Daniel Weiss MD

My name is Dr. Daniel Weiss.
I am a board-certified internist and endocrinologist. I am also a senior fellow with the non-profit organization called Do No Harm. My commentary is mine alone and does not represent the views of any medical practice.

I practiced endocrinology in northeastern Ohio for 36 years. In December 2022, I moved to Utah and joined a medical practice there. I believe my clinical experience is meaningful in part because for 10 years I provided hormonal treatments for persons with gender dysphoria .

I no longer provide this care.

Why not? Because I discovered that most of these patients had stories of traumatic childhoods and co-morbid depression. Their psychologic evaluation was inadequate before they were "cleared" for treatment. Furthermore, opposite sex treatment did not resolve any of their underlying psychologic issues.

I later learned that there is no good scientific or clinical evidence to support hormonal or surgical interventions for minors with gender dysphoria. Instead, there is increasing evidence to show that such treatments for gender dysphoria cause harm. I will briefly summarize key data in the medical literature .

The most-cited studies of hormonal treatment in minors report the outcomes using the so-called Dutch protocol. I encourage you to look at the references I have provided.

Multiple papers detail the many scientific flaws in the Dutch studies. Here are a few. There was no comparison group. The study subjects were highly selected. The study started with 111 children but only 55 were analyzed at its conclusion. Nonetheless the small group of children showed no improvement in gender distress, anxiety, or anger after opposite sex hormone treatment. The researchers used an unvalidated measurement tool and manipulated its results.

It is little known that the series included a death as a complication of surgery. Importantly, independent UK researchers could not replicate the findings of the Dutch group.

A paper published last year in the Endocrine Society's key journal summarized the evidence on hormonal interventions for "gender diverse adolescents" as sparse and of low quality. In the key authoritative endocrinology textbook, just published in 2023, the chapter on Transgender Healthcare, written by a WPATH member, states that "long-term prospective outcome studies of the effects of GAHT (gender affirming hormone therapy) of any type are lacking. What data that do exist are mostly retrospective and have numerous limitations."

And gender dysphoria resolves in the vast majority of children without any interventions.

I have touched on the lack of data showing benefit. So, what about harm? Many studies show that puberty blockers and opposite sex hormones damage bone health, cardiovascular health, and fertility. There is emerging evidence of increased rates of breast cancer and other adverse effects.

Those who state that puberty blockers are readily reversible and harmlessly "pause" puberty can cite no published data on the reversibility of these drugs in this setting. The FDA has not approved any drug for treatment of gender dysphoria.

How about suicide? The largest study documented 4 suicides out of 15,000 adolescents being treated for gender dysphoria in the UK. It is not known whether this rate is any different than that seen in adolescents undergoing mental health treatment who do not have gender dysphoria.

The best data suggest that hormonal and surgical interventions increase the risk of suicide. The Dutch study provided no data on suicide. In contrast, a long-term study of transgender persons in Sweden found a 19-fold overall higher suicide rate, 40-fold higher in females and a

3-fold higher overall mortality despite treatment with opposite sex hormones and surgery as compared to the control population. In a study of over 8000 transgender person,two thirds of those who died by suicide were still receiving treatment at the gender dysphoria center. In an article this year in the NEJM there was a 45-fold increase in suicide with opposite sex hormonal therapy.

For more than a decade, long before opposite sex therapies became popular in the United States, European centers offered these treatments for gender confusion. Now, as increasing data show substantial harm, Finland, Sweden, Norway, France and the United Kingdom have discouraged or terminated opposite sex treatments for minors. Instead, they advise supportive psychotherapy for minors with gender confusion.

The United Kingdom's Gender Identity Development Service, started in 1989, is now closed. Hormonal interventions will only be provided as part of formal research program. They recognize the experimental nature of these treatments in those who have normal puberty.

Why haven't US physicians and surgeons learned from their European colleagues? I am uncertain but I ask how many doctors who justify this harm to minors have financial conflicts of interest? How many are employed at transgender clinics and how many perform lucrative surgeries ?

Finally, it should be noted that strict international principles prohibit children from providing consent because children cannot fully comprehend risk versus benefit. The United States is a signatory to the United Nations Convention on the Rights of the Child. The *Declaration of the Rights of the Child* states that "the child, by reason of his physical and mental immaturity, needs special safeguards and care." These safeguards are uniquely important when it comes to an experimental intervention. The Declaration of Helsinki allows individual parents to consent to an experimental treatment for their child. Usually, this choice is made in an extraordinary

circumstance, to save that child's life, and with the child's assent. Experimental treatments to change gender appearance should not be an exception to these requirements.

Please help protect the children of Ohio.

Thank you.

Daniel Weiss MD

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Key References:

Lack of efficacy

de Vries A. L. *et al.* Puberty suppression in adolescents with gender identity disorder: a prospective follow-up study. J. Sexual Medicine 2011; 8: 2276-2283.

"Dutch Study." There was no change in anxiety, depression or gender distress following GnRH therapy (puberty blockers) and opposite sex therapy in children. There was no comparator control group and all received psychologic support.

de Vries A.L. *et al.* Young adult psychological outcome after puberty suppression and gender reassignment. Pediatrics 2014; 134: 696-704.

"Dutch Study." A non-validated assessment tool was used to assess dysphoria, there was no control group and the 55 patients were tested in such a way that improvements in scores would be seen even without treatment.

Carmichael P. *et. al*. Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. PLOS One 2021; 16 (2)

These researchers could not confirm any of the claims of DeVries et al in young people treated with the Dutch protocol in the U.K.

Kaltiala R, *et. al.* Adolescent development and psychosocial functioning after starting cross-sex hormones for gender dysphoria. *Nord J Psychiatry*. 2020;74(3):213-219.

This retrospective chart review showed no improvement in psychiatric status in 52 adolescents after opposite sex hormone treatments.

Abbruzzese E. *et. al*. The Myth of "Reliable Research" in Pediatric Gender Medicine: A critical evaluation of the Dutch Studies—and research that has followed, Journal of Sex & Marital Therapy. January 2023.

This paper is a comprehensive and critical review of De Vries' studies identifying the many flaws and biases in the methodology.

Levine S. *et. al*. Reconsidering informed consent for trans-identified children, adolescents and young adults. J. Sex and Marital Therapy 2022; 48: 706-727.

This paper describes the challenges in providing full and proper informed consent to children with gender dysphoria and their parents in light of the flaws in the Dutch protocol and limitations in our knowledge base.

O'Connell MA, *et al*. Approach to the Patient: Pharmacological Management of Trans and Gender-Diverse Adolescents. *J Clin Endocrinol Metab*. 2022;107(1):241-257.

This review stresses the need for improvement in the "evidence base" emphasizing that the "evidence relating to hormonal therapies in youth is low" and that "data on wellbeing in transgender persons is sparse".

Levine SB, et. al. What are we doing to these children? Response to Drescher, Clayton, and Balon commentaries on Levine et. al. 2022. J Sex and Marital Therapy 2023; 49:115-125.

In a response to comments, the authors discuss the benefits of psychotherapeutic interventions and the frequent conflicts of interest in those clinicians who promote hormonal and surgical interventions.

Deutsch, MB. Transgender Healthcare. p 1752-1757 *in* Degroot's Endocrinology. Basic science and clinical practice. 8th edition. 2023.

Dr. Madeline Deutsch, a member of the World Professional Association for Transgender Health (WPATH) writes that "long-term prospective outcome studies of the effects of GAHT (gender affirming hormone therapy) of any type are lacking. What data that do exist are mostly retrospective and have numerous limitations."

Role of psychotherapy or non-intervention

Ristori J, Steensma TD. Gender dysphoria in childhood. *Int Rev Psychiatry*. 2016;28(1):13-20.

85% of children with gender dysphoria show spontaneous resolution of their symptoms and distress without any intervention.

Clayton, A. Gender-affirming treatment of gender dysphoria in youth: a perfect storm environment for the placebo effect-the implications for research and clinical practice. Arch Sex Behavior 2023; 52:483-494.

This paper provides an overview of the poor data in support of opposite sex hormone treatment, of the harms caused by opposite sex treatment and improvement in response to placebo. For perspective, it describes historical treatments which once were popular, but eventually proved harmful to children.

Costa R. *et. al.* Psychological support, puberty suppression, and psychosocial functioning in adolescents with gender dysphoria. J Sex Med 2015: 12: 2206-2214.

This UK study found that psychological support alone lead to significant improvement in psychological function in adolescents with gender dysphoria, mean age of 15.5.

Psychiatric co-morbidities in youth with gender dysphoria

Becerra-Culquie TA *et. al.* Mental health of transgender and gender nonconforming youth compared with their peers. Pediatrics 2018: 141: e20173845.

Over 60 % of transgender adolescents were diagnosed with depression, autism spectrum disorders, psychoses, substance abuse, anxiety or eating disorders

Kozlowska, K. *et. al.* Australian children and adolescents with gender dysphoria: clinical presentations and challenges experienced by a multidisciplinary team and gender service. Human Systems: Therapy, Culture and Attachments 2021; 1: 70-95

88% of these youth had comorbid mental health diagnoses and other indicators of psychological distress and adverse childhood events. 19% had a history of sexual abuse.54% were bullyed. What is the best approach to treating these youth?

Devor, H. Transexualism, dissociation and child abuse: an initial discussion based on nonclinical data. J Psychology and Human Sexuality 1994; 6: 49-72.

In depth interviews disclosed that sixty percent of the natal females disclosed one or more types of child abuse; more than 50% of that abuse was sexual.

Harm:

Mortality:

Dhejne C, *et al.* Long-term follow-up of transsexual persons undergoing sex reassignment surgery: cohort study in Sweden. *PLoS One*. 2011;6(2):e16885.

This long-term study found an overall 19-fold higher suicide rate (40 fold in female to male) and a 3-fold higher overall mortality in 324 transgender persons at 11 years after full transition, compared to the control population.

de Blok CJM. *et al.* Mortality trends over five decades in adult transgender people receiving hormone treatment: a report from the Amsterdam cohort of gender dysphoria. *The Lancet Diabetes & Endocrinology*. 2021;9(10):663-670.

This study documented increased rates of mortality in all persons receiving opposite sex hormone therapy.

Bone:

Biggs M. Revisiting the effect of GnRH analogue treatment on bone mineral density in young adolescents with gender dysphoria. *J Pediatr Endocrinol Metab*. Jul 27 2021;34(7):937-939.

Children treated with puberty blockers showed a marked reduction in bone density in those treated with GnRH analogues (puberty blockers); this change would be expected to increase the risk of fractures.

Cardiovascular:

Nota NM, et al. Occurrence of Acute Cardiovascular Events in Transgender Individuals Receiving Hormone Therapy. *Circulation*. 2019;139(11):1461-1462.

This study found increased rates of heart attacks, strokes and blood clots in those treated with opposite sex hormone therapy.

Getahun D. *et. al.* Cross-sex Hormones and Acute Cardiovascular Events in Transgender Persons: A Cohort Study. *Ann Intern Med*. Aug 21 2018;169(4):205-213.

This study documents increased rates of blood clots as well as strokes and heart attacks in males given opposite sex hormone treatment

Fertility:

Baram S, *et al*. Fertility preservation for transgender adolescents and young adults: a systematic review. *Hum Reprod Update*. Nov 5 2019;25(6):694-716.

The authors raise concerns that opposite sex hormone therapies cause infertility, but offer no solutions to this problem.

Rodriguez-Wallberg K, *et. al.* Reproductive health in transgender and gender diverse individuals: a narrative review to guide clinical care and international guidelines. International J of Transgender Health. 2023; 24: 7-25

This paper details the likelihood of infertility "inherent in these interventions". They stress the many challenges and unknowns in fertility preservation in those receiving opposite sex therapy, especially in children. They note that many transgender persons "regret missed opportunities for fertility preservation".

Cancer:

de Blok CJM, *et. al.* Breast cancer risk in transgender people receiving hormone treatment: nationwide cohort study in the Netherlands. BMJ 2019; 365: l1652.

Males given opposite sex hormones experience a 46 fold increase in the occurrence of breast cancer.

Corso, G, *et. al.* Risk and incidence of breast cancer in transgender individuals: a systematic review and meta-analysis. European J of Cancer Preventioln 2023;

Reports a 22 fold increase in breast cancer in male to female transgender persons as compared to biolologic males.

Gurrala RR, *et. al.* The impact of exogenous testosterone on breast cancer risk in transmasculine individuals. Ann Plastic Surg 2023; 90: 96-105.

Breast cancer occurred 20 yrs earlier than expected in this population of females even though most had mastectomies before the diagnosis.

Wang, JC et. al. Factors associated with unsatisfactory Pap tests among sexually active trans masculine adults. LGBT Health 2023;

Those females who had received 1 year or more of testosterone were three and half times more likely to have an unsatisfactory Pap test, making early detection of cervical cancer much more difficult.

Breastfeeding:

Gribble, K. *et al.* Breastfeeding grief after chest masculinisation mastectomy and detransition: a case report with lessons about unanticipated harm. Frontiers in Global Women's Health 2023; Feb.

This case report describes the challenges faced by a woman who detranstions and who grieves over being unable to breastfeed her infant. Detransition is discussed and the importance of including in the informed consents before mastectomy the inability to breastfeed.

Brain:

Schneider MA, e*t. al.* Brain maturation, cognition, voice pattern in a gender dysphoria case under pubertal suppression. Frontiers in Human Neuroscience Nov 2017; 11.

This patient showed an abnormal failure to increase brain white matter. In addition the patient experienced a reduction in IQ and memory during 22 months of puberty blockers.

Gutkind NE, *et. al.* Idiopathic intracranial hypertension in female-to-male transgender patients on exogenous testosterone therapy. Ophthalmic Plast Reconst Surg 2023.

Describes 4 patients, the youngest 19, with visual impairment, headaches and other symptoms caused by increased intracranial pressure. They postulate male hormone therapy as a cause.

Post-surgical complications

Van der Sluis WB, *et. al.* Genital gender-affirming surgery for transgender women. Best Practice and Research Clinical Obstetrics and Gynecology Dec 2022.

The surgical procedures vulvoplasty and vaginoplasty typically require a 5 day hospital stay. The authors describe the risk of severe complications, the possibility of repeat surgeries and the fact that there is no accepted validated questionnaire to assess postoperative satisfaction.

Ortengren, C. et. al. Urethral outcomes in metoidoplasty and phalloplasty gender affirming surgery and vaginectomy: a systematic review. Translational Andrology and Urology 2022; 11: 1762-1770.

The authors review reports of surgical outcomes including the ability to urinate while standing after surgery. Of those reporting this result, 25% of patients were unable to urinate while standing. Up to 63% had complications including urethral strictures and infections. No description was provided of patient satisfaction after surgery.

Kamal K, *et.al.* Addressing the physical and mental impacts of postsurgical scarring among transgender and gender diverse people. LGBT Health 2023

The authors describe the "dearth of peer-reviewed research" on the "repurcussions" of postsurgical scarring and the lack of coverage by insurance for "scar treatment".

Potter, E. *et. al*. Patient reported symptoms and adverse outcomes seen in Canada's first vaginoplasty postoperative care clinic Neurourol Urodyn 2023; 42: 523-529

Pain, bleeding, sexual dysfunction and urinary symptoms were common (> 50%) in this series of 80 biologic males who had undergone surgery to create a vagina.

Wang, AMQ, *et. al*. Outcomes following gender affirming phalloplasty: a systematic review and meta-analysis. Sexual Medicine Reviews 2022; 10: 499-512.

The authors describe a 76% complication rate after attempts to create a penis in biologic females. Goals of surgery include being able to urinate with standing, having sensation, and aesthetics, i.e being similar in appearance to biologic male genitalia. The objective the authors considered did not include having a penis that can function for intromission. Only 6% of those centers reporting results aesthetic results.

Suicide risk

Wiepjes CM, *et. al.* Trends in suicide death risk in transgender people; results from the Amsterdam Cohort of Gender Dysphoria study (1972-2017). Act Psychiatr Scand 2020; 141: 486-491.

This long-term study of 8263 transgender adults, (mean age of 25 at first visit to gender dysphoria center) showed that suicide deaths occur during every stage of gender transitioning. There were 49 suicides out of 8263 persons with average follow-up of 7.5 years. This number is a rate of 40/100,000 which may be compared to 11/100,000 in the general population. Two thirds of those who died by suicide were still receiving treatment at the gender dysphoria center. The average age at the time of suicide was 41. This study provided no additional psychiatric information.

Biggs, M. Suicide by clinic-referred transgender adolescents in the United Kingdom. Arch Sexual Behavior 2021; 51: 685-90.

In this study, of the Gender identity Development Service in the UK, 4 patients commited suicide out of 15,000. This rate was 5.5 times higher than the overall adolescent population without psychiatric diagnoses. The study reached no conclusion as to the best approach to prevent these suicides.

Chen, D. *et. al.* Psychosocial functioning in transgender youth after 2 years of hormones. N Engl J Med 2023; 388: 240-250.

There was no control group in this study of children, aged 12-20 (mean age 16) treated with opposite sex hormones over 2 years in 4 US transgender clinics. Psychiatric care was not described. The biologic males showed no improvement in depression, anxiety or life satisfaction. There were no reports of adverse physical events but 2 children, on treatment, committed suicide during this short term study. The rate of suicide in this group translates into a 45 fold higher rate than CDC reported suicide rates for those of comparable age in the general population.

Jackson, D. Suicide-related outcomes following gender-affirming treatment: a review. Cureus March 20, 2023. Vol 15.

The author reviews those 23 studies that examine suicidal ideation and suicide attempts in persons before and after surgical and/or hormonal interventions. He finds various flaws in most of these studies. He points to the need for more research and informed consent for those considering these treatments.

Regret and Detransition

Littman L. Individuals treated for gender dysphoria with medical and/or surgical transition who subsequently detransitioned: a survey of 100 detransitioners. Arch. Sex Behavior. 2021; 50: 3353-3369.

This study recruited subjects with gender dysphoria and offered them a 115-question anonymous survey on several social media sites. The responses showed that 48% of the natal females had trauma within 1 year before onset of gender dysphoria. 55% felt they did not receive adequate evaluation from a doctor or mental health professional before opposite sex therapy 76 % did not tell their treating physician that they had chosen to detransition. In 23%, the desire to "transition" was a response to difficulty in accepting themselves as gay, lesbian, or bisexual. Gender dysphoria started on average at age 11 and transition occurred on average at age 22. On average, detransition occurred 4 years later.

Roberts CM, *et. al.* Continuation of gender-affirming hormones among transgender adolescents and adults. J Clin Endocrinol Metab 2022; 107: e3937-e3943.

This study used the US Military Healthcare System database to determine the adherence rates for opposite sex hormone treatment in 952 persons with a mean age 19. 66% of this cohort were natal females. Over 4 years, 36% of the natal females discontinued treatment. Of those who started opposite sex treatment below the age of 18, 26% discontinued within 4 years.

Ethics

https://www.ecfr.gov/current/title-21/chapter-I/subchapter-A/part-50/subpart-D/section-50.52

Code of federal regulations relating to institutional review board requirements for clinical investigations involving children. There must be anticipated benefit that is as favorable as other available treatments and there must be assent of the children and permission of the parents or guardians.

Declaration of Helsinki (1964) BMJ 313, 1448-1449, 1996

Gender Service Providers

Barnes, Hannah. Time to Think. The Inside Story of the Collapse of the Tavistock's Gender Service for Children. 2023.

This BBC journalist details the history of the poor care provided to over 10,000 children seen over the course of 30 years in the United Kingdom's Gender Identity Development Service. Pressure from transgender activists, concrete thinking by distressed youth hoping for a quick fix and financial issues were some of the reasons why staff failed to address important psychologic

factors in their patients. In doing so, they directed these children into medical therapies that harmed and did not help.

Cass Review Interim Report (Feb 2022)
https://cass.independent-review.uk/publications/interim-report/

This is the commissioned report written by Dr Hillary Cass, a highly respected pediatrician in the United Kingdom. She describes the failings of the Gender Identity Development Service. Dr. Cass recommends many changes to the treatment of minors with gender dysphoria. She stresses psychosocial interventions as the principal focus.

Affidavit of Jamie Reed.
https://ago.mo.gov/docs/default-source/press-releases/2-07-2023-reed-affidavit---signed.pdf?sfvrsn=6a64d339_2

The writer is a whistleblower who describes the treatment of (over 600) children at the Washington University Pediatric Transgender Center. Children were railroaded into opposite sex medical interventions without addressing adverse effects and without treating underlying psychiatric conditions.