations in the U.S. support them. While it is understandable that doctors and their patients should want to follow guidelines issued by professional medical groups, it is important to recognize that these groups don’t always get the science right.

On the issue of medical treatment for youth gender dysphoria in particular, American medical organizations have demonstrated a preference for ideologically driven conclusions over cautious review of the available research.

The three main American medical organizations to have recommended “gender affirming care” for minors are the American Academy of Pediatrics (AAP), the Endocrine Society, and the World Professional Association for Transgender Health (WPATH). Other organizations, including the American Medical Association, have issued public statements in support of the use of hormones to address gender dysphoria, but without discussing the research.

American Academy of Pediatrics

The AAP’s position is based on a policy statement, authored by Dr. Jason Rafferty and published in 2018 in the organization’s journal, Pediatrics. Rafferty’s central claim in that article is that “watchful waiting,” a therapeutic approach in which clinicians delay social and medical transition as long as possible in order to exhaust all efforts to help youth in distress feel comfortable in their bodies, is a form of “conversion therapy.” Clinicians, he argues, should always “affirm” (i.e., agree with) the gender self-declarations of their pediatric patients.

A 2020 fact-check of Rafferty’s article, written by Dr. James Cantor of the Toronto Sexuality Centre and published in another journal, revealed it to contain egregious omissions and misrepresentations of the available research on youth gender dysphoria.

The flaws include:

- Omission. Rafferty neglects to mention that there had been 11 studies to date on rates of persistence of gender dysphoria from childhood into adolescence. All 11 found that the vast majority (61–98%) of children with gender dysphoria come to accept their sex by adolescence. A majority come out as gay or lesbian, indicating that cross-gender feelings and behavior at an early age are predictive of same-sex sexual orientation, not evidence of a child having been “assigned” the wrong sex at birth.

- Misrepresentation. Rafferty’s citations for his claim that “watchful waiting” is “conversion therapy” fall into two categories:
1. Some citations are studies on sexual orientation, not gender identity. This is odd, considering that Rafferty emphasizes that sexual orientation and gender identity are "not synonymous" and "develop separately."

2. The studies on gender identity cited by Rafferty in fact endorse the "watchful waiting" approach. For example, Rafferty cites a "practice guideline" published by the American Academy of Child and Adolescent Psychiatry (AACAP) in 2012. That source concludes, "In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood, or at least until the wish to change sex is unequivocal, consistent, and made with appropriate consent." In other words, save for extreme cases, adolescents should not have their gender self-identification "affirmed." As another example, one of Rafferty's sources explicitly says that "delaying affirmation should not be construed as conversion therapy or an attempt to change gender identity."

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**Endocrine Society**

In 2017, the Endocrine Society published a “clinical practice guideline” for treatment of “gender-dysphoric/gender-incongruent persons.” Two key facts about the ES guideline:

- It is a "how to" guideline, not a "whether to" guideline. As the ES makes clear, whether a minor should receive hormonal interventions is a decision for mental health experts following the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) diagnostic criteria to make. In theory, the ES guidelines are compatible with a clinical reality in which not a single minor receives hormonal interventions. Citing the ES guideline in support of a claim about "gender affirming" hormones being "medically necessary" or "life-saving" is therefore highly misleading.

- The ES guideline assesses the quality of evidence supporting its own recommendations. In the relevant category of hormonal interventions for minors, ES cites the quality of evidence as being "low" or "very low." Not just that, but even when it comes to the "low" category (the higher of the two), ES rates its guidelines as being "weak recommendations."

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**WPATH and the “Dutch Study”**

WPATH’s Standards of Care for adolescents seeking hormones are based largely on a single study from the Netherlands (the so-called “Dutch study” and related Dutch protocol). That study, however, has been subject to withering criticism for its biased methodology, unimpressive results, and inapplicability to the current clinical scene in Western countries, including the United States.

Because the Dutch study, published in 2011 and 2014, is widely regarded as the gold standard of research in support of "gender affirming" hormonal and surgical interventions for minors, its five main problems should be well understood:
1. As confirmed by the authors themselves, the main metric on which the researchers observed clinically significant improvement was alleviation of gender dysphoria (and related body image). But this finding rests on a sleight of hand. The Dutch team used the Utrecht Gender Dysphoria Scale, which has different questionnaires for males and females. They gave male-to-female transitioners the male questionnaire at the beginning of their transition but the female questionnaire at the end. As one critic has pointed out, after transition “[a] boy who wanted to become a girl … would be rating agreement with the statement ‘I hate menstruating because it makes me feel like a girl’ and satisfaction with ‘ovaries–uterus.’” That a biological boy who transitioned to the female role does not “hate menstruating” would yield the minimum gender dysphoria score, leading to a meaningless finding of “resolved” dysphoria.

2. The final of the two famous Dutch studies, published in 2014, relied on only 1.5 years of follow-up after subjects had completed their transition. This is hardly enough time to reveal whether the procedures ultimately benefit the patients. Two studies found that the average time to regret is around 10 years. But, remember, almost all the data in these studies comes from those who transitioned as adults and were gathered before the “affirming” model and its hostility to safeguards became widespread. Increasingly, we hear from detransitioners who describe a period of euphoria immediately after completing some or all of the transition. As even Peggy Cohen-Kettenis, one of the Dutch researchers who co-authored the 2011 study, would later observe, “a truly proper follow-up needs to span a minimum period of 20 years.”

3. The study could not reliably distinguish the effects of hormonal and surgical interventions from those of psychotherapy. This is a recurring problem in studies on the link between hormones and mental health. In the Dutch study, candidates had to demonstrate a stable state of mind and absence of psychological counterindication (co-occurring conditions) to receive puberty blockers or cross-sex hormones initially. Then, once receiving them, they were continuously seen by therapists who (presumably) worked to address their underlying mental health problems (anxiety, depression, etc.).

4. The Dutch team carefully selected patients for participation in their study—so carefully, in fact, as to moot the clinical significance of their findings, according to a forthcoming peer-reviewed analysis by Levine, Abrussezze, and Mason. To be eligible for the study on puberty blockers, participants would already have had to be enrolled for cross-sex hormones, which, given eligibility criteria, meant that their use of puberty blockers did not yield any seriously negative results. In other words, for their research on puberty blockers, the Dutch team excluded from the outset cases that would have cast doubt on the safety or efficacy of puberty blockers. It is hard to imagine a more obvious example of selection bias.

5. Finally, the only effort to replicate the Dutch study’s findings to date has failed. Scientific research must be replicable, because researchers can never be sure if the results they observe are due to confounding factors which they may not have fully recognized at the time and for which they did not adequately control. The fact that a team of researchers in the U.K. tried to apply the eligibility criteria and treatment protocols of the Dutch team to a cohort with similar characteristics but failed to observe the same outcome substantially weakens the claims of the original study.

Even if these problems are ignored, there is good reason to believe that the Dutch study and its resulting treatment protocol does not apply to the vast majority of teenagers showing up for medical transition today.

To be eligible to participate in the Dutch protocol, candidates had to fulfill five criteria:

1. Early-onset gender identity disorder (as it was called at the time).
2. The condition had to persist or intensify into adolescence. This condition was because previous studies had consistently shown that the vast majority of children with gender identity issues desist by puberty (i.e., come to terms with their sex), and most come out as gay.

3. No comorbid psychiatric diagnoses. Candidates had to be psychologically and emotionally stable.

4. Supportive family. Parents or guardians had to give approval for the procedure.

5. Informed consent would have to be achieved as a continuous process, often lasting months, in which candidates’ expectations were lowered. Candidates had to understand the reality that the interventions would change their appearance and gender role, but not literally change their sex.

By contrast, data published by gender clinics across the West, including in the U.S., show that the majority of youth seeking hormonal interventions these days are adolescent girls with no prior history of dysphoria and very high rates of mental health comorbidities. Proponents of the affirmative model of care argue that parental approval should not be a requirement for receiving hormones, and generally reject medical “gatekeeping” (and by extension a prolonged and burdensome informed consent process).

Prominent researchers and clinicians in the area of youth gender dysphoria have noted the appearance of a new patient subgroup (teenagers, mainly girls, with "rapid onset gender dysphoria"). They have suggested "social contagion" as one reason why the rate of teenagers (especially girls) identifying as transgender and seeking medical interventions has skyrocketed in recent years. These experts have urged caution in medicalizing their gender incongruent behavior without proper research. The Dutch researchers themselves have recognized the inapplicability of their model to the current clinical scene. In 2021, Dr. Thomas Steensma told a Dutch newspaper that other countries were “blindly adopting our research.”

WPATH recently released its 8th version of Standards of Care. The new version still considers the Dutch study the most authoritative, despite the appearance of additional studies in the intervening years. These later studies, it should be noted, all suffer from methodological shortcomings, most commonly lack of adequate controls for confounding factors like psychotherapy and very short follow-up times. Three systematic reviews of the evidence—by health authorities in Sweden, Finland, and the U.K.—all found that these additional studies did not show evidence of mental health benefits from hormonal interventions outweighing the risks.

Still, “gender affirming” activists continue to mischaracterize the results of these studies in mainstream discussions.

U.S. as Medical Outlier

The question to ask is not why some American medical experts depart from the AAP, ES, or WPATH, but why these organizations depart from a growing international consensus over the lack of evidence for “gender affirming care.”

Over the past two years, Finland, Sweden, and the U.K. have conducted a systematic review of the evidence for the use of puberty blockers and cross-sex hormones in treating pediatric gender dysphoria. Health authorities in all three countries reached the same conclusion: the belief that the mental health benefits of these interventions outweigh the costs is based on very
low-quality evidence. When the Florida Department of Health conducted an overview of systematic reviews of the evidence in 2022, it, too, arrived at this conclusion. It's important to note that these systematic reviews considered the exact same body of literature that proponents of "gender affirming care" cite.

Sweden and Finland have since decided to place severe restrictions on eligibility for hormonal interventions. Following the U.K.’s review of the evidence, a commissioned report by Dr. Hilary Cass of the country’s largest pediatric gender clinic found serious gaps in the quality of care. In her report, Cass explicitly highlighted the “affirmative model,” which she said “originated in the USA,” as a plausible reason for the lack of “safeguarding” and the rushing of teenagers onto hormones. The NHS subsequently ordered the closure of the Tavistock’s gender clinic. The NHS also recently deleted from its website the claim that puberty blockers are “fully reversible.” Meantime, France’s National Academy of Medicine has urged “the greatest caution” when dispensing hormones as “treatments” for what is in essence a mental health condition, and health authorities in Australia and New Zealand have likewise begun sounding the alarm.

A systematic review of the evidence is a method of evidence review that relies on predetermined criteria to select, analyze, and synthesize all relevant research pertaining to a concretely defined question. The main purpose of systematic reviews is to prevent cherry-picking of studies to produce desirable conclusions. Neither the AAP, nor the ES, nor WPATH have conducted systematic reviews of the research. Indeed, in its latest Standards of Care WPATH asserts that such a review is “not possible.” A systematic review of clinical guidelines for treating gender discordant youth, peer-reviewed and published in 2021, gave ES’s guidelines a quality score of 1 out of 6 and WPATH’s a score of 0 out of 6. Worse, over the past two years the AAP has actively suppressed resolutions proposed by pediatrician members to conduct a systematic review of the evidence, insisting, in one instance, that those who demand such a review are “anti-transgender.”

With so many contemporary “affirming care” methods and practices resting on poorly conducted or inapplicable studies, medical authorities like the AAP and the ES, and ideological organizations like WPATH, are gambling not only with their credibility, but the mental and physical health of children. There are plenty of examples of American medical organizations being wrong on other recent scientific and medical questions. Recent examples from the AAP alone include guidelines on peanut allergies, Covid-related masking, and Covid-related school closures. Parents, scientists and researchers, attorneys general and lawmakers are justified in their hesitance to lean into the surge in transgender identification. They must not be reluctant to call for a pause in transitioning, and demand better research and more debate.

Correction: A previous version of this memo stated that the rate of desistence was 61–88%. In fact, it was 61–98%.
Endnotes

1 Jason Rafferty, “Ensuring Comprehensive Care and Support for Transgender and Gender-Diverse Children and Adolescents,” *Pediatrics* 142, no 4 (October 2018).


3 Ibid.


5 Ibid.


The U.K. recorded a surge of 4,400% in teenage girls seeking medical gender transition between 2009 and 2018. As revealed in the Cass Report, “approximately one third of children and young people referred” to the nation’s main gender clinic had “autism or other types of neurodiversity.” The report also noted “an over-representation percentage wise (compared to the national percentage) of looked after children” (i.e., foster children).


Sapir, “The Distortions in Jack Turban's Psychology Today Article on 'Gender Affirming Care.' ”

See, e.g., Jack Turban, “The Evidence for Trans Youth Gender-Affirming Medical Care,” *Psychology Today*, Jan. 24, 2022; I respond to this flawed article in Sapir, “The Distortions in Jack Turban's Psychology Today Article on 'Gender Affirming Care.' ”

“One Year Since Finland Broke with WPATH ‘Standards of Care,’ ” Society for Evidence Based Gender Medicine, July 2, 2021.

“Summary of Key Recommendations from the Swedish National Board of Health and Welfare (Socialstyrelsen/NBHW),” Society for Evidence Based Gender Medicine, Feb. 27, 2022.

“New Systematic Reviews of Puberty Blockers and Cross-Sex Hormones Published by NICE,” Society for Evidence Based Gender Medicine, March 31, 2021.


Ibid.


