**SUMMARY OF GD/TG LITERATURE**

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(US TG Survey, Amsterdam Cohort, Cornell Syst Lit Review, Turban puberty suppression, Turban other, Turban GICE, Tobin bone density, Branstrom, Olson-Kennedy mastectomy on minors, UK GIDS 2020)

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**SEX**

**Sex**        Biological indication of male and female (understood in the context of reproductive capacity), such as sex chromosomes, gonads, sex hormones, and nonambiguous internal and external genitalia.

American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)* (Arlington, VA: American Psychiatric Association, 2013), p. 829.

# [This is distilled, not cited verbatim, from the petition written by Michelle and I to the Trump HHS, DOJ, and DOE, so authorship credit doesn’t matter much here. Source: “Petition to Uphold the Scientific Definition of Sex in Federal Law and Policy” https://www.ipetitions.com/petition/uphold-the-scientific-defintion-of-sex.]

Sex is objective, identifiable and immutable biology, thus within the realm of science. Biological sex is established at conception, declared in utero, and recognized or not at birth. Every nucleated cell in our bodies has a sex.(1). There are only 2 gametes, sperm and egg, that participate in the generation of new life. There is no 3rd gamete active in that process. Sex differences are real and of consequence. There are over 6500 shared genes that are expressed differently in human males and females. (2). These differences impact our brains; organ systems; propensity for developing certain diseases; differing responses to drugs, toxins and pain; contrasting cognitive and emotional processes; behavior and more. To offer one example, sotalol has triple the likelihood of provoking torsades de pointes in women compared to men.(3). Sex matters.

(1) Institute of Medicine (US) Committee on Understanding the Biology of Sex and Gender Differences; Wizemann TM, Pardue ML, editors. Exploring the Biological Contributions to Human Health: Does Sex Matter? Washington (DC): National Academies Press (US); 2001. 2, Every Cell Has a Sex. Available from: https://www.ncbi.nlm.nih.gov/books/NBK222291/

(2)“Researchers Identify 6,500 Genes That Are Expressed Differently in Men and Women,” Weizmann Wonder Wander (Weizmann Institute of Science), May 3, 2017, online at: <https://wiswander>. weizmann.ac.il/life-sciences/researchers-identify-6500-genes-are-expressed-differentlymen-and-women.

(3)Lehmann MH, et. al., Sex difference in risk of torsade de pointes with d,l-sotalol.Circulation. 1996 Nov 15;94(10):2535-41. Abstract available online at: <https://www.ncbi.nlm.nih.gov/pubmed/8921798>.

[From 11th Circuit ADF amicus Adams v St. Johns County.Grossman, Laidlaw, Van Meter, Van Mol]

“The central underlying basis for sex is the distinction between the reproductive roles of males and females. *See* Lawrence S. Mayer & Paul R. McHugh, *Sexuality and Gender: Findings from the Biological, Psychological, and Social Sciences*, New Atlantis, Fall 2016 at 89-90. …

“Reproductive roles provide the conceptual basis for the differentiation of animals into the biological categories of male and female. There is no other widely accepted biological classification for the sexes. **Sex is a physiological reality which permeates every cell of an organism containing a nucleus. Sex is thus innate and immutable**; the genetic information directing development of male or female gonads and other primary sexual traits, **which normally are encoded on chromosome pairs “XY” and “XX,” are present immediately upon conception. As early as eight weeks’ gestation, endogenously produced sex hormones cause prenatal brain imprinting that ultimately influences postnatal behaviors**. *See* Francisco I. Reyes *et al*., *Studies on Human Sexual Development*, 37 J. of Clin. Endocrinology & Metabolism 74-78 (1973); Michael Lombardo, *Fetal Testosterone Influences Sexually Dimorphic Gray Matter in the Human Brain*, 32 J. of Neuroscience 674-80 (2012); P.C. Sizonenko, *Human Sexual Differentiation*, Geneva Foundation for Medical Education and Research (2017).[Available at: <http://bit.ly/2CrBDWE> .] It is therefore not the reproductive system alone that carries one’s sexual identity. **Every cell in the body containing a nucleus is marked with a sexual identity by its chromosomal constitution XX or XY. Thus, sex is not “assigned” at birth; rather, it “declares itself anatomically in utero and is acknowledged at birth.**” Michelle A. Cretella, *Gender Dysphoria in Children and Suppression of Debate*, 21 J. of Am. Physicians & Surgeons 50, 51 (2016).”

**“[I]n mammals, the sexual fate of the organism is cast at fertilization.”**

Wilhelm, Palmer, & Koopman, *Sex Determination and Gonadal Development in Mammals*, Physiological Reviews 2007 87:1, 1-28.

<https://doi.org/10.1152/physrev.00009.2006>

“X-carrying sperm produces a female (XX) embryo, and a Y-carrying sperm produces a male (XY) embryo. Therefore, **the chromosomal sex of the embryo is determined at fertilization**.”

 T.W. Sadler, Langman’s Medical Embryology 40 (2004).

**“Biological sex cannot be changed.”**

Stephen B. Levine (2018): Informed Consent for Transgendered Patients,

Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2018.1518885

Camille Paglia: “**Sex reassignment surgery**, even today with all of its advances, **cannot in fact change anyone’s sex** … ultimately, every single cell in the human body, the **DNA** in that cell, remains coded for your biological birth.”

 (“Paglia: ‘Transgender Mania’ is a Symptom of West's Cultural Collapse,” CNSnews.com, Nov. 3, 2015. From an Oct. 22, 2015 Brazilian TV interview.)

(Paglia YouTube video: “Lesson from History: Transgender Mania is Sign of Cultural Collapse - Camille Paglia” Dec. 14, 2016. <https://www.youtube.com/watch?v=I8BRdwgPChQ>)

**DISORDERS OF SEX DEVELOPMENT, INTERSEX**

“Intersex is simply a catch-all category for sex ambiguity and/or a mismatch between sex genotype and phenotype, regardless of its etiology. Furthermore, the claim that “sex is a spectrum” is also misleading, as a spectrum implies a continuous distribution, and maybe even an amodal one (one in which no specific outcome is more likely than others). Biological sex in humans, however, is clear-cut over 99.98 percent of the time. Lastly, the claim that classifying people’s sex based on anatomy and genetics “has no basis in science” has itself no basis in reality, as any method exhibiting a predictive accuracy of over 99.98 percent would place it among the most precise methods in all the life sciences. We revise medical care practices and change world economic plans on far lower confidence than that.”

Colin Wright, <https://quillette.com/2018/11/30/the-new-evolution-deniers/>

Beale JM, Creighton SM. Long-term health issues related to disorders or differences in sex development/intersex. *Maturitas*. 2016;94:143-148. doi:10.1016/j.maturitas.2016.10.003

Abstract

“DSD (Disorders or Differences in Sex Development) and Intersex are terms used to describe a diverse group of congenital conditions where the **development of the reproductive system is different from what is usually expected**.”…

“Given the complexity of many of the conditions, health care input when required should be provided by a multidisciplinary team who have appropriate expertise. Holistic care should include the consideration of the risk of cancer, prevention of osteoporosis, advice on hormones, sexual health and fertility options, and ongoing support in order to optimise quality of life and wellbeing.”

**DSDs usually impair fertility**.

Słowikowska-Hilczer J, Hirschberg AL, Claahsen-van der Grinten H, et al. Fertility outcome and information on fertility issues in individuals with different forms of disorders of sex development: findings from the dsd-LIFE study. *Fertil Steril*. 2017;108(5):822-831. doi:10.1016/j.fertnstert.2017.08.013

Biological anomalies do not disprove or undercut what is normal.

**DSD list arranged by defect types** (Summary from Lee):

Disorders of gonadal (testicular) development: (1) complete gonadal dysgenesis (Swyer syndrome); (2) partial gonadal dysgenesis; (3) gonadal regression; and (4) ovotesticular DSD

Disorders in androgen synthesis or action: (1) androgen biosynthesis defect (eg, 17-hydroxysteroid dehydrogenase deficiency, 5αRD2 deficiency, StAR mutations); (2) defect in androgen action (eg, CAIS, PAIS); (3) luteinizing hormone receptor defects (eg, Leydig cell hypoplasia, aplasia); and (4) disorders of anti-Müllerian hormone and anti-Müllerian hormone receptor (persistent Müllerian duct syndrome)

Disorders of gonadal (ovarian) development: (1) ovotesticular DSD; (2) testicular DSD (eg, SRY+, duplicate SOX9); and (3) gonadal dysgenesis

Androgen excess: (1) fetal (eg, 21-hydroxylase deficiency, 11-hydroxylase deficiency); (2) fetoplacental (aromatase deficiency, POR [P450 oxidoreductase]); and (3) maternal (luteoma, exogenous, etc)

Other (eg, cloacal exstrophy, vaginal atresia, MURCS [Müllerian, renal, cervicothoracic somite abnormalities], other syndromes)

 Consensus Statement on Management of Intersex Disorders

Peter A. Lee, Christopher P. Houk, S. Faisal Ahmed, Ieuan A. Hughes

Pediatrics Aug 2006, 118 (2) e488-e500; **DOI:** 10.1542/peds.2006-0738

[This following section is taken from my article for the CMDA “Intersex. What It Is And Is Not,” (CMDA The Point Blog, May 2, 2019. <https://cmda.org/intersex-what-it-is-and-is-not/>)

I have condensed it. You can easily condense it to a paragraph of the necessary if needed. Original sources are cited, and quotes accurate, but perhaps best to avoid citing the blog itself due to the publication source. ?]

Intersex is a colloquialism for what is more formally titled Disorders of Sex Development (DSD). A DSD consistently means a definable, objective underlying medical problem, and a medical condition is something one has, not who one is.

The nomenclature “intersex” acknowledges something between two sexes and not a third sex. The term is intersex and not “extrasex,” therefore acknowledging the binary nature of human sex. Biological sex rarely may be phenotypically unclear in a given individual, but this does not represent a third sex.

Evolutionary biologist Colin Wright rejects the “sex is a spectrum” claim with clear reasoning: “a spectrum implies a continuous distribution, and maybe even an amodal one (one in which no specific outcome is more likely than others). Biological sex in humans, however, is clear-cut over 99.98 percent of the time.” Dr. Wright continues, “any method exhibiting a predictive accuracy of over 99.98 percent would place it among the most precise methods in all the life sciences. We revise medical care practices and change world economic plans on far lower confidence than that.”

Sax L. How common is lntersex? A response to Anne Fausto‐Sterling. *Journal of Sex Research* 2002; **39**(3): 174-8. <http://www.leonardsax.com/how-common-is-intersex-a-response-to-anne-fausto-sterling/>

Intersex/DSD is not gender dysphoria or trans-identification

Intersex is not a subjective ideation. There is always an objective underlying medical origin. The DSM-5 Gender Dysphoria criteria states: “*Specify if*: **With a disorder of sex development** (e.g., a congenital adrenogenital disorder such as 255.2 [E25.0] congenital adrenal hyperplasia or 259.50 [E34.50] androgen insensitivity syndrome).” Intersex is what they mean, as it is different than gender dysphoria.

Intersex/DSD is rare

Wildly inflated claims of the prevalence of DSD are common, but untrue. Dr. Leonard Sax exposed the source of some of this in his article, “How common is intersex.”(1). Dr. Sax writes that Anne Fausto-Sterling asserted in her 2000 book *Sexing the Body: Gender Politics and the Construction of Sexuality* that intersex totaled 1.7% of human births. However, Sax shows that she included in her calculations common conditions having nothing to do with DSD. Dr. Sax notes that congenital adrenal hyperplasia and complete androgen insensitivity syndrome are the most common DSDs, which is in keeping with the previously stated DSM-5 Gender Dysphoria specification. Dr. Sax concludes that DSD/Intersex “far from being ‘a fairly common phenomenon,’ is actually a rare event, occurring in fewer than 2 out of every 10,000 births.”

(1) Sax L. How common is lntersex? A response to Anne Fausto‐Sterling. *Journal of Sex Research* 2002; **39**(3): 174-8. . <http://www.leonardsax.com/how-common-is-intersex-a-response-to-anne-fausto-sterling/>

Similarly, a 1992 Danish study found their rate of “testicular feminization syndrome” to be 1:20,400.(2). A 2001 Dutch study stated their rate of androgen insensitivity syndrome “with molecular proof of the diagnosis is 1:99,000.” (3).

And a 2016 Danish study examining all their known 46XY karyotype females (androgen insensitivity syndrome) born since 1960 found the prevalence at 6.4 per 100,000 live born females.(4). Intersex/DSD is rare.

(2) Banksboll S, Qvist, Lebech PE, et al: Testicular feminization syndrome and associated gonadal tumors in Denmark. Acta Obstet Gynecol Scand 1992; 71:63.

(3) Boehmer AL, Brinkmann O: Brüggenwirth H: Genotype versus phenotype in families with androgen insensitivity syndrome. J Clin Endocrinol Metab 2001; 86:4151.

(4) Berglund, A. et al: Incidence, Prevalence, Diagnostic Delay, and Clinical Presentation of Female 46,XY Disorders of Sex Development. J Clin Endocrinol Metab. 2016 Dec;101(12):4532-4540. Epub 2016 Sep 7.

“A disorder of sex development/intersex uniformly signifies the presence of a definable, objective underlying medical problem. Intersex is a condition – something someone has -- and neither an identity nor a third sex. DSD/intersex represent rare conditions requiring highly individualized therapeutic approaches and timelines, not a blanket one-size-fits-all prescription.”

(Andre Van Mol, “Intersex. What It Is And Is Not,” CMDA The Point Blog, May 2, 2019.)

**DSDS AND GENDER DYSPHORIA/TRANS-IDENTIFICATION ARE SEPARATE**

“Importantly, the vast majority of affected children with CAH historically

did not experience self-perceived transgender identity or gender dysphoria (Zucker et al. 1996).”

Hruz, P. W. (2020). Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria. *The Linacre Quarterly*, *87*(1), 34–42. <https://doi.org/10.1177/0024363919873762>

Citing: Zucker, Kenneth J., Susan J. Bradley, Gillian Oliver, Jennifer Blake, Susan Fleming, and Jane Hood. 1996. “Psychosexual Development of Women with Congenital Adrenal Hyperplasia.” Hormones and Behavior 30: 300–18. doi: 10.1006/hbeh.1996.0038.

2020 UK Tavistock GIDS study of 44 minors with gender dysphoria on puberty blockers: “**All had normal karyotype and endocrinology** consistent with birth-registered sex.” So gender dysphoria should not be conflated with DSDs.

Polly Carmichael, Gary Butler, Una Masic, Tim J Cole, Bianca L De Stavola, SarahDavidson, Elin M. Skageberg, Sophie Khadr, Russell Viner. 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. medRxiv 2020.12.01.20241653; doi:https://doi.org/10.1101/2020.12.01.20241653

**SEX IS CONSEQUENTIAL**

“Diseases that affect both sexes often have different frequencies, presentations, and responses to treatments in males and females; therefore, different preventative, diagnostic, and treatment approaches may be required for males and females.”

Cretella, Michelle A.,Rosik, Christopher H.,Howsepian, A. A. Sex and gender are distinct variables critical to health: Comment on Hyde, Bigler, Joel, Tate, and van Anders (2019). American Psychologist, Vol 74(7), Oct 2019, 842-844.

Male and female sexes demonstrate significant differences in “genetics, epigenomic modifiers, hormonal milieu, immune function, neurocognitive aging process, vascular health, and response to therapeutics.”

Bartz D, Chitnis T, Kaiser UB, et al. Clinical Advances in Sex- and Gender-Informed Medicine to Improve the Health of All: A Review. *JAMA Intern Med* 2020.

“There is growing recognition that the quality and **generalizability of biomedical research depends** on appropriate consideration of **key biological variables, such as sex**.”

…“Just like randomization, blinding, sample size calculations, and other basic design elements, consideration of the **influence of sex is a critical component of rigorous experimental design. Failure to account for sex as a biological variable may undermine the rigor, transparency, and generalizability of research findings**.”

NIH at <https://orwh.od.nih.gov/sex-gender/nih-policy-sex-biological->variable-sabv/questions-answers

“The completion of the **human genome project** in 2003 also influenced our understanding of the **effects of sex on human biology and disease** through the sequencing of all human genes, including those located on sex chromosomes. Understanding the location and function of genes located on sex chromosomes throughout the body’s cells, not just in reproductive organs, was critical to understanding that **biologic sex not only affects human health and disease via sex steroids and reproductive organs but also affects cells in all organ systems**.”

Tracy Madsen et al., *Sex- and Gender-Based Medicine: The Need for Precise Terminology*, 1 Gender and the Genome 122, 123 (2017).

“Today, the importance of accounting for the variability between male and female biology in research is widely recognized. **There exists a clear contribution of biological sex to health outcomes across a wide spectrum of conditions**.”

Nathan Huey, “Treating Men and Women Differently: Sex Differences in the Basis of Disease,” Harvard University Graduate School of Arts and Sciences (Oct. 30, 2018), <http://sitn.hms.harvard.edu/flash/2018/treating-men-and-women-differently-sex-differences-in-the-basis-of-disease/>.

CDC Fact Sheet “10 Ways STDs Impact Women Differently from Men,” which also includes a CDC information phone number, available at: <https://www.cdc.gov/std/health-disparities/stds-women-042011.pdf>

David P. Schmitt. Regarding sexual activity differences between men and women, he cites a comprehensive review claiming 63 “psychological sex differences discussed that have been replicated across cultures.” “In fact,” Schmitt wrote, “most psychological sex differences…are conspicuously *larger* in cultures with more egalitarian sex role socialization and greater sociopolitical gender equity.”

David P. Schmitt, *The Evolution of Culturally Variable Sex Differences*, *in* The Evolution of Sexuality 221, 222 (Todd K. Shackelford & Ranald D. Hansen eds., 2015).

p. 221, citing L. Ellis, “Identifying and Explaining Apparent Universal Sex Differences in Cognition and Behavior,” 51 Personality and Individual Differences552 (2011).

Sexual paraphilias in DSM-5 are largely male tendencies, save for sadomasochism.

Am. Psychiatric Ass’n, Diagnostic and Statistical Manual of Mental Disorders 685–705 (5th ed. 2013).

# [Source of the following: “Petition to Uphold the Scientific Definition of Sex in Federal Law and Policy” https://www.ipetitions.com/petition/uphold-the-scientific-defintion-of-sex.]

“Sex differences are real and consequential. The Institute of Medicine recognized the

singular importance of sex to health and the field of medicine nearly two decades ago. Sex chromosomes impart innate differences between men and women in literally every cell of our bodies.i There are over 6500 shared genes that are expressed differently in human males and females.iii These differences impact our brains, organ systems, propensity for developing certain diseases, differential responses to drugs, toxins and pain, differential cognitive and emotional processes, behavior and more.i

Individuals who identify as transgender deserve optimal medical treatment which is

influenced by biological sex. In reality, an individual who identifies as transgender

remains either a biological male or female. This objective biological fact has bearing

upon their health even beyond sex-specific illnesses.

Diseases that affect both sexes often have different frequencies, presentations and

responses to treatments in males and females; therefore, different preventative,

diagnostic, and treatment approaches may be required for males and females.i Doctors and scientists unconstrained by transgender politics know full well that were we to treat patients in accordance with a discordant gender identity, instead of their real sex, the results could be catastrophic.i For example, the heart medication, Betapace, is three times more likely to cause a lethal heart rhythm called torsades de pointes in women than it is in men.iv”

i Exploring the Biological Contributions to Human Health: Does Sex Matter? In: Wizemann TM, editor; Pardue ML, editor. Washington, DC: The National Academies Press; 2001.

ii American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders: DSM-5 (Washington, D.C.: American Psychiatric Publishing, 2013), p. 829.

iii “Researchers Identify 6,500 Genes That Are Expressed Differently in Men and Women,”Weizmann Wonder Wander (Weizmann Institute of Science), May 3, 2017, online at: https://wiswander.

weizmann.ac.il/life-sciences/researchers-identify-6500-genes-are-expressed-differentlymen-and-women; reporting on: Moran Gershoni and Shmuel Pietrokovski, “The landscape of sex-differential transcriptome and its consequent selection in human adults,” BMC Biology 15:7 (2017), which says, “[T]here are over 6500 protein-coding genes with significant SDE [sexdifferential expression] in at least one tissue.” Online at: https://bmcbiol.biomedcentral.com/track/pdf/10.1186/s12915-017-0352-z.

iv Lehmann MH, et. al. Circulation. 1996 Nov 15;94(10):2535-41. Abstract available online at: https://www.ncbi.nlm.nih.gov/pubmed/8921798

2020. In 425,097 UK Biobank study participants, used 2,571 genome-wide significant associations regarding endogenous higher testosterone levels in the sexes:

* “…genetically higher testosterone is **harmful** **for metabolic diseases in women** but **beneficial in men**.”
* “…a genetically determined 1 s.d. higher testosterone **increases the risks of type 2 diabetes** (odds ratio (OR) = 1.37…) and **polycystic ovary** syndrome (OR = 1.51 …) in women, but reduces type 2 diabetes risk in men (OR = 0.86…).”
* “We also show **adverse effects of higher testosterone on breast and endometrial cancers in women** and **prostate cancer in men**.

Ruth, K.S., Day, F.R., Tyrrell, J. *et al.* Using human genetics to understand the disease impacts of testosterone in men and women. *Nat Med* **26,**252–258 (2020). https://doi.org/10.1038/s41591-020-0751-5

**BRAIN SEX?**

Research has failed to establish that there is such a thing as a female brain or a male brain.

Jordan-Young, R.M. Hormones, context, and “brain gender”: A review of evidence from congenital adrenal hyperplasia. (2012). Social Science & Medicine, 74, 1738-1744. <https://doi.org/10.1016/j.socscimed.2011.08.026>

Researchers analyzed MRIs of more than 1,400 human brains from four datasets. They found extensive overlap between ‘females and males for all gray matter, white matter, and connections assessed.” “These findings are corroborated by a similar analysis of personality traits, attitudes, interests, and behaviors of more than 5,500 individuals which reveals that internal consistency is extremely rare....although there are sex/gender differences in the brain, human brains do not belong to one of two distinct categories: male brain/female brain.”

Joel, D., Berman, Z., Tavor, L., et al. Sex beyond the genitalia: The human brain mosaic. (2015). PNAS, 112(50), 15468-15473. [www.pnas.org/cgi/doi/10.1073/pnas.1509654112](http://www.pnas.org/cgi/doi/10.1073/pnas.1509654112)

**BRAIN DEVELOPMENT IN MINORS**

* National Institute of Mental Health (2001). Teenage Brain: A work in progress.[http://www2.isu.edu/irh/projects/better\_todays/B2T2VirtualPacket/BrainFunction/NIMH-Teenage%20Brain%20 %20A%20Work%20in%20Progress.pdf](http://www2.isu.edu/irh/projects/better_todays/B2T2VirtualPacket/BrainFunction/NIMH-Teenage%20Brain%20%20%20A%20Work%20in%20Progress.pdf).
* Pustilnik AC, and Henry LM. Adolescent Medical Decision Making and the Law of the Horse. *Journal of Health Care Law and Policy* 2012; 15:1-14. (U of Maryland Legal Studies Research Paper 2013-14).
* Blakemore, S.‐J., Burnett, S. and Dahl, R.E. (2010), The role of puberty in the developing adolescent brain. Hum. Brain Mapp., 31: 926-933. doi:[10.1002/hbm.21052](https://doi.org/10.1002/hbm.21052)
* František Váša,  et al. Conservative and disruptive modes of adolescent change in human brain functional connectivity. PNAS, Jan 2020, 201906144; DOI:10.1073/pnas.1906144117.
* The **frontal lobe** – brain’s judgment and inhibition center -- does not fully mature until approximately **23 – 25 years of age**.
* The **amygdala** – brain’s emotion center -- is both immature and not fully connected to the frontal lobe in teens. So **emotional thinking** can prevail.
* **Children have developing brain, their minds change often, and they don’t grasp long-term consequences**.

 (“Transing California Foster Children & Why Doctors Like Us Opposed It,” PublicDiscourse.com, October 28, 2018.)

* AAP’s HealthDay reported (April 2017) U of Iowa study that kids younger than 14yo could not reliably cross a busy street safely.
	+ <https://consumer.healthday.com/kids-health-information-23/child-safety-news-587/at-what-age-can-kids-safely-cross-the-street-721785.html>.

**Brain changes of puberty**

* “Many brain changes take place during adolescence. Some precede and initiate puberty. Others continue for around a decade beyond. Yet gonadal hormones affect a wide range of neuronal processes: neurogenesis, dendritic growth, synapse formation and elimination, apoptosis, neuropeptide expression, and sensitivity of neuro transmitter receptors.”
* “Three known oestrogen receptors mediate effects on cholinergic, noradrenergic, serotinergic, and dopaminergic neurotransmitter systems. The functions affected include cognitive abilities, aggression, affect regulation, learning, and memory.”
* “In human beings there is also some evidence for pubertal changes in sex-specific responses to stressors, with men showing greater hypothalamic-pituitary-adrenal reactivity to achievement challenges and women to social rejection.”
* “A range of factors beyond gonadal hormones—genetic effects, nutrition, and sensory inputs—also seem to be involved in pubertal brain changes.”
* “This evidence of greater neural plasticity around puberty and persisting changes in neural function as a result of early adolescent experiences has major implications for health promotion.”
* “A reduction in grey matter in the pre-frontal cortex and expansion of cortico cortical communication continues into the third decade of life.46–48 These changes correlate with the development of self-control and mature judgement, yet continue for more than a decade after puberty brings profound emotional and behavioural shifts.”

Patton G.C., Viner R. Pubertal transitions in health. Lancet 2007; 369: 1130–39. DOI:10.1016/S0140-6736(07)60366-3.

“Using a longitudinal sample of 711 **magnetic resonance imaging**scans from 275 individuals aged 7–20 years, we examined **how subcortical brain regions change in relation to puberty**. Our regions of interest included the amygdala, hippocampus  and corpus striatum including the nucleus accumbens (NA), caudate, putamen and  globus pallidus (GP). Pubertal development was significantly related to structural volume in all six regions in both sexes. Pubertal development and age had both independent and interactive influences on volume for the amygdala, hippocampus and putamen in both sexes, and the caudate in females. There was an interactive puberty-by-age effect on volume for the NA and GP in both sexes, and the caudate in males. These **findings suggest a significant role for puberty in structural brain development**.”

Anne-Lise Goddings, Kathryn L. Mills, Liv S. Clasen, Jay N. Giedd, Russell M. Viner, Sarah-Jayne Blakemore, The influence of puberty on subcortical brain development, NeuroImage, Volume 88, 2014, Pages 242-251, ISSN 1053-8119, doi.org/10.1016/j.neuroimage.2013.09.073.

**NEUROIMAGING AND NEUROPLASTICITY**

Neuroimaging:

Prof. Lawrence Mayer, 2016: “…it is now widely recognized among psychiatrists and neuroscientists who engage in brain imaging research that there are inherent and ineradicable methodological limitations of any neuroimaging study that simply associates a particular trait, such as a certain behavior, with a particular brain morphology.”

Mayer L and McHugh P, “Sexuality and Gender: Findings from the Biological, Psychological, and Social Sciences,” [TheNewAtlantis.com](http://thenewatlantis.com/), Fall 2016, p. 103.

Neuroplasticity is a well-established principle.  The brain changes with exposures and behaviors.

Gu J, Kanai, R. “What contributes to individual differences in brain structure?” Front Hum Neurosci. 2014 Apr 28;8:262. doi: 10.3389/fnhum.2014.00262.

1997, Dr. Mark Breedlove (then at UC Berkeley), “ . . . sexual experience can alter the structure of the brain, just as genes can alter it.  [I]t is possible that differences in sexual behavior cause (rather than are caused by) differences in the brain.”

  Breedlove, M.S. (1997), “Sex on the brain,” Nature, 389, p. 801.

**GENDER, GENDER IDENTITY**

(Comments mine) **Gender** is an engineered term reportedly debuting in the academic literature in 1955 in an article addressing “hermaphroditism” (as it was then known) by psychiatrist John Money of John Hopkins University[cited below],

referring to “the identity of the inner sexed self.” Gender identity refers to self-perception and feelings that are subjective and prone to change. Gender is most often used as a sex stereotype. My point is this: nouns have gender, people have a sex.

(John Money, “Hermaphroditism, gender and precocity in hyperadrenocorticism: psychologic findings,” Bulletin of the John Hopkins Hospital 95, no. 6 (1955): 253 – 264, <http://www.ncbi.nlm.nih.gov/pubmed/14378807>.)

"The root “gen”—from which we get words such as generous, generate, genesis, genetics, genealogy, progeny, gender, and genitals—means “to produce” or “give birth to.” A person’s gen-der, therefore, is based on the manner in which that person is designed to gen-erate new life. Contrary to widespread secular insistence, a person’s gender is not a malleable social construct. Rather, a person’s gender is determined by the kind of genitals he or she has.”

Christopher West,*Our Bodies Tell God’s Story*, (Brazos Press, Grand Rapids), 2020. p. 28.

**“Gender identity**, in contrast, is an **awareness of and comfort** with one's physical body. It is not hardwired by DNA, **develops over time** due to a host of factors, and **may change** across a person's lifespan. **Gender identity is a psychological and sociological construct** closely aligned with sex-stereotypes.” -- Dr. Michelle Cretella (ACP letter dated Oct. 31, 2018 on the WEE Act)

**GENDER DYSPHORIA**

APA’s DSM 5 “Gender Dysphoria” have separate criteria listed for (1) children and (2) adolescents and adults.

**Criteria A:** “A marked incongruence between one’s experienced/expressed gender and assigned gender, of at least 6 months’ duration, as manifested by at least six of the following…” for children, and only two for adolescents and adults.

**Criteria B**: “The condition is associated with clinically significant distress or impairment in social, occupational or other important areas of functioning.”

**Prevalence**: “For natal adult males, prevalence ranges from 0.005% to 0.014%, and for natal females, from 0.002% to 0.003%.”

(The *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.;
*DSM–5*; American Psychiatric Association [APA], 2013).)

“A gender-dysphoric youth experiences a sense of incongruity between the gender expectations linked to her or his biological sex and her or his biological sex itself.”

(Tomer Shechner, *Gender Identity Disorder: A Literature Review from a Developmental Perspective*, 47 Isr. J. of Psychiatry & Related Sci. 132-38 (2010).)

Ken Zucker: “But a transgender identity is not isomorphic with a mental health diagnosis of gender dysphoria …”

(K.J. Zucker, The myth of persistence: response to “A critical commentary on follow-up studies and ‘desistance’ theories about transgender and gender nonconforming children” by Temple Newhook et al , 19(2) INT ’L J. TRANSGENDERISM 231–45 (2018).)

“It is even the case that **most transgender people still present as older adolescents**…”

Annelou L.C. de Vries. Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents. Pediatrics Sep 2020, e2020010611; DOI: 10.1542/peds.2020-010611

Considering “the neurobiological and genetic research on the origins of gender identity, there is **little evidence** that the phenomenon of transgender identity has a **biological basis**.”

L. Mayer, P. McHugh “Sexuality and Gender”, 50 *New Atlantis* 4, 106 (2016).

“The hypothesis that gender identity is an innate, fixed property of human beings that is independent of biological sex—that a person might be ‘a **man trapped in a woman’s body**’ or ‘a woman trapped in a man’s body’—is **not supported by scientific evidence.**”

L. Mayer, P. McHugh “Sexuality and Gender”, 50 *New Atlantis* 4, 8 (2016).

2020 UK Tavistock GIDS study of 44 minors with GD on puberty blockers: “All had normal karyotype and endocrinology consistent with birth-registered sex.”

Polly Carmichael, Gary Butler, Una Masic, Tim J Cole, Bianca L De Stavola, SarahDavidson, Elin M. Skageberg, Sophie Khadr, Russell Viner. 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. medRxiv 2020.12.01.20241653; doi:https://doi.org/10.1101/2020.12.01.20241653

“In other words, “**gender dysphoria**” may be used as a **catch-all explanation** for any kind of distress, psychological pain, and discomfort that an AYA is feeling while **transition** is being promoted as a **cure-all solution**.”

(Littman, L. “**Rapid-onset gender dysphoria** in adolescents and young adults: A study of parental reports,” journals.plos.org, Aug. 16, 2018. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0202330>)

**Prevalence**:

DSM 5: **Prevalence**: “For natal adult males, prevalence ranges from 0.005% to 0.014%, and for natal females, from 0.002% to 0.003%.”

The *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.;
*DSM–5*; American Psychiatric Association [APA], 2013).

“Prevalence studies conclude that fewer than 1 in 10,000 adult natal males and 1 in 30,000 adult natal females experience GD, but such estimates vary widely.”

(Zucker, KJ, et al. Gender Dysphoria in Adults. Annu. Rev. Clin. Psychol. **2016**. 12:217–47.)(P.217.)

“The Massachusetts Behavior Risk Factor Surveillance Survey (via telephone) (2007 and 2009) identified 0.5% individuals as transgender (Conron et al., 2012).”

Conron KJ, Scott G, Stowell GS, Landers SJ. Transgender health in Massachusetts: results from a household probability sample of adults. *Am J Public Health.* 2012 Jan;102(1):118-22. Epub 2011 Nov 28. PMID: 22095354.

“Derivative data obtained from the **2004** California Lesbian Gay Bisexual and Transgender (LGBT) Tobacco Survey (via telephone) and the **2009** California Health Interview Survey (CHIS) (via telephone) suggested the LGB population constitutes 3.2% of the California population and that transgender subjects constitute approximately 2% of the California LGBT population and 0.06% of the overall California population (Bye et al., 2005; CHIS 2009; Gates, 2011).”

Source: Center for Medicare & Medicaid Services, Decision Memo for Gender Dysphoria and Gender Reassignment Surgery (CAG-00446N), August 30, 2016.

Also cited within:

[Bye L, Gruskin E, Greenwood, G, Albright V, Krotki K. California Lesbians, Gays, Bisexuals, and Transgender (LGBT) Tobacco Use Survey – 2004. *Sacramento, CA: California Department of Health Services*, 2005. (Not in PubMed).

CHIS 2009: California Health Interview Survey, 2009. “AskCHIS” via the UCLA Center for Health Policy Research date website ask.chis.ucla.edu/.

Gates GJ. How many people are lesbian, gay, bisexual, and transgender? 2011. (Not in PubMed) williamsinstitute@law.ucla.edu.]

[CDC Survey of US High School Students (2019](https://www.cdc.gov/mmwr/volumes/68/wr/mm6803a3.htm)):  Population-based survey data from ten state and nine urban school districts found that an average of **1.8% of high school students identify as transgender.**

Johns MM, Lowry R, Andrzejewski J, et al. Transgender Identity and Experiences of Violence Victimization, Substance Use, Suicide Risk, and Sexual Risk Behaviors Among High School Students — 19 States and Large Urban School Districts, 2017. MMWR Morb Mortal Wkly Rep 2019;68:67–71.

<https://www.cdc.gov/mmwr/volumes/68/wr/mm6803a3.htm>

[Minnesota Student Survey of 9th and 11th graders](https://www.health.state.mn.us/data/mchs/surveys/mss/statewidetables/statetablesbygender16.pdf) (2016)

80,929 students: **2.7% TGNC** (transgender or gender non-conforming)

Kaltiala-Heino, et al., 2018.

**“Why the increase in referrals?**

Zucker et al[99](https://www.dovepress.com/gender-dysphoria-in-adolescence-current-perspectives-peer-reviewed-fulltext-article-AHMT#ref99) observed an increase in the number of adolescents presenting at gender identity services in the early 2000s. Since then, several gender identity services for minors from across Western countries have reported increases.[8](https://www.dovepress.com/gender-dysphoria-in-adolescence-current-perspectives-peer-reviewed-fulltext-article-AHMT#ref8),[9](https://www.dovepress.com/gender-dysphoria-in-adolescence-current-perspectives-peer-reviewed-fulltext-article-AHMT#ref9),[42](https://www.dovepress.com/gender-dysphoria-in-adolescence-current-perspectives-peer-reviewed-fulltext-article-AHMT#ref42),[49](https://www.dovepress.com/gender-dysphoria-in-adolescence-current-perspectives-peer-reviewed-fulltext-article-AHMT#ref49) “

Kaltiala-Heino R, Bergman H, Työläjärvi M, Frisén L. Gender dysphoria in adolescence: current perspectives. *Adolesc Health Med Ther*. 2018;9:31-41
https://doi.org/10.2147/AHMT.S135432

Citing:

(99) Zucker KJ, Bradley SJ, Owen-Anderson A, Kibblewhite SJ, Cantor JM. Is gender identity disorder in adolescents coming out of the closet? *J Sex Marital Ther.*2008;34(4):287–290.

(8) Wood H, Sasaki S, Bradley SJ, et al. Patterns of referral to a gender identity service for children and adolescents (1976–2011): age, sex ratio, and sexual orientation. *J Sex Marital Ther.*2013;39(1):1–6.

(9) Aitken M, Steensma TD, Blanchard R, et al. Evidence for an altered sex ratio in clinic-referred adolescents with gender dysphoria. *J Sex Med.*2015;12(3):756–763.

(42) Chen M, Fuqua J, Eugster EA. Characteristics of referrals for gender dysphoria over a 13-year period. *J Adolesc Health.*2016;58(3):369–371.

(49) Rodríguez MF, Mora PG, Sánchez EM, Gidseen G. Características de los menores de edad con disforia de género que acuden a la unidad de tratamiento de identidad de género. *Rev Esp Salud Publica.*2017;91(1):e1–e9.

“Emerging cultural, social and clinical trends, such as **increases in referrals, shifts in sex ratio** and diversification in gender identification, illustrate that gender diverse individuals are not a homogeneous group.”

de Graaf NM, Carmichael P. Reflections on emerging trends in clinical work with gender diverse children and adolescents. *Clinical Child Psychology and Psychiatry*. 2019;24(2):353-364. doi:[10.1177/1359104518812924](https://doi.org/10.1177/1359104518812924)

Handler T, Hojilla JC, Varghese R, Wellenstein W, Satre DD, Zaritsky E. Trends in Referrals to a Pediatric Transgender Clinic. Pediatrics. 2019;144(5):e20191368.

“An investigation has been ordered into why so many girls are seeking gender reassignment after the number referred for treatment rose by more than 4,000% in less than a decade.

The equalities minister, Penny Mordaunt, has instructed her officials to look into the cause.

Official figures show the number of girls being given gender treatment has risen from 40 in 2009-10 to 1,806 in 2017-18.”

Tony Grew, “Inquiry into surge in gender treatment ordered by Penny Mordaunt,” the times.co.uk, Sept. 16, 2018. <https://www.thetimes.co.uk/article/inquiry-into-surge-in-gender-treatment-ordered-by-penny-mordaunt-b2ftz9hfn?wgu=270525_54264_15983781843502_fa5c729d13&wgexpiry=1606154184>

**Females Predominate:**

Simultaneously, the earlier overrepresentation of natal boys has equaled or turned to **overrepresentation** **of natal girls**.[9](https://www.dovepress.com/gender-dysphoria-in-adolescence-current-perspectives-peer-reviewed-fulltext-article-AHMT#ref9) **Natal girls now comprise from half**[**49**](https://www.dovepress.com/gender-dysphoria-in-adolescence-current-perspectives-peer-reviewed-fulltext-article-AHMT#ref49)**to ~90%**[**39**](https://www.dovepress.com/gender-dysphoria-in-adolescence-current-perspectives-peer-reviewed-fulltext-article-AHMT#ref39)**of clinical adolescent samples**. The reasons for these changes are not known.“

Kaltiala-Heino R, Bergman H, Työläjärvi M, Frisén L. Gender dysphoria in adolescence: current perspectives. *Adolesc Health Med Ther*. 2018;9:31-41
https://doi.org/10.2147/AHMT.S135432

Citing:

(9) Aitken M, Steensma TD, Blanchard R, et al. Evidence for an altered sex ratio in clinic-referred adolescents with gender dysphoria. *J Sex Med.*2015;12(3):756–763.

 (49) Rodríguez MF, Mora PG, Sánchez EM, Gidseen G. Características de los menores de edad con disforia de género que acuden a la unidad de tratamiento de identidad de género. *Rev Esp Salud Publica.*2017;91(1):e1–e9.

(39) Kaltiala-Heino R, Sumia M, Tyolajarvi M, Lindberg N. Two years of gender identity service for minors: overrepresentation of natal girls with severe problems in adolescent development. *Child Adolesc Psychiatry Ment Health.*2015;9:9.

2018. Lisa Littman’s parental survey of Rapid Onset Gender Dysphoria:

* **83% female.**

Littman, L. “Rapid-onset gender dysphoria in adolescents and young adults: A study of parental reports,” journals.plos.org, Aug. 16, **2018**. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0202330>

Transgender clinic-referred adolescents between 2000 and 2016 in the Netherlands.

* **Females 62.3% of referrals**.
* Fig. 1 shows a t**ripling** of female referrals numerically.
* “Although **in early years, more assigned boys were referred** to gender identity services [29 ], referred adolescents **favour birth-assigned females since the mid-2000s** [16 , 30 ]. **Our study showed that this shift in sex ratio is further skewed**. In 2016, the ratio between birth-assigned males and birthassigned females was 1:2.93, while in 2015 and 2014, it was 1:2.80 and 1:1.66, respectively.”

Arnoldussen, M., Steensma, T.D., Popma, A. *et al.* Re-evaluation of the Dutch approach: are recently referred transgender youth different compared to earlier referrals?. *Eur Child Adolesc Psychiatry* **29,**803–811 (2020). https://doi.org/10.1007/s00787-019-01394-6

“Emerging cultural, social and clinical trends, such as **increases in referrals, shifts in sex ratio** and diversification in gender identification, illustrate that gender diverse individuals are not a homogeneous group.”

de Graaf NM, Carmichael P. Reflections on emerging trends in clinical work with gender diverse children and adolescents. *Clinical Child Psychology and Psychiatry*. 2019;24(2):353-364. doi:[10.1177/1359104518812924](https://doi.org/10.1177/1359104518812924)

UK. “Inquiry into surge in gender treatment ordered by Penny Mordaunt,” thetimes.co.uk, Sept. 16, 2018.

“**An investigation has been ordered into why so many girls are seeking gender reassignment after the number referred for treatment rose by more than 4,000% in less than a decade**.”

“Official figures show the number of girls being given gender treatment has risen from **40** in 2009-10 to **1,806** in 2017-18.”

<https://www.thetimes.co.uk/article/inquiry-into-surge-in-gender-treatment-ordered-by-penny-mordaunt-b2ftz9hfn?wgu=270525_54264_15983781843502_fa5c729d13&wgexpiry=1606154184>

**TRANSGENDER, NOT JUST ONE THING, NOT JUST GENDER DYSPHORIA**

DSM 5 of the APA:

“**Transgender** refers to the broad spectrum of individuals who transiently or persistently identify with a gender different from their natal gender.”

(American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing. P.451.)

Zucker: “The term “transgender identity” is hardly an objective label for a child’s gendered subjectivity.”

“But a transgender identity is not isomorphic with a mental health diagnosis of gender dysphoria or even the alternative label of gender incongruence proposed for the forthcoming ICD-11 (Drescher, Cohen-Kettenis, & Reed, 2016).”

(Zucker, K. J. (2018). The myth of persistence: response to “A critical commentary on follow-up studies and ‘desistance’ theories about transgender and gender nonconforming children” by Temple Newhook et al. International Journal of Transgenderism, 19(2), 231–245. Published online May 29, 2018. http://doi.org/10.1080/15532739.2018.1468293)

“…failure to make scientifically valid and functional distinctions among different types of gender dysphoric persons can only prevent progress toward finding the best approach to helping each.”

(Blanchard, Ray. (2005). Early History of the Concept of Autogynephilia. Archives of sexual behavior. 34. 439-46. 10.1007/s10508-005-4343-8.)

**DESISTANCE**

“This study reports follow-up data on the **largest sample to date of boys clinic-referred for gender dysphoria** (*n* = 139) with regard to gender identity and sexual orientation.”…

“Of the 139 participants, 17 (12.2%) were classified as persisters and the remaining 122 **(87.8%) were classified as desisters**. Data on sexual orientation in fantasy were available for 129 participants: 82 (63.6%) were classified as biphilic/androphilic, 43 (33.3%) were classified as gynephilic, and 4 (3.1%) reported no sexual fantasies. For sexual orientation in behavior, data were available for 108 participants: 51 (47.2%) were classified as biphilic/androphilic, 29 (26.9%) were classified as gynephilic, and 28 (25.9%) reported no sexual behaviors.”

Singh D, Bradley SJ and Zucker KJ (2021) A Follow-Up Study of Boys With Gender Identity Disorder. *Front. Psychiatry* 12:632784. doi: 10.3389/fpsyt.2021.632784

The pro-affirmation Endocrine Society Guidelines admit: “… the large majority (about 85%) of prepubertal children with a childhood diagnosis (of GD) did not remain gender dysphoric in adolescence.”

Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. *The Journal of Clinical Endocrinology & Metabolism* 2017; **102**(11): 3869-903.

American Psychiatric Assoction’s DSM 5 gender dysphoria section:

“**Rates of persistence** of gender dysphoria from childhood into adolescence or adulthood vary. In natal males, persistence has ranged from 2.2% to 30%. In natal females, persistence has ranged from 12% to 50%.”

My comment: This translates to rates of **desistance** in natal males from 70 to 97.8% and natal females from 50 to 88%. P.455.

American Psychological Association *Handbook on Sexuality and Psychology*:

“In no more than about **one in four** children does gender dysphoria **persist** from childhood to adolescence or adulthood…”

That represents a minimum **75% rate of desistance**.

(Bockting, W. (2014). Chapter 24: Transgender Identity Development. In Tolman, D., & Diamond, L., Co-Editors-in-Chief (2014) *APA Handbook of Sexuality and Psychology* (2 volumes). Washington D.C.: American Psychological Association, *1*: 744.)

Finding **80-95%** of gender dysphoric pre-pubertal children will accept their biological sex by the end of adolescence.

(Cohen-Kettenis PY, et al. “The treatment of adolescent transsexuals: changing insights.” J Sex Med. 2008 Aug;5(8):1892-7. doi: 10.1111/j.1743-6109.2008.00870.x. Epub 2008 Jun 28.)

Finding a desistance rate of **61-98%** of GD cases by adulthood.

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

 “To date, the prospective follow-up studies on children with GD, for whom the majority would meet the DSM-IV diagnostic criteria for Gender Identity Disorder (GID) collectively reported on the outcomes of 246 children. At the time of follow-up in adolescence or adulthood, these studies showed that, for the majority of children (**84.2%;** n= 207), the GD desisted.”

(Steensma, T. D., Mcguire, J. K., Kreukels, B. P., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors Associated With Desistence and Persistence of Childhood Gender Dysphoria: A Quantitative Follow-Up Study. Journal of the American Academy of Child & Adolescent Psychiatry, 52(6), 582-590. doi:10.1016/j.jaac.2013.03.016)

U of Toronto psychologist Dr. Ken Zucker summarizes and defends the numerous studies showing **desistance is common** in his 2018 paper, “The myth of persistence.”

Zucker, K. J. (2018). The myth of persistence: response to “A critical commentary on follow-up studies and ‘desistance’ theories about transgender and gender nonconforming children” by Temple Newhook et al. International Journal of Transgenderism, 19(2), 231–245. Published online May 29, 2018. http://doi.org/10.1080/15532739.2018.1468293

“In my view, there are **reasons to be skeptical about the merit in recommending an early gender social transition as a first-line treatment**. One should recognize **that if one peruses carefully the follow-up studies of young children with** **gender dysphoria** (or traits of gender dysphoria), **the majority of such children do not have gender dysphoria when followed up in adolescence or adulthood** (Zucker, 2018).”

Zucker KJ. Debate: Different strokes for different folks. *Child and Adolescent Mental Health* 2020; **25**(1): 36-7.

“…but it seems clear that the significant majority of children do resolve their gender ID in favour of their natal sex by adulthood. Where is the advocacy for the mental health needs of that majority?”

Howard S. The struggle for GPs to get the right care for patients with gender dysphoria. *British Medical Journal* 2020; **368**: m215. doi: <https://doi.org/10.1136/bmj.m215>.

Adults: “GD can remit in some [adult]cases (Marks et al. 2000); perhaps psychotherapy could facilitate such remission – or a reduction in GD symptoms… in some subset of the diverse group of adults [who meet the diagnosis of] GD.”

…“Unfortunately, these possibilities have not yet been investigated, and such investigations are strongly discouraged in the SOC – 7.”

Zucker KJ, Lawrence AA, Kreukels BP, Gender Dysphoria in Adults, Annual Rev of Clinical Psych, 2016. 12:20.1-20.31, p. 21.

Marks I, Green R, Mataix-Cols D. Adult gender identity disorder can remit. *Comprehensive Psychiatry* 2000; **41**(4): 273-5.

**Citation allowing Turban to cite himself as a source against Adolescent desistance**:

“In contrast to the low rates of persistence from childhood into adolescence, it appears that the vast majority of transgender adolescents persist in their transgender identity (76).”

Turban JL, DeVries ALC, Zucker K. Gender Incongruence & Gender Dysphoria. In Martin A, Block MH, Volkmar FR: *Lewis’s Child and Adolescent Psychiatry*: *A Comprehensive Text, 5th ed*. Philadelphia, Wolters Kluwer, 2018.

Citing: Cohen-Kettenis PT, Pfafflin F: *Transgenderism and Intersexuality in Childhood and Adolescence: Making Choices*. London, Sage, 2003.

**Since desistance is the norm, it is preferable over medicalization that carries with it a lifelong risks and dependence on the medical establishment.**

**DETRANSITION**

(My comment) Among the increasing numbers of people with regret about their engagement in gender affirming therapy is a subset that opts to stop GAT, re-identify with their natal sex, and work toward reversing the damage to whatever degree they can or do find acceptable. These are the detransitioners.

International Association of Therapists for Desisters and Detransitioners (IATDD)

<https://iatdd.com>

# “Introduction to Detransition for Therapists”

<https://iatdd.com/introduction-to-detransition-for-therapists/?fbclid=IwAR2bsQ-ojdFi7Zyzow_RNCDcD34eGU_flce_x8mfRpH3s0DRp91PwwONkto>

**r/detrans** | Detransition Subreddit. Reddit.com. (2020). Retrieved 22 September 2020, from <https://www.reddit.com/r/detrans/>.

**Walt Heyer**. <http://www.sexchangeregret.com> and a raft of articles in Public Discourse.

“**His Name is Money**” 5 min interview shorts:  <https://www.facebook.com/hisnameismoney>

**Pique Resilience Project** on YouTube [4 detransitioned young women telling their story and answering questions] <https://www.youtube.com/watch?v=kxVmSGTgNxI>

**Stop Medicalizing Children** <https://www.transgenderabuse.org>

Rene Jax. His web site: <http://renejax.bravesites.com/follow-me-on-twitter>.

Authored: “Don’t get on the Plane! Sex change surgery will ruin your life.” <http://renejax.bravesites.com/books>

“3 detransitioners talk about GD” <https://www.youtube.com/watch?v=-pxxBQm114k>

“With 85% desistance amongst referred transgender children, and **increasing awareness of detransitioning**, unquestioning ‘affirmation’ as a pathway that leads gender dysphoric patients to irreversible interventions cannot be considered sole or best practice.”

Salkind, Jessica, et al. “Safeguarding LGBT+ Adolescents.” BMJ, 2019, p. l245., doi:10.1136/bmj.l245.

“There is much to suggest that the patient does not always know best—for example, post-transition depression, **detransition,** pre- and postsurgical suicide rates, and that researchers have concluded that postoperative patients need psychiatric care.”

Stephen B. Levine (2019) Informed Consent for Transgendered Patients, Journal of Sex & Marital Therapy, 45:3, 218-229, DOI: [10.1080/0092623X.2018.1518885](https://doi.org/10.1080/0092623X.2018.1518885)

(citing Dhejne, *supra*; R.K. Simonsen, et al., *Long-term follow-up of individuals undergoing sex reassignment surgery: psychiatric morbidity and mortality*. 70(4) Nordic J. Psychiatry 241–47 (2016)).

"It also asks for caution because some case histories illustrate the complexities that may be associated with later-presenting transgender adolescents and describe

that some eventually **detransition**.9,10”

Annelou L.C. de Vries. Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents. Pediatrics Sep 2020, e2020010611; DOI: 10.1542/peds.2020-010611

"However, **systematic studies on the rate of adolescents who discontinue their transitions after they have started affirming hormones or surgeries with lasting effects are lacking at present**.”

Annelou L.C. de Vries. Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents. Pediatrics Sep 2020, e2020010611; DOI: 10.1542/peds.2020-010611

Hacsi Horvath, UCSF epidemiology expert and detranstioner. “The Theatre of the Body: A detransitioned epidemiologist examines suicidality, affirmation, and transgender identity,” Dec. 19, 2018, 4thwavenow.com.

<https://4thwavenow.com/2018/12/19/the-theatre-of-the-body-a-detransitioned-epidemiologist-examines-suicidality-affirmation-and-transgender-identity/>

UK Story: 'Hundreds' of young trans people seeking help to return to original sex,” News.sky.com, 05 Oct 2019.

A 28 yo detransitioning woman is setting up a charity, The Detransition Advocacy Network. Hundreds have contacted her: “they tend to be around their mid-20s, they're mostly female and mostly same-sex attracted, and often autistic as well."

Some “felt shunned by the LGBT community for being a traitor.”

Article “Trouble In Transtopia: Murmurs Of Sex Change Regret,” <https://thefederalist.com/2014/11/11/trouble-in-transtopia-murmurs-of-sex-change-regret/> from 2014.

“**The transgender lobby actively polices and suppresses discussion of sex-change regret, and claims it’s rare (no more than “5 percent.”) However, if you do decide to “de-transition” to once again identify with the sex in your DNA, talking about it will get you targeted by trans activists. So it’s a challenge to understand the scope of regret for sex change surgery**.”

Among the examples she gives are Australia’s Alan Finch.

“Finch went on to sue the Australian gender identity clinic at Melbourne’s Monash Medical Center for misdiagnosis. He also was involved in starting an outreach to others called “Gender Menders.” The reaction from the transgender community was fast, furious, and abusive, particularly in the Susans.org discussion forum[as described in Sheila Jeffrey’s book, “Gender Hurts](http://books.google.com/books?id=xhRxAwAAQBAJ&pg=PT95&lpg=PT95&dq=susan%27s.org+%22alan+finch%22&source=bl&ots=djU1JtLsbs&sig=VGubJICA7b7enLMrMqKDP3szTgw&hl=en&sa=X&ei=0c1XVNKTA5CWigKp8IHwAQ&ved=0CCQQ6AEwAQ#v=onepage&q=susan's.org%20%22alan%20finch%22&f=false).”

**Since then, Finch’s outreach website has been**[**archived**](http://trove.nla.gov.au/work/35124984?q=+&versionId=43621738)**and there is no further information online. In fact, Finch’s subsequent silence is the norm for those who change their minds. This is perhaps not surprising, given the vigor and vindictiveness of the transgender community in persecuting those who have the temerity to suggest that all is not well in sexual La-La Land**.”

Also has sections on **Rene Richards** the tennis star (not detranstioned bu lagging on feminity): “I get a lot of letters from people who are considering having this operation…and I discourage them all.’ —Rene Richards, “The Liaison Legacy,” Tennis Magazine, March 1999.”

Journalist Mike Penner, transitioned, de-transitioned, unable to save his marriage, killed himself.

Walt Heyer is also covered.

**TWIN STUDIES**

Studies of twin transsexuals state that 61-72% of monozygotic and nearly all dizygotic twin pairs were discordant for transsexualism.

Diamond M. Transsexuality Among Twins: Identity, Concordance, Transition, Rearing, and Orientation. *International Journal of Transgenderism* 2013; **14**(1): 24-38.

Heylens G, De Cuypere G, Zucker KJ, et al. Gender identity disorder in twins: a review of the case report literature. *J Sex Med* 2012; **9**(3): 751-7.

The environmental similarity shared by monozygotic twins may result in a higher concordance rate than that of dizygotic twin pairs.

Guo SW. Does higher concordance in monozygotic twins than in dizygotic twins suggest a genetic component? *Hum Hered* 2001; **51**(3): 121-32.

**MENTAL HEALTH/CO-MORBIDITIES IN GENDER DYSPHORIA**

**1. THEY ARE PRESENT AND THERE CAN BE MANY.**

“Emphasis on **civil rights is not a substitute for the recognition and treatment of associated psychopathology**. Gender identity specialists, unlike the media, **need to be concerned about the majority of patients, not just the ones who are apparently functioning well in transition**.”

2009. Levine SB, Solomon A, “**Meanings and political implications of "psychopathology" in a gender identity clinic**: a report of 10 cases.” J Sex Marital Ther. 2009;35(1):40-57. doi: 10.1080/00926230802525646.

**Australia 2021**. Prospective study from a multidisciplinary pediatric gender service.

* Children: n = 79; 8.42–15.92 yo; 33 biological males, 46 biological females.
* High levels of distress (including GD), suicidal ideation (41.8%), self-harm (16.3%), and suicide attempts (10.1%).
* High rates of comorbid mental health disorders: anxiety (63.3%), depression (62.0%), behavioural disorders (35.4%), and autism (13.9%).
* High rates of adverse childhood experiences, with family conflict (65.8%), parental mental illness (63.3%), loss of important figures via separation (59.5%), and bullying (54.4%); and maltreatment (39.2%).
* Key challenges faced by the clinicians: polarized discourses; pressures to abandon the holistic [biopsychosocial] model; the difficulties of untangling gender dysphoria from comorbid factors such as anxiety, depression, and sexual abuse.
* “Our results suggest the need to bring into play a biopsychosocial, trauma-informed model of mental health care for children presenting with gender dysphoria. Ongoing therapeutic work needs to address unresolved trauma and loss, the maintenance of subjective well-being, and the development of the self.”

Kozlowska K, McClure G, Chudleigh C, et al. Australian children and adolescents with gender dysphoria: Clinical presentations and challenges experienced by a multidisciplinary team and gender service. *Human Systems*. 2021;1(1):70-95. doi:[10.1177/26344041211010777](https://doi.org/10.1177/26344041211010777)

**2015** **Finland**’s gender identity services

* “**75% of adolescents [assessed]** had been or were currently undergoing child and adolescent **psychiatric treatment for reasons other than gender dysphoria**”
* **26% had an autism spectrum disorder**
* **87% were female**, far disproportionate to past ratios of F:M.

Kaltiala-Heino R, Sumia M, Työläjärvi M, Lindberg N. Two years of gender identity service for minors: overrepresentation of natal girls with severe problems in adolescent development. Child and Adolescent Psychiatry and Mental Health (2015) 9:9.

**2019**: The **prevalence of mental disorder diagnoses** was **higher in transgender hospital encounters (77% vs. 37.8%,***P* < .001). The prevalence of each examined mental disorder diagnosis was significantly higher in transgender hospital encounters. A multivariable analysis demonstrated **significantly higher odds of all mental disorder diagnoses** (odds ratio [OR] = 7.94; confidence interval [CI], 7.63–8.26; *P* < .001), **anxiety** (OR = 3.44; CI, 3.32–3.56; *P* < .001), **depression** (OR = 1.63; CI, 1.57–1.70; *P* < .001), and **psychosis** (OR = 2.46; CI, 2.36–2.56; *P* < .001) **among transgender versus cisgender inpatient encounters**.

Hanna, B, et al. [Psychiatric disorders in the U.S. transgender population](https://www.sciencedirect.com/science/article/pii/S1047279719302832), Annals of Epidemiology, online 4 October 2019. [doi.org/10.1016/j.annepidem.2019.09.009](https://doi.org/10.1016/j.annepidem.2019.09.009)

2019. For “late presenters” [post-pubertal adolescents] “the majority report **significant psychopathology and broader identity confusion** than gender identity issues alone (de Graaf et al., 2017; Kaltiala-Heino et al., 2015).”

“…it is important to keep in mind that physical treatments are not always associated with a resolution in **mental health difficulties**. In some cases, mental health problems can emerge while on physical treatment.”

de Graaf NM, Carmichael P. Reflections on emerging trends in clinical work with gender diverse children and adolescents. *Clinical Child Psychology and Psychiatry*. 2019;24(2):353-364. doi:[10.1177/1359104518812924](https://doi.org/10.1177/1359104518812924)

**Kaiser-Permanente study 2018** (Becerra-Culqui): Mental Health of Transgender and Gender Nonconforming Youth Compared With Their Peers.

* Gleaned from electronic medical records of 8.8M members in GA and CA.
* **High rates of psychiatric disorders and suicidal ideation before gender non-congruence in teens.**
* Rates (prevalence ratios/PR) in the 6 months before first findings of GNC compared to gender congruent peers: **psych disorders** 7 times higher overall, vast PR for certain ones, **psych hospitalizations** 22-44 times higher, **self harm** 70-144 times higher, **suicidal ideation** 25-54 times higher (Tables 3 & 4 of study).
* Suicidal ideation during said 6 months before GNC findings: 7% in biological males and 5% in biological females. Far below rates claimed by activists, but still high.

Becerra-Culqui TA, Liu Y, Nash R, et al. Mental Health of Transgender and Gender Nonconforming Youth Compared With Their Peers. Pediatrics. 2018;141(5):e20173845.

“Data came from the **2015–2017 Healthy Minds Study**, a mobile survey of randomly selected students (N=65,213 at 71 U.S. campuses, including 1,237 gender minority [GM] students); data were analyzed in 2018. Outcomes

were symptoms of **depression, anxiety, eating disorders, self-injury, and suicidality**…” “Compared with 45% of cisgender students, **78% of GM** students met the criteria for **1 or more of the aforementioned mental health outcomes**. GM status was associated with 4.3 times higher odds of having at least 1 mental health problem (95% CI=3.61, 5.12).”

“CONCLUSIONS

This national study offers compelling evidence of mental health inequities among GM students compared with cisgender students, with **2–4 times higher prevalence of depression, anxiety, eating disorders, self-injury, and suicidality**.”

Lipson SK, et al., Gender Minority Mental Health in the U.S.: Results of a

National Survey on College Campuses, American J. of Preventive Medicine, Volume 57, Issue 3, 293 – 301. doi.org/10.1016/j.amepre.2019.04.025

**2018**. Lisa Littman’s parental survey of Rapid Onset Gender Dysphoria:

* **62.5%** of gender dysphoric adolescents had “**a psychiatric disorder or neurodevelopmental disability preceding the onset of gender dysphoria**”.
* “Many **(48.4%) had experienced a traumatic or stressful event prior** to the onset of their gender dysphoria.”
* **83% female**.
* **12.3%** prevalence of **autism spectrum disorder.**

Littman L. Parent reports of adolescents and young adults perceived to show signs of a rapid onset of gender dysphoria. *PloS one* 2018; 13(8): e0202330.

**2014**: “83 patients requesting sex reassignment surgery (SRS) were assessed for DSM-IV **Axis I disorders. 62.7% has one or more**.” (Major depression, phobias, and adjustment disorders were the 3 most common).

“Consistent with most earlier researches, **the majority of patients with gender dysphoria had psychiatric Axis I comorbidity**.”

Mazaheri Meybodi A, et al. “Psychiatric Axis I Comorbidities among Patients with Gender Dysphoria.” Psychiatry J, 2014, Article ID :971814. doi: 10.1155/2014/971814.

**2014.** Four nation European study found “People with gender identity disorder show more psychiatric problems than the general population…”

**“Nearly 70% had “a current and lifetime diagnosis**.”

Heylens G, et al. “Psychiatric characteristics in transsexual individuals: multicentre study in four European countries,” The British Journal of Psychiatry Feb 2014, 204 (2) 151-156; **DOI:** 10.1192/bjp.bp.112.121954.

“Eight other studies that used structured clinical interviews for data collection (Colizzi et al. 2015; G´ omez-Gil et al. 2009; Guzm´an-Parra et al. 2015; Haraldsen & Dahl 2000; Hepp et al. 2005; Madeddu et al. 2009; Mazaheri Meybodi et al. 2014a,b) reported generally similar results (see Supplemental Table 1): Most found about a **30–40% prevalence of current comorbid psychopathology and about a 50–80% prevalence of lifetime comorbid psychopathology in adults with GD**, **including a 20–60% prevalence of personality disorders**.”

Zucker, KJ, et al. Gender Dysphoria in Adults. Annu. Rev. Clin. Psychol. 2016. 12:217–47. P. 227.)

Citing:

Colizzi M, Costa R, Todarello O. Dissociative symptoms in individuals with gender dysphoria: Is the elevated prevalence real? *Psychiatry Research* 2015; **226**(1): 173-80.

Gomez-Gil E, Trilla A, Salamero M, Godas T, Valdes M. Sociodemographic, Clinical, and Psychiatric Characteristics of Transsexuals from Spain. *Archives of Sexual Behavior* 2009; **38**(3): 378-92.

Guzma´n-Parra J, Sa´nchez-A´ lvarez N, de Diego-Otero Y, Pe´rez-Costillas L, Esteva de Antonio I, et al. 2015. Sociodemographic characteristics and psychological adjustment among transsexuals in Spain. Arch. Sex.

Behav. doi: 10.1007/s10508-015-0557-6

Haraldsen IR, Dahl AA. Symptom profiles of gender dysphoric patients of transsexual type compared to patients with personality disorders and healthy adults. *Acta Psychiatrica Scandinavica* 2000; **102**(4): 276-81.

Hepp U, Kraemer B, Schnyder U, Miller N, Delsignore A. Psychiatric comorbidity in gender identity disorder. *Journal of Psychosomatic Research* 2005; **58**(3): 259-61.

Madeddu F, Prunas A, Hartmann D. Prevalence of Axis II disorders in a sample of clients undertaking psychiatric evaluation for sex reassignment surgery. *Psychiatric Quarterly* 2009; **80**(4): 261-7.

Mazaheri Meybodi A, Hajebi A, Ghanbari Jolfaei A. 2014a. Psychiatric Axis I comorbidities among patients with gender dysphoria. Psychiatry J. 2014:971814

MazaheriMeybodi A, Hajebi A, Ghanbari Jolfaei A. 2014b. The frequency of personality disorders in patients with gender identity disorder. Med. J. Islam. Repub. Iran 28:90

“GD in adults is associated with an elevated prevalence of comorbid psychopathology, especially mood disorders, anxiety disorders, and suicidality.”

Zucker, KJ, et al. Gender Dysphoria in Adults. Annu. Rev. Clin. Psychol. 2016. 12:217–47.(P.217.)

A study of suicidality in transgender-identified adolescents (N=2771) at specialty clinics in Toronto, Amsterdam and London.

* “…suicidality was consistently higher among birth-assigned females and strongly associated with degree of general behavioral and emotional problems.”
* “…adolescents diagnosed with GD have, on average, a greater number of behavioral and emotional problems in general when compared to non-referred adolescents, but relatively similar to adolescents seen clinically for other types of mental health issues [].”

de Graaf, N.M., Steensma, T.D., Carmichael, P. *et al.* Suicidality in clinic-referred transgender adolescents. *Eur Child Adolesc Psychiatry* (2020). <https://doi.org/10.1007/s00787-020-01663-9>

Swedish National Board of Health and Welfare, 2020:

“People with gender dysphoria, especially young people, have a high incidence of co-occurring psychiatric diagnoses, self-harm behaviors, and suicide attempts compared to the general population. Co-occurring psychiatric diagnoses among people with gender dysphoria are therefore a factor that needs to be considered more closely during investigation.”

“Suicide mortality rates are higher among people with gender dysphoria compared to the general population. At the same time, people with gender dysphoria who commit suicide have a very high rate of co-occurring serious psychiatric diagnoses, which in themselves sharply increase risks of suicide. Therefore, it is not possible to ascertain to what extent gender dysphoria alone contributes to suicide, since these psychiatric diagnoses often precede suicide.”

Table 1 shows far higher prevalences in males and females with gender dysphoria in all age groups examined of anxiety disorders, depression, ADHD, autism and substance abuse than in the general population.

“The Evolution of the Diagnosis of Gender Dysphoria. Prevalence, co-occurring psychiatric diagnoses and mortality from suicide.” Swedish National Board of Health and Welfare, Published www.socialstyrelsen.se, February 2020

Gijs, L., van der Putten-Bierman, E., & De Cuypere, G. (2014). Psychiatric comorbidity inadults with gender identity problems. In B. P. C. Kreukels, T. D. Steensma, & A. L. C. de Vries (Eds.), Gender dysphoria and disorders of sex development: Progress in care and knowledge (pp. 255–276). New York: Springer. https://doi.org/10.1007/978-1-4614-7441-8\_13.

Goodman, M., & Nash, R. (2018). Examining health outcomes for people who are transgender. Washington, DC: Patient-Centered Outcomes Research Institute. https ://doi.org/10.25302 /2.2019. AD.12114 532.

Wanta, J. W., Niforatos, J. D., Durbak, E., Viguera, A., & Altinay, M. (2019). Mental health diagnoses among transgender patients in the clinical setting: An all-payer electronic health record study. Transgender Health, 4(1), 313–315. https ://doi.org/10.1089/trgh.2019.0029.

**Personality Disorders**

Iran. 2014. Among people requesting sex reassignment surgery **(SRS**): “The **frequency of personality disorders was 81.4%.** The most frequent personality disorder was narcissistic personality disorder (57.1%)… The average number of diagnoses was 3.00 per patient.”

Meybodi AM, Hajebi A, Jolfaei AG. The frequency of personality disorders in patients with gender identity disorder. *Med J Islam Repub Iran*. 2014;28:90. Published 2014 Sep 10.

“Eight other studies that used structured clinical interviews for data collection (Colizzi et al. 2015; G´ omez-Gil et al. 2009; Guzm´an-Parra et al. 2015; Haraldsen & Dahl 2000; Hepp et al. 2005; Madeddu et al. 2009; Mazaheri Meybodi et al. 2014a,b) reported generally similar results (see Supplemental Table 1): Most found about a **30–40% prevalence of current comorbid psychopathology and about a 50–80% prevalence of lifetime comorbid psychopathology in adults with GD**, **including a 20–60% prevalence of personality disorders**.”

Zucker, KJ, et al. Gender Dysphoria in Adults. Annu. Rev. Clin. Psychol. 2016. 12:217–47. (P. 227.)

40% of MFs and 22% of FMs had a comorbid personality disorder.

De CuypereG, Elaut E,HeylensG, Van MaeleG, Selvaggi G, et al. 2006. Long-term follow-up: psychosocial outcomes of Belgian transsexuals after sex reassignment surgery. Sexologies 15:126–33

70% of MFs and 23% of FMs had a personality disorder;

De Cuypere G, Janes C, Rubens R. 1995. Psychosocial functioning of transsexuals in Belgium. Acta Psychiatr. Scand. 91:180–84

Cited here: Zucker, KJ, et al. Gender Dysphoria in Adults. Annu. Rev. Clin. Psychol. 2016. 12:217–47. Supplemental Table 1: Studies Reporting an Increased Prevalence of Associated Psychopathology in Adults with Gender Dysphoria.

**Adverse Childhood Events:**

Bechard M et al, Psychosocial and Psychological Vulnerability in Adolescents with Gender Dysphoria: a “proof of Principle” Study, J Sex and Marital Therapy 2017;43:678-688.

Bradley, S.J.B. & Zucker, Kenneth. (1990). Gender Identity Disorder and Psychosexual Problems in Children and Adolescents. Canadian journal of psychiatry. Revue canadienne de psychiatrie. 35. 477-86. 10.1177/070674379003500603.

**Australia 2021**. Prospective study from a multidisciplinary pediatric gender service.

* Children: n = 79; 8.42–15.92 yo; 33 biological males, 46 biological females.
* **High rates of adverse childhood experiences**, with family conflict (65.8%), parental mental illness (63.3%), loss of important figures via separation (59.5%), and bullying (54.4%); and maltreatment (39.2%).
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Kozlowska K, McClure G, Chudleigh C, et al. Australian children and adolescents with gender dysphoria: Clinical presentations and challenges experienced by a multidisciplinary team and gender service. *Human Systems*. 2021;1(1):70-95. doi:[10.1177/26344041211010777](https://doi.org/10.1177/26344041211010777)

“Many **(48.4%) had experienced a traumatic or stressful event prior** to the onset of their gender dysphoria.”

Littman L (2018) Rapid-onset gender dysphoria in adolescents and young adults: A study of parental reports. PLoS ONE 13(8): e0202330. https://doi.org/10.1371/journal.pone.0202330

“In this paper the author argues that **trans-identification and its associated**

**medical treatment can constitute an attempt to evade experiences of psychological distress**. This occurs on three levels. Firstly, the trans person themselves may seek to evade dysregulated affects associated with such experiences as attachment trauma, childhood abuse, and ego‐alien sexual feelings. Secondly, therapists may attempt to evade feelings, such as fear and hatred, evoked by engaging with these dysregulated affects. Thirdly, we, as a society, may wish to evade acknowledging the reality of such trauma, abuse and sexual distress by hypothesizing that trans‐identification is a biological issue, best treated medically. The author argues that the quality of evidence supporting the biomedical approach is extremely poor. This puts young trans people at risk of receiving potentially damaging medical treatment they may later seek to reverse or come to regret, while their underlying psychological issues remain unaddressed.”

Withers, R. (2020)  Transgender medicalization and the attempt to evade psychological distress. *J Anal Psychol*,  65:  865– 889.  <https://doi.org/10.1111/1468-5922.12641>.

**Common themes**: prior to GD onset patients had “experienced teasing/bulling, exclusion, isolation, difficulty in social communication, distress in relation to awareness of a developing sexed body.”

The majority “had an existing diagnosis of an **autism spectrum condition** (ASC) or

would be likely to obtain one.”

Clarke, Anna Churcher, and Anastassis Spiliadis. “‘Taking the Lid off the Box’: The Value of Extended Clinical Assessment for Adolescents Presenting with Gender Identity Difficulties.” Clinical Child Psychology and Psychiatry, vol. 24, no. 2, 2019, pp. 338–352., doi:10.1177/1359104518825288.

2019. Norwegian retrospective review of 52 charts of adolescents begun on hormonal GAT and followed over “real-life phase of gender reassignment.”

“Conclusion: **Medical gender reassignment is not enough to** improve

functioning and **relieve psychiatric comorbidities** among adolescents

with gender dysphoria. Appropriate interventions are warranted for

psychiatric comorbidities and problems in adolescent development.”

…“**Cross-sex hormone treatment** may alleviate depression and anxiety [I would contest this] but **does not have a positive impact on psychiatric comorbidities** at large.”

…“**An adolescent’s gender identity concerns must not become a reason for failure to address all her/his other relevant problems in the usual way**.”

Riittakerttu Kaltiala, Elias Heino, Marja Työläjärvi & Laura Suomalainen (2019) Adolescent development and psychosocial functioning after starting cross-sex hormones for gender dysphoria, Nordic Journal of Psychiatry, DOI: [10.1080/08039488.2019.1691260](https://doi.org/10.1080/08039488.2019.1691260)

**AFFIRMING PARENTS DON’T IMPROVE THE STATS:**

“Whereas Olson et al. (2016b) and Durwood, McLaughlin, and Olson (2017) concluded that transgender children with strong parental support had, at

worst, only slightly higher levels of anxiety with no differences in self-worth or depression; a reanalysis of their findings suggests otherwise, with slightly

higher levels of depression but significantly and substantively meaningful differences in anxiety and self-worth, and with results favoring cisgender children,

even when the transgender children had high levels of parental support for their gender transitioning.”

Schumm, Walter & Crawford, Duane. (2019). Is Research on Transgender Children What It Seems? Comments on Recent Research on Transgender Children with High Levels of Parental Support. The Linacre Quarterly. 87. 002436391988479. 10.1177/0024363919884799.

Citing:

* Olson, Kristina R., Lily Durwood, Madeleine DeMeules, and Katie A. McLaughlin. 2016b. “Mental Health of Transgender Children Who Are Supported in Their Identities.” Pediatrics 137:e20153223.
* Durwood, Lily, Katie A. McLaughlin, and Kristina R. Olson. 2017. “Mental Health and Self-worth in Socially Transitioned Transgender Youth.” Journal of the American Academy of Child & Adolescent Psychiatry 57:116–23.

**2. AUTISM**

**Australia 2021**. Prospective study from a multidisciplinary pediatric gender service.

* Children: n = 79; 8.42–15.92 yo; 33 biological males, 46 biological females.
* High levels of distress (including GD), suicidal ideation (41.8%), self-harm (16.3%), and suicide attempts (10.1%).
* High rates of comorbid mental health disorders: anxiety (63.3%), depression (62.0%), behavioural disorders (35.4%), and **autism (13.9%).**

Kozlowska K, McClure G, Chudleigh C, et al. Australian children and adolescents with gender dysphoria: Clinical presentations and challenges experienced by a multidisciplinary team and gender service. *Human Systems*. 2021;1(1):70-95. doi:[10.1177/26344041211010777](https://doi.org/10.1177/26344041211010777)

A **2015** survey of adolescents applying for sex reassignment surgery (SRS) in **Finland** found **26% had an autism spectrum disorder**

* **87% were female**, far disproportionate to past ratios of F:M ratio.

(Kaltiala-Heino R, Sumia M, Työläjärvi M, Lindberg N. Two years of gender identity service for minors: overrepresentation of natal girls with severe problems in adolescent development. Child and Adolescent Psychiatry and Mental Health (2015) 9:9.)

Dr. Lisa Littman’s study of adolescents and young adults (AYAs) with rapid-onset gender dysphoria found a **12.3% prevalence of autism spectrum disorder**.

(Littman L. Rapid-onset gender dysphoria in adolescents and young adults: a study of parental reports. PLoS One. 2018;13(8):e0202330.)

Almost **8%** of children and adolescents referred to the Netherlands’ multidisciplinary clinic for gender dsyphoria in this age group had **autism spectrum disorders (ASD)**.

(de Vries AL, Noens IL, Cohen-Kettenis PT, van Berckelaer-Onnes IA, Doreleijers TA. Autism spectrum disorders in gender dysphoric children and adolescents. *J Autism Dev Disord*. 2010;40(8):930–936. doi:10.1007/s10803-010-0935-9.)

A UK survey of self-reported gender identity found, “**Individuals with autism spectrum disorder (ASD)** or meeting the AQ [Autism Spectrum Quotient] cut-off score for ASD were **over-represented in both the transgender and nonbinary groups**.”

Stagg SD, Vincent J. Autistic traits in individuals self-defining as transgender or nonbinary. *European Psychiatry* 2019; **61**: 17-22.

UK. An 18-month review of authors’ cases at the NHS Gender Identity Development Service (GIDS) Tavistock found the majority of adolescents presenting with “**gender identity difficulties**” also “had an existing diagnosis of an **autism spectrum condition** (ASC) or would be likely to obtain one.”

Clarke, Anna Churcher, and Anastassis Spiliadis. “‘Taking the Lid off the Box’: The Value of Extended Clinical Assessment for Adolescents Presenting with Gender Identity Difficulties.” Clinical Child Psychology and Psychiatry, vol. 24, no. 2, 2019, pp. 338–352., doi: 10.1177/1359104518825288.”

**3. AUTOGYNEPHILIA**

“Since the beginning of the last century, clinical observers have described the propensity of certain males to be erotically aroused by the thought or image of themselves as women.“

Blanchard, Ray. (2005). Early History of the Concept of Autogynephilia. Archives of sexual behavior. 34. 439-46. 10.1007/s10508-005-4343-8.

“Autogynephilia is defined as a male’s propensity to be sexually aroused by the thought of himself as a female. It is the paraphilia that is theorized to underlie transvestism and some forms of male-to-female (MtF) transsexualism.”

Lawrence AA. Autogynephilia: An Underappreciated Paraphilia. In: Balon R, ed. Sexual dysfunction: beyond the brain-body connection: Karger Medical and Scientific Publishers; 2011: 135-48. <https://doi.org/10.1159/000328921>.

**4. ROGD (RAPID ONSET GENDER DYSPHORIA)**

Rapid-Onset Gender Dysphoria is the sudden onset of dysphoria during or after puberty with no prior sign of it. Lisa Littman’s 2018 survey on this showed a commonality of this occurring in adolescents and young adults (AYAs) where one or more friends became gender dysphoric or trans-identifying; and whose parents report increasing social media and web use before it, worsening of their child’s mental health, worsening isolation from family and non-trans-identified friends; and distrust of information from non-trans-affirming sources. 83% female.

ROGD has become a social contagion, as is now self-evident.

(Littman, L. “**Rapid-onset gender dysphoria** in adolescents and young adults: A study of parental reports,” journals.plos.org, Aug. 16, 2018.

UK. “Inquiry into surge in gender treatment ordered by Penny Mordaunt,” thetimes.co.uk, Sept. 16, 2018.

 “**An investigation has been ordered into why so many girls are seeking gender reassignment after the number referred for treatment rose by more than 4,000% in less than a decade**.”

 “Official figures show the number of girls being given gender treatment has risen from **40** in 2009-10 to **1,806** in 2017-18.”

“They are living in their rooms, on the internet during night-time, and

thinking about this [gender dysphoria]. Then they come to the clinic and they are convinced that this explains all their problems and now they have to be made a boy.” –Psychiatrist

(Vrouenraets, Lieke Josephina Jeanne Johanna, et al. “Early Medical Treatment of Children and Adolescents With Gender Dysphoria: An Empirical Ethical Study.” Journal of Adolescent Health, vol. 57, no. 4, 2015, pp. 367–373., doi:10.1016/j.jadohealth.2015.04.004.)

“While some of us have informally tended toward describing the phenomenon we witness as “adolescent-onset” gender dysphoria, that is, without any notable symptom history prior to or during the early stages of puberty (certainly nothing of clinical significance), Littman’s description resonates with our clinical experiences from within the consulting room.”

Hutchinson, A., Midgen, M. & Spiliadis, A. In Support of Research Into Rapid-Onset Gender Dysphoria. *Arch Sex Behav* **49,**79–80 (2020). https://doi.org/10.1007/s10508-019-01517-9

“This rapid onset of gender dysphoria in assigned females post puberty is indeed a worrying phenomenon we are observing more and more at the clinic.”

Marina Bonfatto & Eva Crasnow (2018) Gender/ed identities: an overview of our current work as child psychotherapists in the Gender Identity Development Service, Journal of Child Psychotherapy, 44:1, 29-46, DOI: [10.1080/0075417X.2018.1443150](https://doi.org/10.1080/0075417X.2018.1443150)

Zucker, 2019: “In my view, there are at least three distinct **issues that ROGD raise:** First, is this really a new clinical phenomenon? Second, if it is, how do we understand it? Third, as a new clinical phenomenon, does it call for revisions to what are considered best

practice therapeutics for adolescents with gender dysphoria? With regard to the first question, **it is my view that this is a new clinical phenomenon**. I was seeing such adolescents in the mid-2000s in Toronto (I just didn’t have a label for them) and, at present, **they comprise the majority of my private practice adolescent patients.** (Of course, I make no claim that my clients are representative of the adolescent population with gender dysphoria in general.)”

“It is **not entirely clear to me why some clinician and “armchair” critics have been so skeptical about the possible veridicality of ROGD**.”

Zucker, K.J. Adolescents with Gender Dysphoria: Reflections on Some Contemporary Clinical and Research Issues. *Arch Sex Behav* **48,**1983–1992 (2019). https://doi.org/10.1007/s10508-019-01518-8

**SEMANTIC AND SOCIAL CONTAGION**

**Semantic contagion**.

“Once transsexual and gender-identity disorder and sex reassignment surgery became common linguistic currency, more people began conceptualizing and interpreting their experience in these terms. They began to make sense of their lives in a way that hadn’t been available to them before, and to some degree they actually became the kinds of people described by these terms.:” -- Dr. Carl Elliot

(Dr. Carl Elliot, “A New Way to be Mad,” theatlantic.com, Dec. 2000.)

**Social and peer contagion**.

* Dr. Lisa Littman: With exposure “**Within friendship groups**, the average number of individuals who became transgender-identified was **3.5 per group**.”
* **Dr. Lisa Littman**: “In other words, “**gender dysphoria**” may be used as a **catch-all explanation** for any kind of distress, psychological pain, and discomfort that an AYA is feeling while **transition** is being promoted as a **cure-all solution**.”
* “However, it is plausible that the following can be **initiated, magnified, spread, and maintained via the mechanisms of social and peer contagion**: (1) the belief that non-specific symptoms (including the symptoms associated with trauma, symptoms of psychiatric problems, and symptoms that are part of normal puberty) should be perceived as gender dysphoria and their presence as proof of being transgender; 2) the belief that the only path to happiness is transition; and 3) the belief that anyone who disagrees with the self-assessment of being transgender or the plan for transition is transphobic, abusive, and should be cut out of one’s life.”

Littman, L. “**Rapid-onset gender dysphoria** in adolescents and young adults: A study of parental reports,” journals.plos.org, Aug. 16, 2018. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0202330>)

**THERAPEUTIC MODEL OF COUNSELING**

“Watchful waiting” and psychological support is the international professional consensus for the treatment of gender dysphoria in minors.

U of Toronto **Psychologist Dr. James Cantor** in his comprehensive **analysis of the American Academy of Pediatrics policy statement** noted, **“**…almost all clinics and professional associations in the world use what’s called the *watchful waiting* approach to helping GD children…*.*”

(James M. Cantor (2019): Transgender and Gender Diverse Children

and Adolescents: Fact-Checking of AAP Policy, Journal of Sex & Marital Therapy, DOI:10.1080/0092623X.2019.1698481)

Furthermore, **Cantor** states, “In fact, the references that **AAP** cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing *watchful waiting*.”

As to one reason why, Cantor asserts, “…*every* follow-up study of GD children, without exception, found the same thing: Over puberty, the majority of GD children ceased to want to transition.”

 (James M. Cantor (2019): Transgender and Gender Diverse Children

and Adolescents: Fact-Checking of AAP Policy, Journal of Sex & Marital Therapy, DOI:10.1080/0092623X.2019.1698481)

“…watchful waiting with support for gender-dysphoric children and adolescents up to the age of 16 years is the current standard of care worldwide, not gender affirmative therapy (de Vries and Cohen-Kettenis 2012).”

Michael Laidlaw, Michelle Cretella & Kevin Donovan (2019) The Right to Best Care for Children Does Not Include the Right to Medical Transition, The American Journal of Bioethics, 19:2, 75-77, DOI: [10.1080/15265161.2018.1557288](https://doi.org/10.1080/15265161.2018.1557288)

de Vries, A. L., and P. T. Cohen-Kettenis. 2012. Clinical management of gender dysphoria in children and adolescents: The Dutch approach. Journal of Homosexuality 59(3): 301–320.

“**The Dutch Approach**”

“In a variation of the therapeutic approach, clinicians in the Netherlands place the **emphasis of treatment on concomitant emotional/behavioral problems in the child as well as family dynamics rather than on direct attempts to modify gender identity** (Cohen-Kettenis & Pfäfflin, 2003; de Vries & Cohen-Kettenis, 2012). The rationale for this approach is that, **if the concomitant problems have contributed to causing or maintaining the gender dysphoria, then the dysphoria will likely disappear by addressing these problems**.”

Singh, Devita. “A Follow up Study of Boys with Gender Dysphoria.” nymag.com, 2012, images.nymag.com/images/2/daily/2016/01/SINGH-DISSERTATION.pdf. P.17.

She references:

Cohen-Kettenis, P. T., & Pfäfflin, F. (2003). Transegenderism and intersexuality in childhood and adolescence: Making choices. (Thousand Oaks, CA: Sage.)

de Vries, A. L. C., & Cohen-Kettenis, P. T. (2012). Clinical management of gender dysphoria in children and adolescents: The Dutch approach. Journal of Homosexuality, 59, 301-320.

“**Dr. Thomas Steensma** is a Dutch doctor who has long advocated for “treating” children with gender dysphoria by putting them on puberty-blockers and cross-sex hormones. Now, roughly a decade after his much-cited study advocating for the **“Dutch Protocol”** was released,Dr. Steensma is concerned. **“The rest of the world is blindly adopting our research,”** [he told a Dutch media outlet](https://www.ad.nl/nijmegen/dringend-meer-onderzoek-nodig-naar-transgenderzorg-aan-jongeren-waar-komt-de-grote-stroom-kinderen-vandaan~aec79d00/) recently.

Medical experimentation on children ought to be universally rejected, but shockingly, it is quickly becoming unquestionable. Partially to blame for this development is the “Dutch Protocol” which encourages doctors to give minors with gender dysphoria puberty-blockers followed by cross-sex hormones. Steensma’s study, arguing that this was in the best interest of children, played a significant role in popularizing this approach. Recently, Steensma has begun urging caution, saying that more research is needed.”

# “Dutch Doctor Who Pioneered Early Transgender Treatment Says World is “Blindly” Adopting His Approach,” March 12, 2021, <https://www.mfc.org/familybeacon/dutch-doctor-who-pioneered-early-transgender-treatment-says-world-is-blindly-adopting-his-approach>

Citing: <https://www.ad.nl/nijmegen/dringend-meer-onderzoek-nodig-naar-transgenderzorg-aan-jongeren-waar-komt-de-grote-stroom-kinderen-vandaan~aec79d00/>

"Prospective longerterm follow-up studies of clinical samples like the study of Sorbara et al1 are needed to inform clinicians so that an individualized approach

can be offered that differentiates who will benefit from medical gender affirmation and **for whom (additional) mental health support might be more appropriate**."

Annelou L.C. de Vries. Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents. Pediatrics Sep 2020, e2020010611; DOI: 10.1542/peds.2020-010611

“This article provides a summary of **the therapeutic model and approach**

**used in the Gender Identity Service** at the Centre for Addiction and Mental Health in **Toronto**. The authors describe their assessment protocol, describe their current multifactorial case formulation model, including **a strong emphasis on developmental factors,** and provides clinical examples of how the model is used in the treatment.”

(Zucker, Kenneth & Wood, Hayley & Singh, Devita & Bradley, Susan. (2012). A Developmental, Biopsychosocial Model for the Treatment of Children with Gender Identity Disorder. Journal of homosexuality. 59. 369-97. 10.1080/00918369.2012.653309.)

**Australia 2021**. Prospective study from a multidisciplinary pediatric gender service.

* “Our results suggest the need to bring into play a **biopsychosocial, trauma-informed model of mental health care** for children presenting with gender dysphoria. Ongoing therapeutic work needs to address **unresolved trauma and loss**, the maintenance of subjective well-being, and the development of the self.”
* “Key challenges faced by the clinicians included the following: the effects of increasingly dominant, polarized discourses on daily clinical practice; issues pertaining to patient and clinician safety (**including pressures to abandon**

**the holistic [biopsychosocial] model**); **the difficulties of untangling gender dysphoria from comorbid factors such as** anxiety, depression, and sexual abuse; and the factual uncertainties present in the currently available literature on longitudinal outcomes.”

Kozlowska K, McClure G, Chudleigh C, et al. Australian children and adolescents with gender dysphoria: Clinical presentations and challenges experienced by a multidisciplinary team and gender service. *Human Systems*. 2021;1(1):70-95. doi:[10.1177/26344041211010777](https://doi.org/10.1177/26344041211010777)

“On the other hand, it has been clearly shown that **children working in psychological therapy have been able to alleviate their GD, thus avoiding the radical changes and health risks of GAT** [8].”

(Laidlaw MK, Van Meter QL, Hruz PW, Van Mol A, Malone WJ Letter to the Editor: "Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline". J Clin Endocrinol Metab. 2019 Mar 1;104(3):686-687. doi: 10.1210/jc.2018-01925.

Citing:

(8. Zucker KJ, Wood H, Singh D, Bradley SJ. A Developmental, Biopsychosocial Model for the Treatment of Children with Gender Identity Disorder. J Homosex. 2012;59(3):369-397.)

“Issue of homophobia, internalized shame, family narratives, relational ruptures, and beliefs and fantasies associated with mid adolescence could be meaningfully thought about and integrated into a story of who one is becoming.”

(Clarke, Anna Churcher, and Anastassis Spiliadis. “‘Taking the Lid off the Box’: The Value of Extended Clinical Assessment for Adolescents Presenting with Gender Identity Difficulties.” Clinical Child Psychology and Psychiatry, vol. 24, no. 2, 2019, pp. 338–352., doi:10.1177/1359104518825288.)

**Adults: “GD can remit in some [adult]cases** (Marks et al. 2000); **perhaps psychotherapy could facilitate such remission** – or a reduction in GD symptoms… in some subset of the diverse group of adults [who meet the diagnosis of] GD.”

…“**Unfortunately, these possibilities have not yet been investigated, and such investigations are strongly discouraged in the SOC – 7**.”

Zucker KJ, Lawrence AA, Kreukels BP, Gender Dysphoria in Adults, Annual Rev of Clinical Psych, 2016. 12:20.1-20.31, p. 21.

Citing:

Marks I, Green R, Mataix-Cols D. Adult gender identity disorder can remit. *Comprehensive Psychiatry* 2000; **41**(4): 273-5.

“…but it seems clear that the significant majority of children do resolve their gender ID in favour of their natal sex by adulthood. **Where is the advocacy for the mental health needs of that majority**?”

Howard S. The struggle for GPs to get the right care for patients with gender dysphoria. *British Medical Journal* 2020; **368**: m215.

 <https://doi.org/10.1136/bmj.m215>.

UK. 35 psychologists have resigned from the Gender Identity Development Service (GIDS) at the Tavistock and Portman NHS Foundation Trust.

* “The NHS is "over-diagnosing" children having medical treatment for gender dysphoria, with **psychologists unable to properly assess patients over fears they will be branded "transphobic"**, former staff have warned.”

“NHS 'over-diagnosing' children having transgender treatment, former staff warn,” news.sky.com, 12 Dec. 2019. <https://news.sky.com/story/nhs-over-diagnosing-children-having-transgender-treatment-former-staff-warn-11875624>

“Since the widespread adoption of interventional strategies directed toward affirming transgender identity, **efforts to identify psychological approaches to mitigate dysphoria,** with or without desistance as a desired goal, **have largely been abandoned**.”

Hruz, P. W. (2020). Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria. *The Linacre Quarterly*, *87*(1), 34–42. <https://doi.org/10.1177/0024363919873762>

Andre Van Mol quote, “Why is providing **skilled psychological investigation** for underlying causes shamed as **“transphobic”** when it is actually **the international standard of care**? Those **underlying causes and contributors – which are always there** -- do not vanish by avoiding them with “gender affirming therapy.” And these underlying issues are the seeds of regret. They must be dealt with, and better to do so early rather than post-transition, when what is gone is gone.”

(ADF interview, unreleased)

Andre Van Mol quote, "Since American mental health experts have largely given up on their job of investigating underlying factors that may be contributing to marginal sexual behavior, this is what we are left with, the **cult of affirmation**."

Showalter B. APA launches task force on 'consensual non-monogamy,' calls polyamory a 'marginalized identity'. The Christian Post. 2019 July 9.

<https://www.christianpost.com/news/apa-launches-task-force-on-consensual-non-monogamy-calls-polyamory-a-marginalized-identity.html>

**RUSHING TO AFFIRM IS CONTRAINDICATED.**

***APA Handbook on Sexuality and Psychology*** (APA, 2014)

“**Premature labeling of gender identity should be avoided**. Early social transition (i.e., change of gender role, such as registering a birth-assigned boy in school as a girl) should be approached with caution to **avoid foreclosing this stage** of (trans)gender identity development.” If there is early social transition, “the stress associated with possible reversal of this decision has been shown to be substantial…”

W. Bockting, *Ch. 24: Transgender Identity Development*, in 1 American Psychological Association Handbook on Sexuality and Psychology, 744 (D. Tolman & L. Diamond eds., 2014).

As for **premature affirmation:** “This approach runs the risk of **neglecting individual problems** the child might be experiencing and may involve an early gender role transition that might be challenging to reverse **if cross-gender feelings do not persist**…”

W. Bockting, *Ch. 24: Transgender Identity Development*, in 1 American Psychological Association Handbook on Sexuality and Psychology, 750 (D. Tolman & L. Diamond eds., 2014).

**Endocrine Society 2017 guidelines**, which are pro-GAT, state that psychological intervention is all that is needed in some forms of gender dysphoria.” “In some forms of GD/gender incongruence, psychological interventions may be useful and sufficient.”

Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. *The Journal of Clinical Endocrinology & Metabolism* 2017; **102**(11): 3869-903.

Dr. **Kenneth Zucker**, long acknowledged as one of the foremost authorities on gender dysphoria in children, spent years helping his patients align their subjective gender identity with their objective biological sex. He **used psychosocial treatments (talk therapy, family counseling, etc.) to treat gender dysphoria and had much success.**

(Kenneth J. Zucker et al., *A Developmental, Biopsychosocial Model for the Treatment of Children with Gender Identity Disorder*, 59 J. of Homosexuality 369-97 (2012).)

“…the field suffers from a vexing problem: There are **no randomized controlled trials (RCT) of different treatment approaches**, so the front-line clinician has to rely on lower-order levels of evidence in deciding on what the optimal approach to treatment might be.

Zucker, K.J. (2020), Debate: Different strokes for different folks. Child Adolesc Ment Health, 25: 36-37. doi:[10.1111/camh.12330](https://doi.org/10.1111/camh.12330)

"Prospective longerterm follow-up studies of clinical samples like the study of Sorbara et al1 are needed to inform clinicians so that an individualized approach

can be offered that differentiates who will benefit from medical gender affirmation and **for whom (additional) mental health support might be more appropriate**."

Annelou L.C. de Vries. Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents. Pediatrics Sep 2020, e2020010611; DOI: 10.1542/peds.2020-010611

U of Toronto psychologist **Ray Blanchard**, “…failure to make scientifically valid and functional distinctions among different types of gender dysphoric persons can only prevent progress toward finding the best approach to helping each.”

Blanchard R. Early history of the concept of autogynephilia. *Archives of Sexual Behavior* 2005; **34**(4): 439-46. 10.1007/s10508-005-4343-8.

**Affirming parents don’t improve the stats:**

“Whereas Olson et al. (2016b) and Durwood, McLaughlin, and Olson (2017) concluded that transgender children with strong parental support had, at

worst, only slightly higher levels of anxiety with no differences in self-worth or depression; a reanalysis of their findings suggests otherwise, with slightly

higher levels of depression but significantly and substantively meaningful differences in anxiety and self-worth, and with results favoring cisgender children,

even when the transgender children had high levels of parental support for their gender transitioning.”

Schumm, Walter & Crawford, Duane. (2019). Is Research on Transgender Children What It Seems? Comments on Recent Research on Transgender Children with High Levels of Parental Support. The Linacre Quarterly. 87. 002436391988479. 10.1177/0024363919884799.

Citing:

* Olson, Kristina R., Lily Durwood, Madeleine DeMeules, and Katie A. McLaughlin. 2016b. “Mental Health of Transgender Children Who Are Supported in Their Identities.” Pediatrics 137:e20153223.
* Durwood, Lily, Katie A. McLaughlin, and Kristina R. Olson. 2017. “Mental Health and Self-worth in Socially Transitioned Transgender Youth.” Journal of the American Academy of Child & Adolescent Psychiatry 57:116–23.

**Affirm the patient’s biological sex, rather than the gender identity confusion**.

**GENDER AFFIRMING THERAPY (GAT) ISSUES**

**1. GAT IS NOT THE INTERNATIONAL STANDARD OF CARE AND IS HIGHLY CONTROVERSIAL**.

**Consensus is not a proxy for truth. Pro-GAT/TAT dogma is, in part, a Castro consensus.**

* “A **Castro Consensus** is a near-unanimous show of agreement brought about by means other than the honest and uncoerced judgements of individuals.”
* “…once dependence, polarization, and external pressure are introduced…the probability of a false consensus increases dramatically.”
* “We demonstrate how dependence, [external] pressure, and polarization can force a consensus, making reliance on consensus as an indicator of truth unreliable. As a result, a consensus can only be trusted to the extent that individuals are free to disagree with it, without repression or reprisal. Similarly, when strong incentives favor affirmation of a position, a consensus affirming it becomes almost inevitable, and therefore all but meaningless.”

Jarred Allen, Cindy Lay, Geroge D. Montanez. A Castro Consensus: Understanding the Role of Dependence in Consensus Formation. *Proceedings of the 2020 Truth and Trust Online (TTO 2020)*, pages 12–20, Virtual, October 16-17, 2020. <https://www.cs.hmc.edu/~montanez/pdfs/allen-2020-castro-consensus.pdf>

 “Limitations of the existing transgender literature include **general lack of randomized prospective trial design, small sample size, recruitment bias, short study duration, high subject dropout rates, and reliance on “expert” opinion**.”

Hruz, P. W. (2020). **Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria.***The Linacre Quarterly*, *87*(1), 34–42. <https://doi.org/10.1177/0024363919873762>

Zucker,2019. “…the field suffers from a vexing problem: There are **no randomized controlled trials (RCT) of different treatment approaches**, so the front-line clinician has to rely on lower-order levels of evidence in deciding on what the optimal approach to treatment might be.

Zucker, K. J. (2019), Debate: Different strokes for different folks. Child Adolesc Ment Health. doi:[10.1111/camh.12330](https://doi.org/10.1111/camh.12330)

Levine 2020. “The **fact that modern patterns of the treatment of trans individuals are not based on controlled or long-term comprehensive follow-up studies** has allowed many ethical tensions to persist.” “The essay posits that it is relevant and ethical to investigate the forces that may have propelled an individual to create and announce a new identity.”

Levine, S.B. Reflections on the Clinician’s Role with Individuals Who Self-identify as Transgender. *Arch Sex Behav* (2021). https://doi.org/10.1007/s10508-021-02142-1

“Potential longer-term medical and surgical risks are currently not well defined…”

Radix A, Davis AM. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons. *JAMA.*2017;318(15):1491–1492. doi:10.1001/jama.2017.13540

2019, de Graaf, et al., “…it is important to keep in mind that **physical treatments are not always associated with a resolution** in **mental health difficulties**. In some cases, **mental health problems can emerge while on physical treatment**.”

de Graaf NM, Carmichael P. Reflections on emerging trends in clinical work with gender diverse children and adolescents. *Clinical Child Psychology and Psychiatry*. 2019;24(2):353-364. doi:[10.1177/1359104518812924](https://doi.org/10.1177/1359104518812924)

**1979**: A study from the **Johns Hopkins U** psychiatry department revealed the **mental and social health of patients undergoing sex reassignment surgery did not improve**. The program (founded by psychologist Dr. John Money) closed shortly thereafter. Why repeat the error now?

Meyer J.K. and Reter D. Sex Reassignment Follow up Arch. Gen Psychiatry 36; 1010-1015; 1979

McHugh P, Surgical Sex, First Things Nov 2004, 34-38.

Quentin Van Meter, Bringing Transparency to the Treatment of Transgender

Persons, Issues in Law & Medicine, Volume 34, Number 2, 2019.

Swedish **psychiatrist Dr. Christopher Gillberg** asserts pediatric transition is **“possibly one of the greatest scandals in medical history”** and proposes “an immediate moratorium on the use of puberty blocker drugs because of their unknown long-term effects.”

<https://thebridgehead.ca/2019/09/25/world-renowned-child-psychiatrist-calls-trans-treatments-possibly-one-of-the-greatest-scandals-in-medical-history/>

Levine: “Even though there are myriad ways to suffer in life, the pain of gender incongruence has enabled patients and their specialists to view this form as a special case (Freud, 1916). Transgender individuals are exceptions—**physicians can break their thousands-year tradition of nonmaleficence** and **remove healthy tissues and impair normal physiology with hormones**. **In the zeal to help this fascinating group, however, clinicians may inadvertently assist patients to jeopardize their connections to others and to inadvertently isolate them throughout their lives.** Ironically, transition that may have been motivated by the wish to escape isolation due to the sense of inauthenticity as a natal male or female **may lead to isolation**.”

(Stephen B. Levine. (2019) [Informed Consent for Transgendered Patients](https://www.tandfonline.com/doi/abs/10.1080/0092623X.2018.1518885). *Journal of Sex & Marital Therapy* 45:3, pages 218-229.)

“There is a distinct difference between pronouncements that represent human rights ideals and the reality of clinical observations.”

(Stephen B. Levine. (2019) [Informed Consent for Transgendered Patients](https://www.tandfonline.com/doi/abs/10.1080/0092623X.2018.1518885). *Journal of Sex & Marital Therapy* 45:3, pages 218-229.)

“From a psychological perspective, the main dilemma is to understand whether buying time at such a precocious age truly enables children to explore deep personal meanings, or whether it freezes youngsters in a prolonged child-hood, secluding them from certain aspects of reality and isolating them from peer groups.”

Giovanardi, G. Buying time or arresting development? The dilemma of administering hormone blockers in trans children and adolescents. Porto Biomedical Journal. 2(5):153–156, SEP 2017. DOI: 10.1016/j.pbj.2017.06.001

The **Endocrine Society** specifically stated “guidelines cannot guarantee any specific

outcome, nor do they **establish a standard of care**”:

“The guidelines should not be considered inclusive of all proper approaches or methods, or exclusive of others. The guidelines cannot guarantee any specific outcome, nor do they establish a standard of care. The guidelines are not intended to dictate the treatment of a particular patient.” P. 3895.

Wylie C Hembree, et al. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline, *The Journal of Clinical Endocrinology & Metabolism*, Volume 102, Issue 11, 1 November 2017, Pages 3869–3903, <https://doi.org/10.1210/jc.2017-01658>

“In my view, there are **reasons to be skeptical about the merit in recommending an early gender social transition as a first-line treatment**. One should recognize that if one **peruses carefully the follow-up studies** of young children with gender dysphoria (or traits of gender dysphoria), **the majority of such children do not have gender dysphoria when followed up in adolescence or adulthood** (Zucker, 2018).” … “If this is, in fact, the case, one might ask why would one recommend a first-line treatment that is, in effect, **iatrogenic**.”

Zucker, K. J. (2019), Debate: Different strokes for different folks. Child Adolesc Ment Health. doi:[10.1111/camh.12330](https://doi.org/10.1111/camh.12330)

 “Emphasis on **civil rights is not a substitute for the recognition and treatment of associated psychopathology**. Gender identity specialists, unlike the media, **need to be concerned about the majority of patients, not just the ones who are apparently functioning well in transition**.”

2009. Levine SB, Solomon A, “**Meanings and political implications of "psychopathology" in a gender identity clinic**: a report of 10 cases.” J Sex Marital Ther. 2009;35(1):40-57. doi: 10.1080/00926230802525646.

“Finally I must state that as I regard the transsexual syndrome as a personality and characterological disaster it cannot be corrected by mutilating operations which are often carried out in response to suicide threats amounting to blackmail.” (Limentani A. The significance of transsexualism in relation to some basic psychoanalytic concepts. *International Review of Psycho-Analysis* 1979; **6**: 139-53.) Quote on p. 149, last paragraph.

Note the title:

Richards C, Maxwell J, McCune N. **Use of puberty blockers for gender dysphoria: a momentous step in the dark.** *Archives of Disease in Childhood*2019;**104:**611-612.

**Royal College of General Practitioners Position Statement**, “The role of the GP in caring for gender-questioning and transgender patients,” June 2019.

“The significant **lack of evidence for treatments and interventions** which may be offered to people with dysphoria is a major issue facing this area of healthcare. There are also differences in the types and stages of treatment for patients with gender dysphoria depending on their age or stage of life. Gonadorelin (GnRH) analogues are one of the main types of treatment for young people with gender dysphoria. These have long been used to treat young children who start puberty too early, however less is known about their long-term safety in transgender adolescents. **Children who have been on GnRH for a certain period of time and are roughly 16 years of age can be offered** **cross-sex hormones by the NHS, the effects of which can be irreversible**.15 **There is a significant lack of robust, comprehensive evidence around the outcomes, side effects and unintended consequences of such treatments** for people with gender dysphoria, particularly children and young people, which prevents GPs from helping patients and their families in making an informed decision.”

<https://www.rcgp.org.uk/-/media/Files/Policy/A-Z-policy/2019/RCGP-transgender-care-position-statement-june-2019.ashx?la=en>

[“15.” C. Heneghan, T. Jefferson, ‘Gender-affirming hormone in children and adolescents; BMJ EBM, 25 February 2019. ]

Editor in chief of the BMJ Carl **Heneghan** wrote, “**There are significant problems with how the evidence for Gender-affirming cross sex hormone has been collected and analyzed that prevents definitive conclusions** to be drawn.”

 “**An Archive of Diseases in Childhood letter referred to GnRH treatment as a**

**momentous step in the dark**. It set out **three main concerns**: 1) Young people are left in a state of developmental limbo without secondary sexual characteristics that might consolidate gender identity **2) use is likely to threaten the maturation of the adolescent mind,** and 3) puberty blockers are being used in the context of profound scientific ignorance.”

He concludes, “**The current evidence does not support informed decision making and safe practice in children**.”

Heneghan, Carl. “Gender-Affirming Hormone in Children and Adolescents.” BMJ EBM Spotlight, 21 May 2019, blogs.bmj.com/bmjebmspotlight/2019/02/25/gender-affirming-hormone-inchildren-and-adolescents-evidence-review/.

Referencing: (Richards C, Maxwell J, McCune N. Use of puberty blockers for gender dysphoria: **a momentous step in the dark.** *Archives of Disease in Childhood*2019;**104:**611-612.)

“NHS 'over-diagnosing' children having transgender treatment, former staff warn,” news.sky.com, 12 Dec. 2019. <https://news.sky.com/story/nhs-over-diagnosing-children-having-transgender-treatment-former-staff-warn-11875624>

* 35 psychologists have resigned from the Gender Identity Development Service (GIDS) at the Tavistock and Portman NHS Foundation Trust.
* “The NHS is "over-diagnosing" children having medical treatment for gender dysphoria, with psychologists unable to properly assess patients over fears they will be branded "transphobic", former staff have warned.”
* “Our fears are that young people are being over-diagnosed and then over-medicalised. "We are extremely concerned about the consequences for young people... For those of us who previously worked in the service, we fear that we have had front row seats to a medical scandal."
* 3,000 children are on the waiting list, appointments are two years out. 2,590 children were referred to GIDS in 2018 compared with 77 ten years ago.
* Underlying issues not addressed.
* A detranstioner: "Mainly the thing that was fuelling me was that I didn't fit in and then I was slowly drip fed this idea that you could change sex," Thomasin said.”

“**Why I Resigned from Tavistock**: Trans-Identified Children Need Therapy, Not Just ‘Affirmation’ and Drugs” by psychoanalyst Marcus Evans, Quillette.com, Jan. 17, 2020. <https://quillette.com/2020/01/17/why-i-resigned-from-tavistock-trans-identified-children-need-therapy-not-just-affirmation-and-drugs/>

Dr. Richard Byng, U of Plymouth (UK), in a 2019 letter to The Lancet, "The evidence of medium-term benefit from hormonal treatment and puberty blockers is based on weak follow-up studies," and that guidelines [endorsed by WPATH, AAP, Endocrine Society] do "not consider longer term effects, including the difficult issue of de-transition.”

R. Byng, et al, “Gender-questioning children deserve better science,” letter to editor, *Lancet*, 2018; 8;392:2435.

S Bewley, “Safeguarding adolescents from premature, permanent medicalisation,” BMJ.com, 11 Feb. 2019.

**UK Tavistock/GIDS study 2020**: “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.”

**"Results** 44 patients had data at 12 months follow-up, 24 at 24 months and 14 at 36 months. All had normal karyotype and endocrinology consistent with birth-registered sex. All achieved suppression of gonadotropins by 6 months. At the end of the study one ceased GnRHa and 43 (98%) elected to start cross-sex hormones.

There was no change from baseline in spine BMD at 12 months nor in hip BMD at 24 and 36 months, but at 24 months lumbar spine BMC and BMD were higher than at baseline (BMC +6.0 (95% CI: 4.0, 7.9); BMD +0.05 (0.03, 0.07)). There were no changes from baseline to 12 or 24 months in CBCL or YSR total t-scores or for CBCL or YSR self-harm indices, nor for CBCL total t-score or self-harm index at 36 months. Most participants reported positive or a mixture of positive and negative life changes on GnRHa. Anticipated adverse events were common.

**Conclusions** Overall patient experience of changes on GnRHa treatment was positive. We identified no changes in psychological function. Changes in BMD were consistent with suppression of growth. Larger and longer-term prospective studies using a range of designs are needed to more fully quantify the benefits and harms of pubertal suppression in GD."

Polly Carmichael, Gary Butler, Una Masic, Tim J Cole, Bianca L De Stavola, SarahDavidson, Elin M. Skageberg, Sophie Khadr, Russell Viner. 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. medRxiv 2020.12.01.20241653; doi:https://doi.org/10.1101/2020.12.01.20241653 (<https://www.medrxiv.org/content/10.1101/2020.12.01.20241653v1>)

BBC summary:  <https://www.bbc.com/news/uk-55282113>

Points:

* Took 9 years to produce yet had only 44 participants, suggesting ample loss to follow up or removal from study.
* “normal karyotype and endocrinology” function.
	+ More proof that DSDs/Intersex are not GD issues.
* 98% went on from puberty blocking to CSH.
	+ GnRHas are gateway drugs, stepping stones to GAT/TAT.
* BMD and growth both suffer precisely when they should be having the surge of the lifetime.
* Self-harm did not improve.
* “no changes in psychological function,” meaning no improvement.

**The UK’s N.I.C.E. reviews** <https://arms.nice.org.uk/resources/hub/1070871/attachment>

and <https://arms.nice.org.uk/resources/hub/1070905/attachment>

**Lawsuit vs NHS GIDS:**

* Alison Holt. NHS use of puberty blockers legal challenge begins. bbc.com, 08 January 2020. <https://www.bbc.com/news/health-51033911>
	+ Papers lodged by a mother and a nurse vs Tavistock and Portman NHS Trust, which runs the only UK GIDS (gender ID development Service)
	+ Nurse Sue Evans left GIDS over 10 years prior concerned abouyt inadequate assessment and psychological intervention with dysphoric youth.
* Alison Holt. NHS gender clinic 'should have challenged me more' over transition. bbc.com, 01 March 2020. <https://www.bbc.com/news/health-51676020>
* **UK High Court in Bell vs. Tavistock** Dec. 12, 2020 ruled that GAT/TAT in minors was **experimental** and could not, in most cases, be given to minors **under 16 without court order**, and that such was advisable for those 16-17. They added, **“There is no age appropriate way to explain to many of these children what losing their fertility or full sexual function may mean to them in later years.”**
	+ Conclusions section, paragraphs 133-153 is well worth the read.

<https://www.judiciary.uk/wp-content/uploads/2020/12/Bell-v-Tavistock-Judgment.pdf>

* The High Court conclusion repeatedly emphasized (para. 134, 143, 148, 151, and 152) the **experimental nature of PB and CSH** use due to the **limited evidence for efficacy and safety**.
* Though stipulating that a court order should usually be sought for PB use in gender dysphoric children under age 16, they advised that even **for minors under age 16-17**, “clinicians may well regard these as cases where the authorisation of the court should be sought prior to commencing the clinical treatment.” (para. 152.)
* (para. 141): “That **adolescents find it difficult** to contemplate or comprehend what their life will be like as adults and that they **do not always consider the longer-term consequences of their actions** is perhaps a statement of the obvious.”
* “**PBs as a stepping stone to cross-sex hormones**.” (para. 136) “The evidence shows that the vast majority of children who take PBs move on to take cross-sex hormones, that Stages 1 and 2 are two stages of one clinical pathway and once on that pathway it is extremely rare for a child to get off it.” They asserted (para, 137), “Indeed, the statistical correlation between the use of puberty blockers and cross-sex hormones supports the case that it is appropriate to view PBs as a stepping stone to cross-sex hormones.”

**NHS Amendments to service specifications for Gender Identity Development Service** (GIDS) for children and adolescents, **effective 01 Dec 2020**. <https://www.england.nhs.uk/wp-content/uploads/2020/12/Amendment-to-Gender-Identity-Development-Service-Specification-for-Children-and-Adolescents.pdf>

* Patient under 16 cannot be referred to pediatric endocrinology for puberty blockers without Court order.
* GIDS must complete “full clinical review of each patient” under 16 on puberty blockers, and obtain Court order if they are thought to be best served by PBA and/or cross sex hormones.
* GIDS “must ensure that appropriate psychosocial support and psychological therapies are available to patients who are removed from puberty blockers, and to their families and carers;” plus other appropriate support and consultations.
* For children 16 to 17 yo – given patient competence, parental consent, and hormonal treatment deemed appropriate – “treatment may proceed.” Even then, the provider to consider Court petition “if there is doubt about the patient’s ‘best interests.’”

By former GIDS employees:

Evans, S. & Evans, M. (Feb. 4, 2021). First, do no harm: A new model for treating trans-identified children. Quillette. <https://quillette.com/2021/02/04/first-do-no-harm-a-new-model-for-treating-trans-identified-children/?inf_contact_key=8487e54d5a1050c35ee8e226e3e078ed09c74070ac2bf3cfa7869e3cfd4ff832>

**Royal Australasian College of Physicians** is launching a national inquiry into the safety and ethics of transgender medicine.

Cook M. Australia launches inquiry into safety and ethics of transgender medicine. BioEdge. 2019 August 18. (<https://www.bioedge.org/bioethics/australia-launches-inquiry-into-safety-and-ethics-of-transgender-medicine/13182>)

The Swedish National Council for Medical Ethics.

<https://www.transgendertrend.com/wp-content/uploads/2019/04/SMER-National-Council-for-Medical-Ethics-directive-March-2019.pdf>

* The **Swedish National Council for Medical Ethics** (SMER) recommended of the Ministry of Social Affairs a systematic review of the scientific literature regarding assessment of youths with gender dysphoria, long-term physical and mental effects, desistance, treatment regret, analysis of “**prescribing off-label puberty blockers and cross-sex hormones” to youths**, and an immediate update of the Ministry’s guidance document.

 Kjell Asplund, National Council for Medical Ethics (Sweden), 2019-04-26,

 Dnr Komm2019/00368/S1985:A

**Sweden’s Karolinska Hospital** (affectingAstrid Lindgren Children’s Hospital’s pediatric gender services) issues a **policy change effective April 1, 2021**:

* “…hormonal treatments (*i.e., puberty blocking and cross-sex hormones, see above*) will not be initiated in gender dysphoric patients under the age of 16.”
* “For patients between ages 16 and 18, it is hereby decided that treatment may only occur within the clinical trial settings approved by the EPM (*Ethical Review Agency/Swedish Institutional Review Board*).”
* “These changes shall not affect the continued psychological and psychiatric care within BUP (*Public Child and Adolescent Psychiatry*) for patients under 18 years of age.” “The patient must receive comprehensive information about potential risks of the treatment…”
* Cited UK High Court Decision, NHS policy change in light of it, and that in “2019, the SBU (*Swedish Agency for Health Technology Assessment and Assessment of Social Services*) published an overview of the knowledge base which showed a lack of evidence for both the long-term consequences of the treatments, and the reasons for the large influx of patients in recent years.”[[1]](#footnote-0)
* “These treatments are potentially fraught with extensive and irreversible adverse consequences such as cardiovascular disease, osteoporosis, infertility, increased cancer risk, and thrombosis.”

[Karolinska Policyförändring K2021-3343 March 2021 (Swedish).pdf](https://segm.org/sites/default/files/Karolinska%20Policyfo%CC%88ra%CC%88ndring%20K2021-3343%20March%202021%20%28Swedish%29.pdf)

[Karolinska Policy Change K2021-3343 March 2021 (English, unofficial translation).pdf](https://segm.org/sites/default/files/Karolinska%20Policy%20Change%20K2021-3343%20March%202021%20%28English%2C%20unofficial%20translation%29.pdf)

**Swedish Agency for Health Technology Assessment and Assessment of Social Services’ 2019 literature review**: “Gender dysphoria in children and adolescents: an inventory of the literature” (commissioned by the Swedish government).

<https://www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/>

“Conclusions

* We have not found any scientific studies which explains the increase in incidence in children and adolescents who seek the heath care because of gender dysphoria.
* We have not found any studies on changes in prevalence of gender dysphoria over calendar time, nor any studies on factors that can affect the societal acceptance of seeking for gender dysphoria.
* There are few studies on gender affirming surgery in general in children and adolescents and only single studies on gender affirming genital surgery.
* Studies on long-term effects of gender affirming treatment in children and adolescents are few, especially for the groups that have appeared during the recent decennium.
* The scientific activity in the field seems high. A large part of the identified studies are published during 2018 and 2019.
* Almost all identified studies are observational, some with controls and some with evaluation before and after gender affirming treatment. No relevant randomised controlled trials in children and adolescents were found.
* We have not found any composed national information from Sweden on: …”

Child and adolescent psychiatrist Dr. Christopher Gillberg of Sweden’s Gothenburg U, calls GAT “absolutely horrendous” and recommended “an immediate moratorium on the use of puberty blocker drugs because of their unknown long-term effects.”

[Doctors back inquiry on kids’ trans care](https://www.theaustralian.com.au/nation/doctors-back-inquiry-on-kids-trans-care/news-story/6f352bc99da430b194620a2605e8a50d)

**Finland rejects routine “affirmation” pathway for minors with GD. From Finnish Health Authority, *Council for Choices in Health Care in Finland (COHERE Finland)* 2020:**

* “Research data on the treatment of dysphoria due to gender identity conflicts in minors is limited.”
* “Surgical treatments are not part of the treatment methods for dysphoria caused by gender-related conflicts in minors.”
* “Based on thorough, **case-by-case consideration**, the **initiation of hormonal interventions** that alter sex characteristics may be considered **before the person is 18** years of age **only if** it can be ascertained that their identity as the other sex is of a permanent nature and causes severe dysphoria. **In addition, it must be confirmed that the young person is able to understand the significance of irreversible treatments and the benefits and disadvantages** associated with lifelong hormone therapy, and that no contraindications are present.”
* “The initiation and monitoring of hormonal treatments must be centralised at the research clinics on gender identity at HUS [Helsinki University Central Hospital] and TAYS [Tampere University Hospital].”
* **Pre-puberty GD:** “If a child is diagnosed prior to the onset of puberty with a persistent experience of identifying as the other sex and shows symptoms of gender-related anxiety, which increases in severity in puberty, the child can be guided at the onset of puberty to the research group on the gender identity of minors at TAYS or HUS for an assessment of the need for treatment to suppress puberty. Based on these assessments, **puberty suppression treatment may be initiated on a case-by-case basis after careful consideration and appropriate diagnostic examinations** if the medical indications for the treatment are present and there are no contraindications.”
* **Post-puberty GD**: “A young person who has already undergone puberty can be sent to the research clinic on the gender identity of minors at TAYS or HUS for **extensive gender identity studies if the variation** in gender identity and related dysphoria **do not reflect the temporary search for identity typical of the development stage of adolescence and do not subside** once the young person has had the opportunity to reflect on their identity but rather their identity and personality development appear to be stable. “
* **Minors with psychiatric history**: “If a young person experiencing gender-related anxiety has experienced or is simultaneously experiencing psychiatric symptoms requiring specialised medical care, a gender identity assessment may be considered if the need for it continues after the other psychiatric symptoms have ceased and adolescent development is progressing normally.”

<https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en.pdf/aaf9a6e7-b970-9de9-165c-abedfae46f2e/Summary_minors_en.pdf>

“**Dr. Thomas Steensma** is a Dutch doctor who has long advocated for “treating” children with gender dysphoria by putting them on puberty-blockers and cross-sex hormones. Now, roughly a decade after his much-cited study advocating for the **“Dutch Protocol”** was released,Dr. Steensma is concerned. **“The rest of the world is blindly adopting our research,”** [he told a Dutch media outlet](https://www.ad.nl/nijmegen/dringend-meer-onderzoek-nodig-naar-transgenderzorg-aan-jongeren-waar-komt-de-grote-stroom-kinderen-vandaan~aec79d00/) recently.

Medical experimentation on children ought to be universally rejected, but shockingly, it is quickly becoming unquestionable. Partially to blame for this development is the “Dutch Protocol” which encourages doctors to give minors with gender dysphoria puberty-blockers followed by cross-sex hormones. Steensma’s study, arguing that this was in the best interest of children, played a significant role in popularizing this approach. Recently, Steensma has begun urging caution, saying that more research is needed.”

# “Dutch Doctor Who Pioneered Early Transgender Treatment Says World is “Blindly” Adopting His Approach,” March 12, 2021, <https://www.mfc.org/familybeacon/dutch-doctor-who-pioneered-early-transgender-treatment-says-world-is-blindly-adopting-his-approach>

Citing: <https://www.ad.nl/nijmegen/dringend-meer-onderzoek-nodig-naar-transgenderzorg-aan-jongeren-waar-komt-de-grote-stroom-kinderen-vandaan~aec79d00/>

“With 85% desistance amongst referred transgender children, and increasing awareness of detransitioning, **unquestioning ‘affirmation’ as a pathway that leads gender dysphoric patients to irreversible interventions cannot be considered sole or best practice**.”

(Salkind, Jessica, et al. “Safeguarding LGBT+ Adolescents.” BMJ, 2019, p. l245., doi:10.1136/bmj.l245.)

Regarding affirmation therapy : “There are some **serious concerns about this**

**approach**. The most striking implication of an approach that facilitates early transitioning is that **it may steer some children down a transgendered path who might have otherwise not desired to transition as they progress in development**. P**roponents** of the early transitioning model **have not addressed how the approach fits conceptually or clinically with the finding that the majority of children with GID show a desistance in adolescence**.”

(Singh, Devita. “A Follow up Study of Boys with Gender Dysphoria.” nymag.com, 2012, images. nymag.com/images/2/daily/2016/01/SINGH-DISSERTATION.pdf. P. 20.)

“In other words, “**gender dysphoria**” may be used as a **catch-all explanation** for any kind of distress, psychological pain, and discomfort that an AYA is feeling while **transition** is being promoted as a **cure-all solution**.”

(Littman, L. “**Rapid-onset gender dysphoria** in adolescents and young adults: A study of parental reports,” journals.plos.org, Aug. 16, 2018. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0202330>)

From **the Endocrine Society guidelines** themselves: “**Social transition is associated with the persistence of GD** as a child progresses into adolescence.”

(Hembree, W., Cohen-Kettenis, et al., (2017) Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guildeline. J Clin Endocrinol Metab,102:1–35.)

2020. At least **65 gender clinics in the US**, only one in 2007. Per Kelsey Coalition: <https://static.wixstatic.com/ugd/3f4f51_c295b2f528884acbb01fa3ac19ffb74a.pdf>

Camille Paglia: “…as a culture begins to decline, you have an efflorescence of transgender phenomena. That is a **symptom of cultural collapse**.”

"**Parents** are now encouraged to subject the child to procedures that I think are a **form of child abuse**. The hormones to slow puberty, actual surgical manipulations, etcetera. I think that this is **wrong**, that people should **wait until they are of an informed age of consent**.”

(“Paglia: ‘Transgender Mania’ is a Symptom of West's Cultural Collapse,” CNSnews.com, Nov. 3, 2015. From an Oct. 22, 2015 Brazilian TV interview.)

(Paglia YouTube video: “Lesson from History: Transgender Mania is Sign of Cultural Collapse - Camille Paglia” Dec. 14, 2016. <https://www.youtube.com/watch?v=I8BRdwgPChQ>)

**The chemical castration, sterilization and mutilation of children is not healthcare.**

“Trans Mission: What’s the Rush to Reassign Gender?” <https://www.youtube.com/watch?v=rUeqEoARKOA>

Dr. Van Meter says the chair emeritus of the Johns Hopkins Psychiatric division [Dr. Paul McHugh] told him this: **“I will tell you what is going to happen to change the tide.** There’s going to be major lawsuits by families or individuals who have been through this. Gone down that pathway and come back at the other side, and they are going to take down, not only the physicians, but the drug companies and the hospital healthcare systems, and the insurance companies that allowed this to happen, and that’s when this will all end.”

**2. THE PROBLEM OF ACCURATE DIAGNOSIS.**

“There are no objective tests—laboratory, imaging, or otherwise—to diagnose a "true transgender" child. By adulthood 61–98% will outgrow GD (Ristori and

Steensma 2016). There is no known way to predict who will desist and who will remain dysphoric.”

Michael Laidlaw, Michelle Cretella & Kevin Donovan (2019) The Right to Best Care for Children Does Not Include the Right to Medical Transition, The American Journal of Bioethics, 19:2, 75-77, DOI: [10.1080/15265161.2018.1557288](https://doi.org/10.1080/15265161.2018.1557288)

Citing: Ristori, J., and T. D. Steensma. 2016. Gender dysphoria in childhood. International Review of Psychiatry (Abingdon, England) 28(1): 13–20.

“There are no laboratory, imaging, or other objective tests to diagnose a "true transgender" child.” … “There is currently no way to predict who will desist and who will remain dysphoric.”

(**Michael K Laidlaw; Quentin L Van Meter; Paul W Hruz; Andre Van Mol; William J Malone. Letter to the Editor: “Endocrine Treatment** of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline” The Journal of Clinical Endocrinology & Metabolism, Volume 104, Issue 3, 1 March 2019, Pages 686–687, <https://doi.org/10.1210/jc.2018-01925>, Online, November 23, 2018)

**3. CONSENT**

**UK High Court in Bell vs. Tavistock** Dec. 12, 2020 ruled that GAT/TAT in minors was **experimental** and could not, in most cases, be given to minors **under 16 without court order**, and that such was advisable for those 16-17. They added, **“There is no age appropriate way to explain to many of these children what losing their fertility or full sexual function may mean to them in later years.”**

Conclusions section, paragraphs 133-153 is well worth the read.

<https://www.judiciary.uk/wp-content/uploads/2020/12/Bell-v-Tavistock-Judgment.pdf>

“**How can a child, adolescent, or even parent provide genuine consent to such a treatment?** How can the physician ethically administer gender affirming therapy knowing that a significant number of patients will be irreversibly harmed?”

(Michael K Laidlaw, Quentin L Van Meter, Paul W Hruz, Andre Van Mol, William J Malone, Letter to the Editor: “Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline” , The Journal of Clinical Endocrinology & Metabolism, Volume 104, Issue 3, March 2019, Pages 686–687.)

Dr. Levine lists a 2-fold summary of ethical tensions people of all ages requesting GAT: **“Does the patient have a clear idea of the risks of the services that are being requested? Is the consent truly informed?”**

“The World Professional Association for Transgender Health’s Standards of Care recommend an informed consent process, which is at odds with its recommendation

of providing hormones on demand.”

(Stephen B. Levine (2018): Informed Consent for Transgendered Patients,

Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2018.1518885)

“There is **much to suggest that the patient does not always know best**— for example, **post-transition depression, detransition, pre- and postsurgical suicide rates**, and that researchers have concluded that postoperative patients need psychiatric care (Dhejne et al., 2011 ; Simonsen, Giraldi, Kristensen, & Hald, 2016 ).”

Stephen B. Levine (2018): Informed Consent for Transgendered Patients,

Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2018.1518885.

Citing:

Dhejne C, Lichtenstein P, Boman M, Johansson ALV, Långström N, Landén M. Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden. *PLoS ONE* 2011; **6**(2): 1-8.

Simonsen RK, Giraldi A, Kristensen E, Hald GM. Long-term follow-up of individuals undergoing sex reassignment surgery: Psychiatric morbidity and mortality. *Nordic Journal of Psychiatry* 2016; **70**(4): 241-7.

**Children have developing brain, their minds change often, and they don’t grasp long-term consequences**.

Andre Van Mol, “Transing California Foster Children & Why Doctors Like Us Opposed It,” PublicDiscourse.com, October 28, 2018.

Cited therein:

National Institute of Mental Health (2001). Teenage Brain: A work in progress. <https://www.psychceu.com/Brain_Basics/teenbrain.pdf>

Pustilnik AC, and Henry LM. Adolescent Medical Decision Making and the Law of the Horse. *Journal of Health Care Law and Policy* 2012; 15:1-14.  (U of Maryland Legal Studies Research Paper 2013-14).

Stringer, H. (Oct. 2017) Justice for teens, *APA Monitor on Psychology*, pp. 44-49. <http://www.apamonitor-digital.org/apamonitor/201710/MobilePagedArticle.action?articleId=1169604&app=false#articleId1169604>

May 2, 2019 the Swedish Pediatric Society issues a letter of support for the Swedish National Council for Medical Ethics’ (SMER) proposal (for the Ministry of Social Affairs to systematically review treatment of youth with gender dysphoria) in which they cautioned, "Giving **children** the right to independently make vital decisions whereby **at that age they cannot be expected to understand the consequences of their decisions** is not scientifically founded and contrary to medical practice."

<http://www.barnlakarforeningen.se/2019/05/02/blf-staller-sig-bakom-smers-skrivelse-angaende-konsdysfori/>

 **Kids should not be making permanent decisions about altering their bodies.**

Andre Van Mol, “Transing California Foster Children & Why Doctors Like Us Opposed It,” PublicDiscourse.com, October 28, 2018.

"**Parents** are now encouraged to subject the child to procedures that I think are a **form of child abuse**. The hormones to slow puberty, actual surgical manipulations, etcetera. I think that this is **wrong**, that people should **wait until they are of an informed age of consent**.”

(“Paglia: ‘Transgender Mania’ is a Symptom of West's Cultural Collapse,” CNSnews.com, Nov. 3, 2015. From an Oct. 22, 2015 Brazilian TV interview.)

(Paglia YouTube video: “Lesson from History: Transgender Mania is Sign of Cultural Collapse - Camille Paglia” Dec. 14, 2016. <https://www.youtube.com/watch?v=I8BRdwgPChQ>)

**4**. **ETHICS**

“Respect for patient **autonomy** enables patients to make decisions; **nonmaleficience requires that the professional discuss these risks.**”

“Although the mental health professional would seem to be the professional who is best equipped to answer the question whether the patient is in a psychological state that can tolerate being informed about the risks, no physician is exempt from making this determination. **This question is no less paternalistic than the assumption that competence in this arena is characterized by the commitment to advocacy.”**

(Stephen B. Levine (2018): Informed Consent for Transgendered Patients,

Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2018.1518885)

**Several outstanding tables of concerns here**.

Stephen B. Levine (2017): Ethical Concerns About Emerging Treatment Paradigms for Gender Dysphoria, Journal of Sex & Marital Therapy, DOI:

10.1080/0092623X.2017.1309482.

The **Swedish National Council for Medical Ethics** (SMER) recommended of the Ministry of Social Affairs a systematic review of the scientific literature regarding assessment of youths with gender dysphoria, long-term physical and mental effects, desistance, treatment regret, analysis of “**prescribing off-label puberty blockers and cross-sex hormones” to youths**, and an immediate update of the Ministry’s guidance document. SMER was concerned about “**ethical questions around** gender dysphoria, gaps and uncertainties in the knowledge we have on the subject”

 Kjell Asplund, National Council for Medical Ethics (Sweden), 2019-04-26,

 Dnr Komm2019/00368/S1985:A (pdf available on request)

See more under related sections.

**UK High Court in Bell vs. Tavistock** Dec. 12, 2020 ruled that PB and CSH in minors was **experimental** and could not, in most cases, be given to minors **under 16 without court order**, and that such was advisable for those 16-17.

* Though stipulating that a court order should usually be sought for PB use in gender dysphoric children under age 16, they advised that even for minors under age 16-17, “clinicians may well regard these as cases where the authorisation of the court should be sought prior to commencing the clinical treatment.” (para. 152.)
* They added (para. 144), **“There is no age appropriate way to explain to many of these children what losing their fertility or full sexual function may mean to them in later years.”**
* (para. 141): “That **adolescents find it difficult** to contemplate or comprehend what their life will be like as adults and that they **do not always consider the longer-term consequences of their actions** is perhaps a statement of the obvious.”

<https://www.judiciary.uk/wp-content/uploads/2020/12/Bell-v-Tavistock-Judgment.pdf>

**5. IRREVERSIBILITY**

(My distillation): A patient who **undergoes gender transitioning will be a patient for the rest of their life. Lifelong need for sex hormones and management of their complications**; along with further surgeries and management of surgical consequences, complications and shortcomings must be taken into consideration.

(Moore E, Wisniewski A, Dobs A. Endocrine treatment of transsexual people: a review of treatment regimens, outcomes, and adverse effects. *J Clin Endocrinol Metab* 2003;88:3467-3473.

Feldman J, Brown GR, Deutsch MB, et al. Priorities for transgender medical and healthcare research. Curr Opin *Endocrinol Diabetes Obes* 2016;23:180-187.)

**Sweden’s Karolinska Hospital** (affectingAstrid Lindgren Children’s Hospital’s pediatric gender services) issues a **policy change effective April 1, 2021**:

* “These treatments are potentially fraught with extensive and irreversible adverse consequences such as cardiovascular disease, osteoporosis, infertility, increased cancer risk, and thrombosis.”
* “…hormonal treatments (*i.e., puberty blocking and cross-sex hormones, see above*) will not be initiated in gender dysphoric patients under the age of 16.”
* “For patients between ages 16 and 18, it is hereby decided that treatment may only occur within the clinical trial settings approved by the EPM (*Ethical Review Agency/Swedish Institutional Review Board*).”

[Karolinska Policyförändring K2021-3343 March 2021 (Swedish).pdf](https://segm.org/sites/default/files/Karolinska%20Policyfo%CC%88ra%CC%88ndring%20K2021-3343%20March%202021%20%28Swedish%29.pdf)

[Karolinska Policy Change K2021-3343 March 2021 (English, unofficial translation).pdf](https://segm.org/sites/default/files/Karolinska%20Policy%20Change%20K2021-3343%20March%202021%20%28English%2C%20unofficial%20translation%29.pdf)

Royal College of General Practitioners Position Statement, “The role of the GP in caring for gender-questioning and transgender patients,” June 2019.

“Children who have been on GnRH for a certain period of time and are roughly 16 years of age can be offered cross-sex hormones by the NHS, the effects of which can be irreversible.”

<https://www.rcgp.org.uk/-/media/Files/Policy/A-Z-policy/2019/RCGP-transgender-care-position-statement-june-2019.ashx?la=en>

Citing: C. Heneghan, T. Jefferson, ‘Gender-affirming hormone in children and adolescents; BMJ EBM, 25 February 2019.

From **the Endocrine Society guidelines** themselves: “**Social transition is associated with the persistence of GD** as a child progresses into adolescence.”

Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. *The Journal of Clinical Endocrinology & Metabolism* 2017; **102**(11): 3869-903

UCSF Transgender Care web page section “Health considerations for gender nonconforming children and transgender adolescents,” subsection “Preparing for gender-affirming hormone use in transgender youth,” states,

* “The consent process for hormones should include a conversationabout fertility. While options are being explored to preserve future fertility for transgender youth, the current reality is that cryopreservation is very expensive, in many cases prohibitively so for those with ovaries. For youth whose pubertal process has been suspended in the earliest stages, followed by administration of gender-affirming hormones, development of mature sperm or eggs is unlikely at the present time…”[[2]](#footnote-1)

Consent forms obtained from Children’s Hospital Los Angeles, “PUBERTAL BLOCKERS FOR MINORS IN EARLY ADOLESCENCE, Parent or Guardian Consent, subsection “Risks of Puberty Blockers” warns:

* “If your child starts puberty blockers in the earliest stages of puberty, and then goes on to gender affirming hormones, they will not develop sperm or eggs. This means that they will not be able to have biological children.”

“Rather than claiming that puberty suppression is reversible, researchers and clinicians should focus on the question of whether the physiological and psychosocial development that occurs during puberty can resume in something resembling a normal way after puberty-suppressing treatments are withdrawn.”

Paul W. Hruz, Lawrence S. Mayer, and Paul R. McHugh, "Growing Pains: Problems with Puberty Suppression in Treating Gender Dysphoria," *The New Atlantis*, Number 52, Spring 2017, pp. 3-36. <https://www.thenewatlantis.com/publications/growing-pains#reversibility>

“With 85% desistance amongst referred transgender children, and increasing awareness of detransitioning, **unquestioning ‘affirmation’ as a pathway that leads gender dysphoric patients to irreversible interventions cannot be considered sole or best practice**.”

(Salkind, Jessica, et al. “Safeguarding LGBT+ Adolescents.” BMJ, 2019, p. l245., doi:10.1136/bmj.l245.)

“In my view, there are **reasons to be skeptical about the merit in recommending an early gender social transition as a first-line treatment**. One should recognize that if one **peruses carefully the follow-up studies** of young children with gender dysphoria (or traits of gender dysphoria), **the majority of such children do not have gender dysphoria when followed up in adolescence or adulthood** (Zucker, 2018).” … “If this is, in fact, the case, one might ask why would one recommend a first-line treatment that is, in effect, **iatrogenic**.”

Zucker, K. J. (2019), Debate: Different strokes for different folks. Child Adolesc Ment Health. doi:[10.1111/camh.12330](https://doi.org/10.1111/camh.12330)

“A gender social transition in prepubertal children is a form of psychosocial treatment that aims to reduce gender dysphoria, but with the **likely consequence of subsequent (lifelong) biomedical treatments** as well (gender-affirming hormonal treatment and surgery).”

Zucker, K. Debate: Different strokes for different folks. *Child and Adolescent Mental Health*. Accepted for publication: 18 March 2019

**From *Council for Choices in Health Care in Finland (COHERE Finland)*** 2020**:**

“In addition, it must be confirmed that the young person is able to understand the **significance of irreversible treatments** and the benefits and disadvantages associated with lifelong hormone therapy, and that no contraindications are present.”

<https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en.pdf/aaf9a6e7-b970-9de9-165c-abedfae46f2e/Summary_minors_en.pdf>

**6. EXPERIMENTAL NATURE**

See in other sections of GAT RISKS PB and CSH, and GAT is not the int’l standard

“puberty suppression as a reversible medical intervention was **introduced in**

**clinical care in the early 2000s by Dutch clinicians** Cohen-Kettenis et al.2”

Annelou L.C. de Vries. Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents. Pediatrics Sep 2020, e2020010611; DOI: 10.1542/peds.2020-010611.

 Citing:

Cohen-Kettenis PT, Delemarre-van de Waal HA, Gooren LJ. The treatment of

adolescent transsexuals: changing insights. J Sex Med. 2008;5(8):1892–1897

“Limitations of the existing transgender literature include general lack of randomized prospective trial design, small sample size, recruitment bias, short study duration, high subject dropout rates, and reliance on “expert” opinion.”

Hruz, P. W. (2020). **Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria.***The Linacre Quarterly*, *87*(1), 34–42. <https://doi.org/10.1177/0024363919873762>

Richards C, Maxwell J, McCune N. **Use of puberty blockers for gender dysphoria: a momentous step in the dark.** *Archives of Disease in Childhood*2019;**104:**611-612.

**United Kingdom High Court case ruling in Bell vs. Tavistock** Dec. 12, 2020.

* Ruled that puberty blockers and cross-sex hormones constitute **experimental** treatments with **limited evidence for efficacy and safety** which cannot, in most cases, be given to children under 16 years of age without application to the court. **Even for minors under aged 16-17,** the High Court advised “clinicians may well regard these as cases where the authorisation of the court should be sought prior to commencing the clinical treatment.” (para. 152.)
* Court’s repeated declaration in their conclusion of affirming therapy’s **experimental nature and unknown long-term consequences**: 134, 143, 148, 151, 152
* They added, “There is **no age appropriate way to explain** to many of these children what losing their fertility or full sexual function may mean to them in later years.” (para.144.)
* (para. 141): “That **adolescents find it difficult** to contemplate or comprehend what their life will be like as adults and that they **do not always consider the longer-term consequences of their actions** is perhaps a statement of the obvious.”

<https://www.judiciary.uk/wp-content/uploads/2020/12/Bell-v-Tavistock-Judgment.pdf>

NHS Amendments to service specifications for Gender Identity Development Service (GIDS) for children and adolescents, effective 01 Dec 2020. <https://www.england.nhs.uk/wp-content/uploads/2020/12/Amendment-to-Gender-Identity-Development-Service-Specification-for-Children-and-Adolescents.pdf>

* Patient under 16 cannot be referred to pediatric endocrinology for puberty blockers without Court order.
* GIDS must complete “full clinical review of each patient” under 16 on puberty blockers, and obtain Court order if they are thought to be best served by PBA and/or cross sex hormones.
* GIDS “must ensure that appropriate psychosocial support and psychological therapies are available to patients who are removed from puberty blockers, and to their families and carers;” plus other appropriate support and consultations.
* For children 16 to 17 yo – given patient competence, parental consent, and hormonal treatment deemed appropriate – “treatment may proceed.” Even then, the provider to consider Court petition “if there is doubt about the patient’s ‘best interests.’”

**Royal College of General Practitioners Position Statement**, “The role of the GP in caring for gender-questioning and transgender patients,” June 2019.

“The significant **lack of evidence for treatments and interventions** which may be offered to people with dysphoria is a major issue facing this area of healthcare. There are also differences in the types and stages of treatment for patients with gender dysphoria depending on their age or stage of life. Gonadorelin (GnRH) analogues are one of the main types of treatment for young people with gender dysphoria. These have long been used to treat young children who start puberty too early, however less is known about their long-term safety in transgender adolescents. **Children who have been on GnRH for a certain period of time and are roughly 16 years of age can be offered** **cross-sex hormones by the NHS, the effects of which can be irreversible**.15 **There is a significant lack of robust, comprehensive evidence around the outcomes, side effects and unintended consequences of such treatments** for people with gender dysphoria, particularly children and young people, which prevents GPs from helping patients and their families in making an informed decision.”

<https://www.rcgp.org.uk/-/media/Files/Policy/A-Z-policy/2019/RCGP-transgender-care-position-statement-june-2019.ashx?la=en>

[“15.” C. Heneghan, T. Jefferson, ‘Gender-affirming hormone in children and adolescents; BMJ EBM, 25 February 2019. ]

Editor in chief of the BMJ Carl **Heneghan** wrote, “**There are significant problems with how the evidence for Gender-affirming cross sex hormone has been collected and analyzed that prevents definitive conclusions** to be drawn.”

 “**An Archive of Diseases in Childhood letter referred to GnRH treatment as a**

**momentous step in the dark**. It set out **three main concerns**: 1) Young people are left in a state of developmental limbo without secondary sexual characteristics that might consolidate gender identity **2) use is likely to threaten the maturation of the adolescent mind,** and 3) puberty blockers are being used in the context of profound scientific ignorance.”

He concludes, “**The current evidence does not support informed decision making and safe practice in children**.”

Heneghan, Carl. “Gender-Affirming Hormone in Children and Adolescents.” BMJ EBM Spotlight, 21 May 2019, blogs.bmj.com/bmjebmspotlight/2019/02/25/gender-affirming-hormone-inchildren-and-adolescents-evidence-review/.

Referencing: (Richards C, Maxwell J, McCune N. Use of puberty blockers for gender dysphoria: **a momentous step in the dark.** *Archives of Disease in Childhood*2019;**104:**611-612.)

What of WPATH’s SOC **argument that it is unethical to do a controlled study of anything except gender affirmation treatments** because failure to affirm is inherently harmful?

Pediatric endocrinologist **Paul Hruz** (e-mail, 3/29/21)

“The problem with the argument that is is unethical to do a controlled study is the erroneous assumption that the control group will not receive care.  A properly controlled trial provides the same interventions in all aspects of care except for the independent variable.  To be effective while ensuring subject safety, it is necessary to have a clearly developed hypothesis, a single study objective, defined endpoint, a feasible intervention regimen and anticipation of potential problems during the conduct of the experiment. With clear a priori delineation of potential adverse events and use of an "intention to treat" analysis, one can maintain safety without artificially biasing results.”

**Sweden’s Karolinska Hospital** (affectingAstrid Lindgren Children’s Hospital’s pediatric gender services) issues a policy change **effective April 1, 2021**:[[3]](#footnote-2)

* “…hormonal treatments (*i.e., puberty blocking and cross-sex hormones, see above*) will not be initiated in gender dysphoric patients under the age of 16.”
* “For patients between ages 16 and 18, it is hereby decided that treatment may only occur within the clinical trial settings approved by the EPM (*Ethical Review Agency/Swedish Institutional Review Board*).”
* “These changes shall not affect the continued psychological and psychiatric care within BUP (*Public Child and Adolescent Psychiatry*) for patients under 18 years of age.” “The patient must receive comprehensive information about potential risks of the treatment…”
* Cited UK High Court Decision, NHS policy change in light of it, and that in “2019, the SBU (*Swedish Agency for Health Technology Assessment and Assessment of Social Services*) published an overview of the knowledge base which showed a lack of evidence for both the long-term consequences of the treatments, and the reasons for the large influx of patients in recent years.”[[4]](#footnote-3)
* “These treatments are potentially fraught with extensive and irreversible adverse consequences such as cardiovascular disease, osteoporosis, infertility, increased cancer risk, and thrombosis.”

[Karolinska Policyförändring K2021-3343 March 2021 (Swedish).pdf](https://segm.org/sites/default/files/Karolinska%20Policyfo%CC%88ra%CC%88ndring%20K2021-3343%20March%202021%20%28Swedish%29.pdf)

[Karolinska Policy Change K2021-3343 March 2021 (English, unofficial translation).pdf](https://segm.org/sites/default/files/Karolinska%20Policy%20Change%20K2021-3343%20March%202021%20%28English%2C%20unofficial%20translation%29.pdf)

**7. SOCIAL TRANSITIONING IS COMMITAL**

“In my view, there are **reasons to be skeptical about the merit in recommending an early gender social transition as a first-line treatment**. One should recognize that if one **peruses carefully the follow-up studies** of young children with gender dysphoria (or traits of gender dysphoria), **the majority of such children do not have gender dysphoria when followed up in adolescence or adulthood** (Zucker, 2018).” … “If this is, in fact, the case, one might ask why would one recommend a first-line treatment that is, in effect, **iatrogenic**.”

Zucker, K. J. (2019), Debate: Different strokes for different folks. Child Adolesc Ment Health. doi:[10.1111/camh.12330](https://doi.org/10.1111/camh.12330)

From **the Endocrine Society guidelines** themselves: “**Social transition is associated with the persistence of GD** as a child progresses into adolescence.”

(Hembree, W., Cohen-Kettenis, et al., (2017) Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guildeline. J Clin Endocrinol Metab,102:1–35.)

“A gender social transition in prepubertal children is a form of psychosocial treatment that aims to reduce gender dysphoria, but with the **likely consequence of subsequent (lifelong) biomedical treatments** as well (gender-affirming hormonal treatment and surgery).”

Zucker, K. Debate: Different strokes for different folks. *Child and Adolescent Mental Health*. Accepted for publication: 18 March 2019

**GAT (GENDER AFFIRMING THERAPY) RISKS**

**1. PUBERTY BLOCKING**

**Supprellin LA** is a device that is surgically implanted under the skin and contains the puberty blocker histerelin which is slowly released. It suppresses puberty for 1 year. Its indication is for precocious puberty.

* Product info: <https://www.supprelinla.com/>
* Note the warnings in the prescribing info:

"Psychiatric Events: Have been reported in patients taking GnRH agonists. Events include emotional lability, such as crying, irritability, impatience, anger, and aggression. Monitor for development or worsening of psychiatric symptoms."

* Here is a site which discusses cost:

"The cost for Supprelin LA subcutaneous implant 50 mg is around $44,973 for a supply of 1 implant," [Supprelin LA Prices, Coupons & Patient Assistance Programs - Drugs.com](https://www.drugs.com/price-guide/supprelin-la)

**Lupron package insert**:

Under “ADVERSE REACTIONS”

 “In postmarketing experience, **mood swings, depression, rare reports of suicidal ideation and attempt**, …”

Under “6.5 Postmarketing”

“Like other drugs in this class, **mood swings, including depression**, have been reported. There have been **very rare reports of suicidal ideation and attempt**. Many, but not all, of these patients had a history of depression or other psychiatric illness. **Patients should be counseled on the possibility of development or worsening of depression** during treatment with LUPRON.”

**Lupron Victims Hub**: <http://lupronvictimshub.com/lawsuits.html>

“Those started on PB [puberty blocking] at **Tanner stage II,** as recommended by guidelines, **will be blocked prior to sperm maturation and ovum release**.”

Laidlaw MK, Van Meter QL, Hruz PW, Van Mol A, Malone WJ. Letter to the Editor:“Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline”. *The Journal of Clinical Endocrinology & Metabolism* 2019; **104**(3): 686-7.

**Sex gametes (sperm and ova), require natural puberty** to mature to the point that they are viable for reproduction. **Administering cross-sex hormones in young children concurrently or immediately following puberty blockers means that these reproductive cells will never mature and infertility is the result**.

Howard E. Kulin, et al., “The Onset of Sperm Production in Pubertal Boys. Relationship to Gonadotropin Excretion,” American Journal of Diseases in Children 143, no. 2 (March, 1989): 190-193,

<https://www.ncbi.nlm.nih.gov/pubmed/2492750>.

“I believe that in adolescence, hypothalamic inhibitors should never be given, because they interfere not only with emotional development, but [also] with the integration process among the various internal and external aspects characterizing the transition to adulthood.” –Psychiatrist

Vrouenraets, Lieke Josephina Jeanne Johanna, et al. “Early Medical Treatment of Children and Adolescents With Gender Dysphoria: An Empirical Ethical Study.” Journal of Adolescent Health, vol. 57, no. 4, 2015, pp. 367–373., doi:10.1016/j.jadohealth.2015.04.004.

Puberty blockers chemically castrate both sexes at the level of the brain;

* Lupron Depot-Ped Injection Label (August 2012) at 12.1 “Mechanism of Action” <https://www.accessdata.fda.gov/drugsatfda_docs/label/2011/020263s036lbl.pdf>;
* Leonard G. Gomella, “Effective Testosterone Suppression for Prostate Cancer: Is There a Best Castration Therapy?” *Reviews in Urology* 11(2):52-60 (2009).
* Silva ÉD, Ferreira U, Matheus W, et al. Goserelin versus leuprolide in the chemical castration of patients with prostate cancer. *Int Urol Nephrol* 2012; 44(4): 1039-44.
* Shim M, Bang WJ, Oh CY, Lee YS, Cho JS. Effectiveness of three different luteinizing hormone-releasing hormone agonists in the chemical castration of patients with prostate cancer: Goserelin versus triptorelin versus leuprolide. *Investigative and clinical urology* 2019; **60**(4): 244-50.
* Christina Jewett, “Drug used to halt puberty in children may cause lasting health problems” *Stat* (February 2, 2017), <https://www.statnews.com/2017/02/02/lupron-puberty-children-health-problems/>.

In some states, they are used to chemically castrate sex offenders, and that’s what they do to children.

James Hamblin, Alabama Moves to State-Ordered Castration” *The Atlantic* (June 11, 2019), <https://www.theatlantic.com/health/archive/2019/06/alabama-chemical-castration/591226/>.

Blakemore, S.‐J., Burnett, S. and Dahl, R.E. (2010), The role of puberty in the developing adolescent brain. Hum. Brain Mapp., 31: 926-933. doi:[10.1002/hbm.21052](https://doi.org/10.1002/hbm.21052)

The loss of puberty time frame relative to self and peers cannot be replaced. (not a quote)

Hruz, P. W. (2020). Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria. *The Linacre Quarterly*, *87*(1), 34–42. <https://doi.org/10.1177/0024363919873762>

Paul W. Hruz, Lawrence S. Mayer, and Paul R. McHugh, "Growing Pains: Problems with Puberty Suppression in Treating Gender Dysphoria," *The New Atlantis*, Number 52, Spring 2017, pp. 3-36.

AAP’s HealthDay reported (April 2017) U of Iowa study that kids younger than 14yo could not reliably cross a busy street safely.

* + <https://consumer.healthday.com/kids-health-information-23/child-safety-news-587/at-what-age-can-kids-safely-cross-the-street-721785.html>.
	+ So how can they be competent to choose GAT?

More recent study:

O'Neal EE, Jiang Y, Franzen LJ, et al. Changes in perception-action tuning over long time scales: How children and adults perceive and act on dynamic affordances when crossing roads. *J Exp Psychol Hum Percept Perform* 2018; **44**(1): 18-26.

**UK Tavistock/GIDS study 2020**: “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.”

**"Results** 44 patients had data at 12 months follow-up, 24 at 24 months and 14 at 36 months. All had normal karyotype and endocrinology consistent with birth-registered sex. All achieved suppression of gonadotropins by 6 months. At the end of the study one ceased GnRHa and 43 (98%) elected to start cross-sex hormones.

There was no change from baseline in spine BMD at 12 months nor in hip BMD at 24 and 36 months, but at 24 months lumbar spine BMC and BMD were higher than at baseline (BMC +6.0 (95% CI: 4.0, 7.9); BMD +0.05 (0.03, 0.07)). There were no changes from baseline to 12 or 24 months in CBCL or YSR total t-scores or for CBCL or YSR self-harm indices, nor for CBCL total t-score or self-harm index at 36 months. Most participants reported positive or a mixture of positive and negative life changes on GnRHa. Anticipated adverse events were common.

**Conclusions** Overall patient experience of changes on GnRHa treatment was positive. We identified no changes in psychological function. Changes in BMD were consistent with suppression of growth. Larger and longer-term prospective studies using a range of designs are needed to more fully quantify the benefits and harms of pubertal suppression in GD."

Polly Carmichael, Gary Butler, Una Masic, Tim J Cole, Bianca L De Stavola, SarahDavidson, Elin M. Skageberg, Sophie Khadr, Russell Viner. 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. medRxiv 2020.12.01.20241653; doi:https://doi.org/10.1101/2020.12.01.20241653

Summary Points:

* Took 9 years to produce yet had only 44 participants, suggesting ample loss to follow up or removal from study.
* No control group of GD youth not given PBs.
* “All had normal karyotype and endocrinology” function in GD youth.
	+ More proof that DSDs/Intersex are not GD issues.
* 98% went on from puberty blocking to CSH.
	+ GnRHas are gateway drugs, stepping stones to GAT/TAT.
* BMD and growth/height both showed “suppression of growth” precisely when they should be having the surge of the lifetime.
	+ “As anticipated, pubertal suppression reduced growth that was dependent on puberty hormones, i.e. height and BMD. Height growth continued for those not yet at final height, but more slowly than for their peers so height z-score fell. Similarly for bone strength, BMD and BMC increased in the lumbar spine indicating greater bone strength, but more slowly than in peers so BMD z-score fell.”
* Self-harm did not improve and “no changes in psychological function,” meaning no improvement. (Also, “YSR [Youth Self Report] data at 36 months (n = 6) were not analysed.”)
	+ “We found no differences between baseline and later outcomes for overall psychological distress as rated by parents and young people, nor for self-harm.”
	+ “We found no evidence of change in psychological function with GnRHa treatment as indicated by parent report (CBCL) or self-report (YSR) of overall problems, internalising or externalising problems or self-harm. This is in contrast to the Dutch study which reported improved psychological function across total problems, externalising and internalising scores for both CBCL and YSR and small improvements in CGAS.”

2019, de Graaf, et al., “…it is important to keep in mind that **physical treatments are not always associated with a resolution** in **mental health difficulties**. In some cases, **mental health problems can emerge while on physical treatment**.”

de Graaf NM, Carmichael P. Reflections on emerging trends in clinical work with gender diverse children and adolescents. *Clinical Child Psychology and Psychiatry*. 2019;24(2):353-364. doi:[10.1177/1359104518812924](https://doi.org/10.1177/1359104518812924)

**1.A. MYTH OF “BUYING TIME” AND “WAIT AND SEE” ON PBA.**

“**Instead of allowing adolescents more time to** **“wait and see”** and evaluate their gender identity options, **puberty blocking treatment may unintentionally push adolescents towards cross sex hormonal treatment and sex reassignment surgery**.”

“**Allowing children to socially transition in childhood may have the effect of increasing the chances of persistence** into adolescence and adulthood.”

Singh, Devita. “A Follow up Study of Boys with Gender Dysphoria.” nymag.com, 2012, images.nymag.com/images/2/daily/2016/01/SINGH- DISSERTATION.pdf.

“PBA compound the problem of natural desistance in a profound way. In a study of 70 adolescents who were followed **after receiving PBA, 100% desired to continue on to cross-sex hormones (de Vries et al. 2011).** The natural pattern of desistance has been broken, either because of physiologic or psychological effects of PBA or a combination of the two. **Adolescents who would have otherwise desisted instead retain the notion** that their gender identity and sex do not match and are thereby guaranteed to risk developing the problems addressed in the preceding.”

**Michael Laidlaw**, Michelle Cretella, Kevin Donovan, ***The Right to Best Care for Children Does Not Include the Right to Medical Transition***, American Journal of Bioethics, 19 (2):75-77 (2019). <https://doi.org/10.1080/15265161.2018.1557288>

Cited:

de Vries, A. L. C., T. D. Steensma, T. A. H. Doreleijers, and P. T. Cohen-Kettenis. 2011. Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. The Journal of Sexual Medicine 8(8): 2276–2283. doi: 10.1111/j.1743-6109.2010.01943.x.

“In a study of PB in adolescents aged 11-17, **100% desired to continue GAT**. They **simply "bought" themselves lower bone density and the need for lifelong medical therapy** [5].”

Michael K Laidlaw; Quentin L Van Meter; Paul W Hruz; Andre Van Mol; William J Malone. Letter to the Editor: “Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline” *The Journal of Clinical Endocrinology & Metabolism*, Volume 104, Issue 3, 1 March 2019, Pages 686–687, <https://doi.org/10.1210/jc.2018-01925>, Online, November 23, 2018.

Cited:

5. De Vries ALC, Steensma TD, Doreleijers TAH, Cohen-Kettenis, PT. Puberty suppression in adolescents with gender identity disorder: a prospective follow-up study. J Sex Med. 2011;8:2276-2283.

**Stopping use of PBAs is low**:

* 1.4% per Wiepjes CM, Nota NM, de Blok CJM, et al. The Amsterdam cohort of gender dysphoria study (1972-2015): trends in prevalence, treatment, and regrets. J Sex Med. 2018;15(4):582–590
* 1.9% per Brik T, Vrouenraets LJJJ, de Vries MC, Hannema SE. Trajectories of

adolescents treated with gonadotropinreleasing hormone analogues for gender dysphoria [published online ahead of print March 9, 2020]. Arch Sex Behav. doi:10.1007/s10508-020-01660-8

* 3.5% per Kuper LE, Stewart S, Preston S, Lau M, Lopez X. Body dissatisfaction and mental health outcomes of youth on gender-affirming hormone therapy. Pediatrics. 2020;145(4):e20193006
* 1 of 44 (2%) “At the end of the study one ceased GnRHa and 43 (98%) elected to start cross-sex hormones.” UK Tavistock GIDS 2020. Polly Carmichael, 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. medRxiv 2020.12.01.20241653;  doi:https://doi.org/10.1101/2020.12.01.20241653

"However, **systematic studies on the rate of adolescents who discontinue their transitions after they have started affirming hormones or surgeries with lasting effects are lacking at present**.”[[5]](#footnote-4)

Annelou L.C. de Vries. Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents. Pediatrics Sep 2020, e2020010611; DOI: 10.1542/peds.2020-010611

“The evidence shows that the vast majority of children who take PBs move on to take cross-sex hormones, that Stages 1 and 2 are **two stages of one clinical pathway** and once on that pathway it is **extremely rare for a child to get off it**.” (Para. 136.)

“Indeed, the statistical correlation between the use of puberty blockers and cross-sex hormones supports the case that it is appropriate to view **PBs as a stepping stone to cross-sex hormones**.” (Para. 137.)

UK High Court in Bell vs. Tavistock Dec. 12, 2020, <https://www.judiciary.uk/wp-content/uploads/2020/12/Bell-v-Tavistock-Judgment.pdf>

“From a psychological perspective, the main dilemma is to understand whether buying time at such a precocious age truly enables children to explore deep personal meanings, or whether it freezes youngsters in a prolonged child-hood, secluding them from certain aspects of reality and isolating them from peer groups.”

Giovanardi, G. Buying time or arresting development? The dilemma of administering hormone blockers in trans children and adolescents. Porto Biomedical Journal. 2(5):153–156, SEP 2017. DOI: 10.1016/j.pbj.2017.06.001

**1.B. EXPERIMENTAL AND CONTROVERSIAL, OFF-LABEL USE.**

(My distillation): The **National Institutes of Health** in 2015 began a study of transgender youth that is **the first to track medical effects of delaying puberty and only the second to follow its psychological impacts**. It will not be completed until 2020. This study is only for **5 years, not long** **enough** to learn long term/endpoint outcomes.

Olson-Kennedy J, Chan Y-M, Garofalo R, et al. Impact of early medical treatment for transgender youth: Protocol for the longitudinal, observational trans youth care study. *JMIR Research Protocols* 2019; **8**(7): e14434. (<https://www.researchprotocols.org/2019/7/e14434/pdf>)

**Being the first means it cannot be the standard of care. It’s an experiment run amok.**

“Potential longer-term medical and surgical risks are currently not well defined…”

Radix A, Davis AM. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons. *JAMA.*2017;318(15):1491–1492. doi:10.1001/jama.2017.13540

Swedish **psychiatrist** **Dr. Christopher Gillberg** asserts pediatric transition is **“possibly one of the greatest scandals in medical history”**and proposes “an immediate moratorium on the use of puberty blocker drugs because of their unknown long-term effects.”

<https://thebridgehead.ca/2019/09/25/world-renowned-child-psychiatrist-calls-trans-treatments-possibly-one-of-the-greatest-scandals-in-medical-history/>

The **UC San Francisco Center of Excellence for Transgender Health** states, “**the impact** of GnRH analogues [puberty blockers] administered to transgender youth in **early puberty and <12 years of age has not been published**.”

“Olson-Kennedy J, Rosenthal SM, Hastings J, Wesp L. UCSF Transgender Care & Treatment Guidelines: Health considerations for gender non-conforming children and transgender adolescents. 2016. <https://transcare.ucsf.edu/guidelines/youth> (accessed September 4 2020).

**European Medicines Agency** recommended in June 2018 that drug information leaflets for **leuprorelin** now include potential **risk for interstitial lung disease**.

<https://www.ema.europa.eu/en/documents/psusa/leuprorelin-cmdh-scientific-conclusions-grounds-variation-amendments-product-information-timetable/00001844/201707_en.pdf>

“One need only examine the **labeling for Lupron** to find very concerning neuropsychological effects. Reported side effects include **emotional lability, mood changes, headaches, nervousness, anxiety, agitation, confusion, delusions, insomnia, and depression**. The label cautions providers to **“monitor for development or worsening of psychiatric symptoms**. Use with caution in patients with a history of psychiatric illness.”

Laidlaw M., “The Pediatric Endocrine Society’s Statement on Puberty Blockers Isn’t Just Deceptive. It’s Dangerous.” ThePublicDiscourse.com, Jan. 13, 2020. <https://www.thepublicdiscourse.com/2020/01/59422/>

**Lupron package insert**:

Under “ADVERSE REACTIONS”

 “In postmarketing experience, **mood swings, depression, rare reports of suicidal ideation and attempt**, …”

Under “6.5 Postmarketing”

“Like other drugs in this class, **mood swings, including depression**, have been reported. There have been **very rare reports of suicidal ideation and attempt**. Many, but not all, of these patients had a history of depression or other psychiatric illness. **Patients should be counseled on the possibility of development or worsening of depression** during treatment with LUPRON.”

**Lupron Victims Hub**: <http://lupronvictimshub.com/lawsuits.html>

**Supprellin LA** is a device that is surgically implanted under the skin and contains the puberty blocker histerelin which is slowly released. It suppresses puberty for 1 year. Its indication is for precocious puberty.

* Product info: <https://www.supprelinla.com/>
* Note the warnings in the prescribing info:

**"Psychiatric Events:** Have been reported in patients taking GnRH agonists. Events include emotional lability, such as crying, irritability, impatience, anger, and aggression. Monitor for development or worsening of psychiatric symptoms."

2019, de Graaf, et al., “…it is important to keep in mind that **physical treatments are not always associated with a resolution** in **mental health difficulties**. In some cases, **mental health problems can emerge while on physical treatment**.”

de Graaf NM, Carmichael P. Reflections on emerging trends in clinical work with gender diverse children and adolescents. *Clinical Child Psychology and Psychiatry*. 2019;24(2):353-364. doi:[10.1177/1359104518812924](https://doi.org/10.1177/1359104518812924)

“Children who have been on GnRH for a certain period of time and are roughly 16 years of age can be offered **cross-sex hormones by the NHS, the effects of which can be irreversible**.15 **There is a significant lack of robust, comprehensive evidence around the outcomes, side effects and unintended consequences of such treatments** for people with gender dysphoria, particularly children and young people, which prevents GPs from helping patients and their families in making an informed decision.”

(<https://www.rcgp.org.uk/-/media/Files/Policy/A-Z-policy/2019/RCGP-transgender-care-position-statement-june-2019.ashx?la=en> , p.5)

“15.” Heneghan C, Jefferson T. Gender-affirming hormone in children and adolescents. February 25, 2019. <https://blogs.bmj.com/bmjebmspotlight/2019/02/25/gender-affirming-hormone-in-children-and-adolescents-evidence-review/> (accessed September 4, 2020).

Editor in chief of the BMJ Carl **Heneghan** wrote, “**There are significant problems with how the evidence for Gender-affirming cross sex hormone has been collected and analyzed that prevents definitive conclusions** to be drawn.”

 “**An Archive of Diseases in Childhood letter referred to GnRH treatment as a**

**momentous step in the dark**. It set out **three main concerns**: 1)Young people are left in a state of developmental limbo without secondary sexual characteristics that might consolidate gender identity **2) use is likely to threaten the maturation of the adolescent mind,** and 3) puberty blockers are being used in the context of profound scientific ignorance.”

He concludes, “**The current evidence does not support informed decision making and safe practice in children**.”

(Heneghan, Carl. “Gender-Affirming Hormone in Children and Adolescents.” BMJ EBM Spotlight, February 25, 2019,

blogs.bmj.com/bmjebmspotlight/2019/02/25/gender-affirming-hormone-inchildren-and-adolescents-evidence-review/.)

Referencing: (Richards C, Maxwell J, McCune N. Use of puberty blockers for gender dysphoria: a momentous step in the dark. *Archives of Disease in Childhood*2019;**104:**611-612.)

**Professor Michael Biggs of Oxford**

Regarding the UK’s Tavistock and Portman NHS Trust’s Gender Identity Development Service’s experimental trial of puberty blockers for early teenagers with gender dysphoria. Oxford’s Professor Michael Biggs wrote, “To summarize, GIDS launched a study to **administer experimental drugs to children suffering from gender dysphoria.**”

“after a year on GnRHa [puberty blockers] children **reported greater self-harm**, and that girls experienced more behavioral and emotional problems and expressed greater dissatisfaction with their body—**so puberty blockers exacerbated gender dysphoria**.”

## (Michael Biggs, “Tavistock’s Experimentation with Puberty Blockers: Scrutinizing the Evidence,” TransgenderTrend.com, March 5, 2019. <https://www.transgendertrend.com/tavistock-experiment-puberty-blockers/>)

**United Kingdom High Court case ruling in Bell vs. Tavistock** Dec. 12, 2020.

* Ruled that puberty blockers and cross-sex hormones constitute **experimental** treatments with **limited evidence for efficacy and safety** which cannot, in most cases, be given to children under 16 years of age without application to the court. Even for minors under aged 16-17, the High Court advised “clinicians may well regard these as cases where the authorisation of the court should be sought prior to commencing the clinical treatment.”
* Court’s repeated declaration in their conclusion of affirming therapy’s **experimental nature and unknown long-term consequences**: 134, 143, 148, 151, 152
* They added, “There is **no age appropriate way to explain** to many of these children what losing their fertility or full sexual function may mean to them in later years.” (para. 144.)
* “That **adolescents find it difficult** to contemplate or comprehend what their life will be like as adults and that they **do not always consider the longer-term consequences of their actions** is perhaps a statement of the obvious.” (para. 141.)

<https://www.judiciary.uk/wp-content/uploads/2020/12/Bell-v-Tavistock-Judgment.pdf>

**NHS Amendments to** service specifications for **Gender Identity Development Service** (GIDS) for children and adolescents, **effective 01 Dec 2020**. <https://www.england.nhs.uk/wp-content/uploads/2020/12/Amendment-to-Gender-Identity-Development-Service-Specification-for-Children-and-Adolescents.pdf>

* Patient under 16 cannot be referred to pediatric endocrinology for puberty blockers without Court order.
* GIDS must complete “full clinical review of each patient” under 16 on puberty blockers, and obtain Court order if they are thought to be best served by PBA and/or cross sex hormones.
* GIDS “must ensure that appropriate psychosocial support and psychological therapies are available to patients who are removed from puberty blockers, and to their families and carers;” plus other appropriate support and consultations.
* For children 16 to 17 yo – given patient competence, parental consent, and hormonal treatment deemed appropriate – “treatment may proceed.” Even then, the provider to consider Court petition “if there is doubt about the patient’s ‘best interests.’”

**Sweden’s Karolinska Hospital** (affectingAstrid Lindgren Children’s Hospital’s pediatric gender services) issues a policy change **effective April 1, 2021**:[[6]](#footnote-5)

* “…hormonal treatments (*i.e., puberty blocking and cross-sex hormones, see above*) will not be initiated in gender dysphoric patients under the age of 16.”
* “For patients between ages 16 and 18, it is hereby decided that treatment may only occur within the clinical trial settings approved by the EPM (*Ethical Review Agency/Swedish Institutional Review Board*).”
* “These changes shall not affect the continued psychological and psychiatric care within BUP (*Public Child and Adolescent Psychiatry*) for patients under 18 years of age.” “The patient must receive comprehensive information about potential risks of the treatment…”
* Cited UK High Court Decision, NHS policy change in light of it, and that in “2019, the SBU (*Swedish Agency for Health Technology Assessment and Assessment of Social Services*) published an overview of the knowledge base which showed a lack of evidence for both the long-term consequences of the treatments, and the reasons for the large influx of patients in recent years.”[[7]](#footnote-6)
* “These treatments are potentially fraught with extensive and irreversible adverse consequences such as cardiovascular disease, osteoporosis, infertility, increased cancer risk, and thrombosis.”

[Karolinska Policyförändring K2021-3343 March 2021 (Swedish).pdf](https://segm.org/sites/default/files/Karolinska%20Policyfo%CC%88ra%CC%88ndring%20K2021-3343%20March%202021%20%28Swedish%29.pdf)

[Karolinska Policy Change K2021-3343 March 2021 (English, unofficial translation).pdf](https://segm.org/sites/default/files/Karolinska%20Policy%20Change%20K2021-3343%20March%202021%20%28English%2C%20unofficial%20translation%29.pdf)

The **Swedish National Council for Medical Ethics** (SMER) recommended of the Ministry of Social Affairs a systematic review of the scientific literature regarding assessment of youths with gender dysphoria, long-term physical and mental effects, desistance, treatment regret, analysis of “**prescribing off-label puberty blockers and cross-sex hormones” to youths**, and an immediate update of the Ministry’s guidance document.

 Kjell Asplund, National Council for Medical Ethics (Sweden), 2019-04-26,

 Dnr Komm2019/00368/S1985:A (pdf available on request)

**Swedish Agency for Health Technology Assessment and Assessment of Social Services’ 2019 literature review**: “Gender dysphoria in children and adolescents: an inventory of the literature” (commissioned by the Swedish government).

<https://www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/>

“Conclusions

* We **have not found any scientific studies which explains the increase in incidence in children and adolescents who seek the heath care because of gender dysphoria**.
* We have not found any studies on changes in prevalence of gender dysphoria over calendar time, nor any studies on factors that can affect the societal acceptance of seeking for gender dysphoria.
* There **are few studies on gender affirming surgery in general in children and adolescents and only single studies on gender affirming genital surgery**.
* **Studies on long-term effects of gender affirming treatment in children and adolescents are few**, especially for the groups that have appeared during the recent decennium.
* The scientific activity in the field seems high. A large part of the identified studies are published during 2018 and 2019.
* **Almost all identified studies are observational, some with controls and some with evaluation before and after gender affirming treatment. No relevant randomised controlled trials in children and adolescents were found.**
* We have not found any composed national information from Sweden on: …”

**Finland rejects routine “affirmation” pathway for minors with GD. From *Council for Choices in Health Care in Finland (COHERE Finland)* 2020:**

* “Research data on the treatment of dysphoria due to gender identity conflicts in minors is limited.”
* “Surgical treatments are not part of the treatment methods for dysphoria caused by gender-related conflicts in minors.”
* “Based on thorough, **case-by-case consideration**, the **initiation of hormonal interventions** that alter sex characteristics may be considered **before the person is 18** years of age **only if** it can be ascertained that their identity as the other sex is of a permanent nature and causes severe dysphoria. **In addition, it must be confirmed that the young person is able to understand the significance of irreversible treatments and the benefits and disadvantages** associated with lifelong hormone therapy, and that no contraindications are present.”
* It provides further details for pre-pubertal and post-pubertal patients and minors with psychiatric history.

<https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en.pdf/aaf9a6e7-b970-9de9-165c-abedfae46f2e/Summary_minors_en.pdf>

And the **experiment is poorly controlled with little to no gate keeping**:

“If you are eligible, **Planned Parenthood staff may be able to start**

**hormone therapy as early as the first visit.”**

February 22, 2019, https://www.plannedparenthood.org/

planned-parenthood-greater-texas/patient-resources/transgender-healthcare

AMA Amicus p. 16 stated, “Hormones have been clinically proven as an effective treatment for gender dysphoria with a low rate of complications.”

Profoundly untrue as the following sections will show.

**1. C. STERILITY**

Average age for spermarche was found to 14 years old, generally Tanner stage 3 - 4.

Schaefer F, Marr J, Seidel C, Tilgen W, Schärer K. Assessment of gonadal maturation by evaluation of spermaturia. *Arch Dis Child*. 1990;65(11):1205-1207. doi:10.1136/adc.65.11.1205

“Those started on PB [puberty blocking] at **Tanner stage II,** as recommended by guidelines, **will be blocked prior to sperm maturation and ovum release**.”

Laidlaw MK, Van Meter QL, Hruz PW, Van Mol A, Malone WJ. Letter to the Editor:“Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline”. *The Journal of Clinical Endocrinology & Metabolism* 2019; **104**(3): 686-7.

**Sex gametes (sperm and ova), require natural puberty** to mature to the point that they are viable for reproduction. **Administering cross-sex hormones in young children concurrently or immediately following puberty blockers means that these reproductive cells will never mature and infertility is the result**.

Howard E. Kulin, et al., “The Onset of Sperm Production in Pubertal Boys. Relationship to Gonadotropin Excretion,” American Journal of Diseases in Children 143, no. 2 (March, 1989): 190-193,

<https://www.ncbi.nlm.nih.gov/pubmed/2492750>.

“These same [Endocrine Society] guidelines, however, **recommend arresting normal puberty at Tanner stage 2**. This is highly significant, because it is the pubertal stage occurring **before menarche in girls and before spermarche in boys**. Continued suppression of the pituitary gonadal axis by PBA **will maintain a state of immaturity of the male and female gonads**. As a result, **though the child will likely continue to grow in stature, the gonads and entire pelvic genitalia will remain stunted at Tanner stage 2.**”

**Michael Laidlaw**, Michelle Cretella, Kevin Donovan, ***The Right to Best Care for Children Does Not Include the Right to Medical Transition***, American Journal of Bioethics, 19 (2):75-77 (2019). <https://doi.org/10.1080/15265161.2018.1557288>

UCSF Transgender Care, Health considerations for gender nonconforming children and transgender adolescents, subsection “Preparing for gender-affirming hormone use in transgender youth”:

“The consent process for hormones should include a **conversation about fertility**. **While options are being explored to preserve future fertility** for transgender youth, the current reality is that cryopreservation is very expensive, in many cases prohibitively so for those with ovaries. **For youth whose pubertal process has been suspended in the earliest stages, followed by administration of gender-affirming hormones, development of mature sperm or eggs is unlikely** at the present time, although it is noteworthy that there is active research developing gametes in vitro from the field of juvenile oncology. **The issue of future infertility is often far more problematic for parents and family members than for youth**, especially especially at the beginning stages of discussing moving forward with gender-affirming hormones.”

<https://transcare.ucsf.edu/guidelines/youth>

**Children’s Hospital Los Angeles**

Children’s Hospital Los Angeles (2016). Children’s Hospital Los Angeles Assent/Consent Forms to Participate in Research Study: "The Impact of Early Medical Treatment in Transgender Youth". Obtained Apr 17, 2020 via HHS Appeal 19-0093-AA; NIH FOIA Request 51365. <https://drive.google.com/file/d/1Q-zJCivH-QW7hL25idXT_jITfJZUUm1w/view>

“**Informed Consent Form for Feminizing Medications (transfeminine individuals on GnRH analogs)”**

“5. Taking feminizing medications after or while being on GnRH analogs will

likely lead to infertility, particularly when GnRH analogs have been started in early puberty.

• Sperm will not mature, leading to infertility. The ability to make sperm normally may or may not come back even after stopping taking feminizing medication.

• The amount of fluid ejaculated may be reduced.

• There is typically a decrease in morning and spontaneous erections.

• Erections may not be firm enough for penetrative sex.”

• Libido (sex drive) may decrease.

**“Informed Consent Form for Feminizing Medications”**

5. Feminizing medications will make the testicles produce less testosterone, which can affect overall sexual function:

• Sperm may not mature, leading to reduced fertility. The ability to make sperm normally may or may not come back even after stopping taking feminizing medication. The options for sperm banking have been explained. People taking estrogen may still be able to make someone pregnant.

• Testicles may shrink by 25 -50%. Regular testicular examinations are still recommended.

• The amount of fluid ejaculated may be reduced.

• There is typically a decrease in morning and spontaneous erections.

• Erections may not be firm enough for penetrative sex.

• Libido (sex drive) may decrease.

**Children’s Hospital Los Angeles**, “**PUBERTAL BLOCKERS FOR MINORS IN EARLY ADOLESCENCE, Parent or Guardian Consent, subsection “Risks of Puberty Blockers”:**

“If your child starts puberty blockers in the earliest stages of puberty, and then goes on to gender affirming hormones, they will not develop sperm or eggs. This means that they will not be able to have biological children. This is an important aspect of blocking puberty and progressing to hormones that you should understand prior to moving forward with puberty suppression.If your child discontinues the use of blockers, and does not go on gender affirming hormones, they will continue their pubertal development about 6-12 months after stopping the medication, and fertility would be maintained.”

[I find the last sentence contestable. Stopping at 4 months v 4 years will not have equivalent results.]

Studies show that **fewer than 5% of adolescents receiving GAT even attempt fertility preservation.**

a. Nahata L, Tishelman AC, Caltabellotta NM, Quinn GP. Low fertility preservation utilization among transgender youth. *Journal of Adolescent Health* 2017; **61**(1): 40-4.
b. Chen D, Simons L, Johnson EK, Lockart BA, Finlayson C. **Fertility Preservation for Transgender Adolescents.** J Adolesc Health. 2017 Jul;61(1):120-123.

**1.D.** **DISEASE INCURRING**

 “**Conclusions**: The majority of subjects reported long term side effects extending beyond GnRHa use, while almost 1/3 reported irreversible side effects that persisted for years after discontinuing treatment.”

Gallagher, Jenny Sadler et al. Long-Term Effects of Gonadotropin-Releasing Hormone Agonist and Add-Back in Adolescent Endometriosis. Journal of Pediatric and Adolescent Gynecology, Volume 31, Issue 2, 190. (2018)

“Clinicians should be aware of the potential harms associated with hormone therapy, including **compromised fertility, dyslipidemias, thromboembolic disease, erythrocytosis, osteopenia, breast/uterine cancer, and cerebrovascular disease**.”

Radix A, Davis AM. Endocrine Treatment of Gender-Dysphoric/Gender-

Incongruent Persons. *JAMA.*2017;318(15):1491–1492. doi:10.1001/jama.2017.13540

Table 10. Medical Risks Associated With Sex Hormone Therapy

**Transgender female: estrogen**

Very high risk of adverse outcomes:  Thromboembolic disease

Moderate risk of adverse outcomes: Macroprolactinoma, Breast cancer, Coronary artery disease, Cerebrovascular disease, Cholelithiasis, Hypertriglyceridemia.

**Transgender male: testosterone**

Very high risk of adverse outcomes: Erythrocytosis (hematocrit > 50%)

Moderate risk of adverse outcomes: Severe liver dysfunction (transaminases > threefold upper limit of normal), Coronary artery disease, Cerebrovascular disease, Hypertension, Breast or uterine cancer.

Wylie C Hembree, Peggy T Cohen-Kettenis, Louis Gooren, Sabine E Hannema, Walter J Meyer, M Hassan Murad, Stephen M Rosenthal, Joshua D Safer, Vin Tangpricha, Guy G T’Sjoen, Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline, *The Journal of Clinical Endocrinology & Metabolism*, Volume 102, Issue 11, 1 November 2017, Pages 3869–3903, <https://doi.org/10.1210/jc.2017-01658>

“The **consequences of this gender affirmative therapy** (GAT) are not trivial and include **potential sterility, sexual dysfunction, thromboembolic and cardiovascular disease, and malignancy** [1,2]”

Michael K Laidlaw; Quentin L Van Meter; Paul W Hruz; Andre Van Mol; William J Malone. Letter to the Editor: “Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline” *The Journal of Clinical Endocrinology & Metabolism*, Volume 104, Issue 3, 1 March 2019, Pages 686–687, <https://doi.org/10.1210/jc.2018-01925>, Online, November 23, 2018.

Cited therein:

1. Hembree WC, Cohen-Kettenis PT, Gooren L, Hannema SE, Meyer WJ, Murad MG, Rosenthal SM, Safer JD, Tangpricha V, T’Sjoen GG. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab. 2017;102(11):3869-3903.

2. Irwig MS. Cardiovascular Health in Transgender People. Rev Endocr Metab Disord. 2018 Aug 3 epub.

“The **consequences of PBA/GAT are not trivial and include potential sterility, sexual dysfunction, thromboembolic and cardiovascular disease, osteoporosis, and malignancy** (Hembree et al. 2017).”

**(Michael Laidlaw**, Michelle Cretella, Kevin Donovan, ***The Right to Best Care for Children Does Not Include the Right to Medical Transition***, American Journal of Bioethics, 19 (2):75-77 (2019). <https://doi.org/10.1080/15265161.2018.1557288> )

Cited:

(Hembree, W. C., P. T. Cohen-Kettenis, L. Gooren, et al. 2017. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An endocrine society clinical practice guideline. The Journal of Clinical Endocrinology & Metabolism 102(11): 3869–3903. doi: 10.1210/jc.2017-01658.)

**Bone Density Problem**

Maximal bone density is accrued during puberty and early adult life. Failure to accrue bone density due to pubertal blockade increases risk of osteoporosis and pathological fractures in later life. CSHT do not appear to fully mitigate this risk.

2020 UK Tavistock GIDS:

* BMD and growth/height both showed “suppression of growth” precisely when they should be having the surge of the lifetime.
	+ “As anticipated, pubertal suppression reduced growth that was dependent on puberty hormones, i.e. height and BMD. Height growth continued for those not yet at final height, but more slowly than for their peers so height z-score fell. Similarly for bone strength, BMD and BMC increased in the lumbar spine indicating greater bone strength, but more slowly than in peers so BMD z-score fell.”
	+ “There was no change from baseline in spine BMD at 12 months nor in hip BMD at 24 and 36 months, but at 24 months lumbar spine BMC and BMD were higher than at baseline (BMC +6.0 (95% CI: 4.0, 7.9); BMD +0.05 (0.03, 0.07)).”
	+ “Changes in BMD were consistent with suppression of growth.”
	+ Problematic that hip BMD was “no change” and only somewhat higher in lumbar spine; puberty is when BMD and growth should surge.

Polly Carmichael, Gary Butler, Una Masic, Tim J Cole, Bianca L De Stavola, SarahDavidson, Elin M.  Skageberg, Sophie Khadr,  Russell Viner. 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. medRxiv 2020.12.01.20241653; doi:https://doi.org/10.1101/2020.12.01.20241653

2017. Authors conclude, “suppressing puberty by GnRHa leads to a decrease of BTMs [bone turnover markers] in both transwomen and transmen transgender adolescents. The increase of BMAD [bone mineral apparent density] and BMAD Z-scores predominantly in the LS [lumbar spine] as a result of treatment with CSHT [cross-sex hormone treatment] is accompanied by decreasing BTM concentrations after 24 months of CSHT. Therefore, the added value of evaluating BTMs seems to be limited and DXA-scans

remain important in follow-up of bone health of transgender adolescents.”

Mariska C. Vlot, Daniel T. Klink, Martin den Heijer, Marinus A. Blankenstein, Joost Rotteveel, Annemieke C. Heijboer, Effect of pubertal suppression and cross-sex hormone therapy on bone turnover markers and bone mineral apparent density (BMAD) in transgender adolescents, Bone, Volume 95, 2017, Pages 11-19, ISSN 8756-3282, doi.org/10.1016/j.bone.2016.11.008.

 “We reviewed the growth characteristics of American boys and girls from published studies, including age at takeoff, age at peak height velocity, peak height velocity, duration of puberty, and the magnitude of the pubertal contribution to adult height. Age at takeoff is highly variable and sex-dependent. The mean takeoff age in children growing at an average rate is approximately 11 years in boys and 9 years in girls, and peak height velocity occurs at a mean age of 13.5 years and 11.5 years, respectively, in these children. Whole-year peak height velocity is 9.5 cm/y in boys and 8.3 cm/y in girls, with slight variations in the different studies. **The contribution of pubertal growth to final height is approximately 30 to 31 cm in boys, accounting for 17% to 18% of the final height, and 27.5 to 29 cm in girls, accounting for 17% of the final height.** The magnitude of pubertal growth has a negative correlation with age at takeoff, but no correlation with final height. Age at takeoff, however, correlates highly with pubertal stage, but correlates negatively with duration of puberty.”

Growth and normal puberty. Abbassi V  Pediatrics. 1998;102(2 Pt 3):507.

“**Age at onset of puberty predicts adult osteoporosis risk**,” Endocrinology Today, healio.com, March 2011.

<https://www.healio.com/endocrinology/pediatric-endocrinology/news/print/endocrine-today/%7Ba7c5d8b2-902f-4197-a225-455bdeb93e05%7D/age-at-onset-of-puberty-predicts-adult-osteoporosis-risk>

Citing : Gilsanz V, Chalfant J, Kalkwarf H, et al. Age at onset of puberty predicts bone mass in young adulthood. *J Pediatr* 2011; **158**(1): 100-5, 5.e1-2.

A 2015 study showed that **bone mineral density scores of the lumbar spine dropped during puberty blocking with GnRHa for transgender adolescent females and failed to increase following estrogen administration**.

Daniel Klink, Martine Caris, Annemieke Heijboer, Michael van Trotsenburg, Joost Rotteveel, Bone Mass in Young Adulthood Following Gonadotropin-Releasing Hormone Analog Treatment and Cross-Sex Hormone Treatment in Adolescents With Gender Dysphoria, *The Journal of Clinical Endocrinology & Metabolism*, Volume 100, Issue 2, 1 February 2015, Pages E270–E275, <https://doi.org/10.1210/jc.2014-2439>

de Vries, A. L., T. D. Steensma, T. A. Doreleijers, and P. T. Cohen-Kettenis. 2011. “Puberty Suppression in Adolescents with Gender Identity Disorder: A Prospective

Follow-Up Study.” Journal of Sexual Medicine 8: 2276–83. doi: 10.1111/j.1743-6109.2010.01943.x.

A **retrospective analysis of 70 trans-identified youths receiving GnRHa for hormonal puberty blocking** were received yearly bone scans (DEXA) over three years. The **authors reported elatedly, “We have shown that there is no actual change in [Bone Mineral Density] in young transgender adolescents on long term GnRHa therapy.”**

Tobin J, Ting J, Butler G. The effect of GnRH analogue treatment on bone mineral density in young adolescents with gender dysphoria: findings from a large national cohort. *J Pediatr Endocrinol Metab* 2019; **32**(10): 1077-81.

DOI: 10.1515/jpem-2019-0046

(My comments) This is a **euphemistic way of phrasing that the expected increase by 50% of lifetime bone density acquired during teen years in fact did not occur in teens taking puberty blockers**. The researchers then stated, “We suggest that yearly DEXA scans may not be necessary. We also suggest that reference ranges may need to be re-defined for this patient cohort.” **Thus children now launched on a path all but assuring early osteoporosis with researchers recommending the damage be concealed by changing the standards of measure**.

Regarding hormonal contraception (HC), which achieves far lower levels of hormone blockade than puberty blockers:

“…firstly that sex influences adolescent brain development in myriad ways; secondly that it does so often in a sex-hormone dependent manner and that; finally even after over 50 years of HC usage by millions of adolescents, we know essentially nothing about the consequences of HC induced blockade of sex hormone function during adolescence on brain maturation.”

Cahill, L., How does hormonal contraception affect the developing human adolescent brain? Current Opinion in Behavioral Sciences, Volume 23, 2018, Pages 131-135, [doi.org/10.1016/j.cobeha.2018.06.015](https://doi.org/10.1016/j.cobeha.2018.06.015)

**PBAs used for androgen-deprivation therapy (ADT) in prostate cancer**

“Androgen-deprivation therapy (ADT) is a key component of treatment for aggressive and advanced prostate cancer, but it has also been **associated with adverse effects on bone, metabolic, cardiovascular, sexual, and cognitive health as well as body composition**.”

Paul L. Nguyen, Shabbir M.H. Alibhai, Shehzad Basaria, Anthony V. D’Amico, Philip W. Kantoff, Nancy L. Keating, David F. Penson, Derek J. Rosario, Bertrand Tombal, Matthew R. Smith, Adverse Effects of Androgen Deprivation Therapy and Strategies to Mitigate Them, European Urology, Volume 67, Issue 5, 2015, Pages 825-836, ISSN 0302-2838, <https://doi.org/10.1016/j.eururo.2014.07.010>.

**COGNITIVE FUNCTIONING**

Schneider, M. A., Spritzer, P. M., Soll, B. M. B., Fontanari, A. M. V.,

Carneiro, M., Tovar-Moll, F., et al. (2017). Brain maturation, cognition

and voice pattern in a gender dysphoria case under pubertal

suppression. Frontiers in Human Neuroscience, 11. https ://doi.

org/10.3389/fnhum .2017.00528 .

Christopher Richards, Julie Maxwell, & Noel McCune, “Use of puberty blockers for gender dysphoria: a momentous step in the dark” *Archives of Disease in Childhood* 104(6):611 (2019).

Denise Hough et al., “Spatial memory is impaired by peripubertal GnRH agonist treatment and testosterone replacement in sheep,” *Psychoneuroendocrinology* 75:173 (2017).

Denise Hough et al., “A reduction in long-term spatial memory persists after discontinuation of peripubertal GnRH agonist treatment in sheep,” *Psychoneuroendocrinology* 77:1 (2017).

Christian J. Nelson, et al., “Cognitive Effects of Hormone Therapy in Men With Prostate Cancer” *Cancer* 113(5):1097-1106 (2008).

“Adverse Effects of Androgen Deprivation Therapy and Strategies to Mitigate Them” (**ADT in treating prostate cancer**)

“3.9. **Cognition**

**Hypogonadism has been linked to cognitive declines in several studies** including a **cohort study from the Baltimore Longitudinal Study of Aging** that found that among 407 men 50–91 yr of age at baseline and **followed for 10 yr, hypogonadism was associated with poorer memory and visuospatial performance and a faster rate of decline invisual memory** [99]. The exact impact of ADT on cognition remains a matter of ongoing study. **The strongest data for a deleterious effect come from a single trial by Green et al. [100]** in 2002 that randomized 82 men to an LHRH agonist, cyproterone acetate, or observation. They found **that half the men assigned to therapy had a clinically significant decline in one or more cognitive tests at 6 mo compared** with none of the men in the observation group. **However, these results were not confirmed in the largest prospective study on the issue conducted by Alibhai** et al. that enrolled 241 men with prostate cancer treated with ADT, prostate cancer and no ADT, or no prostate cancer. After adjusting for age and education, the study found no consistent effect of ADT on 14 different cognitive tests across 8 cognitive domains [101]. **The study did find individual tests of immediate memory (p = 0.029), working memory (p = 0.031), and visuospatial ability ( p = 0.034) that were worse in the ADT group at 12 mo but were not confirmed by other tests looking at the same domains.** Nevertheless, given the potential that ADT could have some subtle influences on cognition, an ongoing randomized trial is evaluating the impact of exercise on reducing the cognitive and psychosocial side effects of ADT [102].

Paul L. Nguyen, Shabbir M.H. Alibhai, Shehzad Basaria, Anthony V. D’Amico, Philip W. Kantoff, Nancy L. Keating, David F. Penson, Derek J. Rosario, Bertrand Tombal, Matthew R. Smith, Adverse Effects of Androgen Deprivation Therapy and Strategies to Mitigate Them, European Urology, Volume 67, Issue 5, 2015, Pages 825-836, ISSN 0302-2838, <https://doi.org/10.1016/j.eururo.2014.07.010>.

Citing:

[99] Moffat SD, Zonderman AB, Metter EJ, et al. Longitudinal assessment

of serum free testosterone concentration predicts memory

performance and cognitive status in elderly men. J Clin Endocrinol

Metab 2002;87:5001–7.

[100] Green HJ, Pakenham KI, Headley BC, et al. Altered cognitive

function in men treated for prostate cancer with luteinizing

hormone-releasing hormone analogues and cyproterone acetate:

a randomized controlled trial. BJU Int 2002;90:427–32.

[101] Alibhai SM, Breunis H, Timilshina N, et al. Impact of androgendeprivation therapy on cognitive function in men with nonmetastatic prostate cancer. J Clin Oncol 2010;28:5030–7.

[102] Lee CE, Kilgour A, Lau YK. Efficacy of walking exercise in promoting

cognitive-psychosocial functions in men with prostate cancer

receiving androgen deprivation therapy. BMC Cancer 2012;

12:324.

**1.E. IMPAIRED SEXUAL FUNCTION**

See above

“Again, **early blockade of puberty will arrest the genitalia** at an early developmental stage with limited to absent functioning as an adult.” … “**Normal SF in the male, including erection, orgasm, and ejaculation, will be significantly impaired to absent. In the female, PBA induce a menopausal state** with consequent low estradiol and progesterone levels. The pelvic genitalia will acquire a menopausal yet undeveloped state.”

Michael Laidlaw, Michelle Cretella, Kevin Donovan, *The Right to Best Care for Children Does Not Include the Right to Medical Transition*, American Journal of Bioethics, 19 (2):75-77 (2019). <https://doi.org/10.1080/15265161.2018.1557288>

Puberty blockers can also **cause problems by inducing early menopause**:

“The long-term consequences of premature or early menopause include adverse effects on cognition, mood, cardiovascular, bone, and sexual health, as well as an increased risk of early mortality. The use of hormone therapy has been shown to lessen some, although not all of these risks.”

Faubion SS, Kuhle CL, Shuster LT, Rocca WA. Long-term health consequences of premature or early menopause and considerations for management. *Climacteric*. 2015;18(4):483–491. doi:10.3109/13697137.2015.1020484

**Sexual Dysfunction in Androgen-Deprivation Therapy for Prostate CA**

“3.4. **Sexual dysfunction**

The decrease in testosterone due to ADT results in both loss of libido in a large proportion of men and a decrease in erectile function due to venous leakage, decreased arterial flow, and impaired nitric oxide, leading to sexual dysfunction

in >90% of men [70–72].”

Paul L. Nguyen, Shabbir M.H. Alibhai, Shehzad Basaria, Anthony V. D’Amico, Philip W. Kantoff, Nancy L. Keating, David F. Penson, Derek J. Rosario, Bertrand Tombal, Matthew R. Smith, Adverse Effects of Androgen Deprivation Therapy and Strategies to Mitigate Them, European Urology, Volume 67, Issue 5, 2015, Pages 825-836, ISSN 0302-2838, <https://doi.org/10.1016/j.eururo.2014.07.010>.

 Citing:

[70] Basaria S, Lieb II J, Tang AM, et al. Long-term effects of androgen

deprivation therapy in prostate cancer patients. Clin Endocrinol

(Oxf) 2002;56:779–86.

[71] Higano CS. Sexuality and intimacy after definitive treatment and

subsequent androgen deprivation therapy for prostate cancer. J

Clin Oncol 2012;30:3720–5.

[72] Hoffman RM, Hunt WC, Gilliland FD, et al. Patient satisfaction with

treatment decisions for clinically localized prostate carcinoma.

Results from the Prostate Cancer Outcomes Study. Cancer

2003;97:1653–62.

**Also in ADT for Prostate CA**

“**Loss of libido and erectile dysfunction (ED)** **are well-known side effects of this treatment and are usually attributed to the decrease in testosterone levels**.”

Mazzola CR, Mulhall JP. Impact of androgen deprivation therapy on sexual function. *Asian J Androl*. 2012;14(2):198-203. doi:10.1038/aja.2011.106

**2. CROSS-SEX HORMONES (CSH)**

From JCEM Endocrine Tx of Gender Dysphoria:

**“3.0 Hormonal Therapy for Transgender Adults**

The two major goals of hormonal therapy are (1) to reduce endogenous sex hormone levels, and thus reduce the secondary sex characteristics of the individual’s designated gender, and (2) to replace endogenous sex hormone levels consistent with the individual’s gender identity by using the principles of hormone replacement treatment of hypogonadal patients.”

And **Table 11 “**Hormone Regimens in Transgender Persons” provides details.

[This verbiage rather stinks. It translates to (1) reducing the sex hormones of the patients natal sex to reduce secondary sex characteristics of said natal sex; and (2) administering hormones of the opposite biological sex, the one with which the patient psychologically identifies but biologically is not.]

Wylie C Hembree, Peggy T Cohen-Kettenis, Louis Gooren, Sabine E Hannema, Walter J Meyer, M Hassan Murad, Stephen M Rosenthal, Joshua D Safer, Vin Tangpricha, Guy G T’Sjoen, Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline, *The Journal of Clinical Endocrinology & Metabolism*, Volume 102, Issue 11, 1 November 2017, Pages 3869–3903, <https://doi.org/10.1210/jc.2017-01658>

**2.A. CSH EXPERIMENTAL AND CONTROVERSIAL**

Editor in chief of the BMJ Carl **Heneghan** wrote, “**There are significant problems with how the evidence for Gender-affirming cross sex hormone has been collected and analyzed that prevents definitive conclusions** to be drawn.”

He concludes, “**The current evidence does not support informed decision making and safe practice in children**.”

(Heneghan, Carl. “Gender-Affirming Hormone in Children and Adolescents.” BMJ EBM Spotlight, 21 May 2019, blogs.bmj.com/bmjebmspotlight/2019/02/25/gender-affirming-hormone-inchildren-and-adolescents-evidence-review/.)

Swedish **psychiatrist Dr. Christopher Gillberg** asserts pediatric transition is **“possibly one of the greatest scandals in medical history”**and proposes “an immediate moratorium on the use of puberty blocker drugs because of their unknown long-term effects.”

<https://thebridgehead.ca/2019/09/25/world-renowned-child-psychiatrist-calls-trans-treatments-possibly-one-of-the-greatest-scandals-in-medical-history/>

JCEM 10/2019

“The **international panel concluded the only evidence-based indication for testosterone therapy for women is for the treatment of HSDD [Hypoactive sexual desire disorder]**, with available data supporting a moderate therapeutic effect. There are **insufficient data to support the use of testosterone for the treatment of any other symptom or clinical condition**, or for disease prevention.

…The **safety of long-term testosterone therapy has not been established**.

Susan R Davis, et al, Global Consensus Position Statement on the Use of Testosterone Therapy for Women, *The Journal of Clinical Endocrinology & Metabolism*, Volume 104, Issue 10, October 2019, Pages 4660–4666, <https://doi.org/10.1210/jc.2019-01603>

**2014. Androgen Therapy in Women: A Reappraisal: An Endocrine Society Clinical Practice Guideline.**

Margaret E. Wierman, et al. **Androgen Therapy in Women: A Reappraisal: An Endocrine Society Clinical Practice Guideline**, *The Journal of Clinical Endocrinology & Metabolism*, Volume 99, Issue 10, 1 October 2014, Pages 3489–3510, <https://doi.org/10.1210/jc.2014-2260>

* The **only positive recommendation for testosterone use in women was for short-term high physiological doses of testosterone in post-menopausal women with hypoactive sexual desire disorder, with monitoring** for androgen excess, and not for long-term use.
* Specifically “recommend against” the diagnosis of androgen deficiency syndrome in healthy women, against routine use of DHEA, against routine use of testosterone or DHEA for low androgen levels, and against general use of testosterone for “infertility; sexual dysfunction other than hypoactive sexual desire disorder; cognitive, cardiovascular, metabolic, or bone health; or general well-being.

2019, de Graaf, et al., “…it is important to keep in mind that **physical treatments are not always associated with a resolution** in **mental health difficulties**. In some cases, **mental health problems can emerge while on physical treatment**.”

de Graaf NM, Carmichael P. Reflections on emerging trends in clinical work with gender diverse children and adolescents. *Clinical Child Psychology and Psychiatry*. 2019;24(2):353-364. doi:[10.1177/1359104518812924](https://doi.org/10.1177/1359104518812924)

**Using human genetics** to understand the disease **impacts of testosterone in men and women**.

Ruth, K.S., Day, F.R., Tyrrell, J. *et al.* Using human genetics to understand the disease impacts of testosterone in men and women.*Nat Med* **26,**252–258 (2020). https://doi.org/10.1038/s41591-020-0751-5

* Used 2,571 genome-wide sex hormone traits in 425K UK Biobank study participants.
* Found “**genetically higher testosterone** is **harmful for metabolic diseases in women but beneficial in men**.”
	+ Found that genetically determined T levels one standard deviation higher in women raised the risk of DM2 (OR-1.37) and polycystic ovary syndrome (OR=1.51).
	+ The same 1 sd higher T level in men reduced DM2 risk (OR=0.86).
	+ High T generated adverse effects on female breast and endometrial cancer as well as on male prostate cancer.

The AMA Amicus p. 16 states, “**A transgender man undergoing hormone therapy**, for example, **will have hormone levels within the same range as other men**; and just as they do in any other man, **these hormones will affect most of his major body systems**.”

**And this is precisely the problem with CSH: a biological female body will never experience male levels of testosterone outside of an androgen-secreting tumor. It’s a iatrogenic pathological state.**

“The **Endocrine Society’s guidelines** recommend elevating females’ testosterone levels from a normal of 10 to 50 ng/dL to 300 to 1000 ng/dL, values typically found with androgen secreting tumors.”

Laidlaw MK, Van Meter QL, Hruz PW, Van Mol A, Malone WJ. Letter to the Editor:“Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline”. *The Journal of Clinical Endocrinology & Metabolism* 2019; **104**(3): 686-7. <https://doi.org/10.1210/jc.2018-01925>, Online, November 23, 2018.

2019. Norwegian retrospective review of 52 charts of adolescents begun on hormonal GAT and followed over “real-life phase of gender reassignment.”

“Conclusion: **Medical gender reassignment is not enough to** improve

functioning and **relieve psychiatric comorbidities** among adolescents

with gender dysphoria. Appropriate interventions are warranted for

psychiatric comorbidities and problems in adolescent development.”

…“**Cross-sex hormone treatment** may alleviate depression and anxiety [I would contest this] but **does not have a positive impact on psychiatric comorbidities** at large.”

…“An adolescent’s gender identity concerns must not become a reason for failure to

address all her/his other relevant problems in the usual way.”

Riittakerttu Kaltiala, Elias Heino, Marja Työläjärvi & Laura Suomalainen (2019) Adolescent development and psychosocial functioning after starting cross-sex hormones for gender dysphoria, Nordic Journal of Psychiatry, DOI: [10.1080/08039488.2019.1691260](https://doi.org/10.1080/08039488.2019.1691260)

**Children’s Hospital Los Angeles** (2016).

Children’s Hospital Los Angeles Assent/Consent Forms to Participate in Research Study: "The Impact of Early Medical Treatment in Transgender Youth". Obtained Apr 17, 2020 via HHS Appeal 19-0093-AA; NIH FOIA Request 51365. <https://drive.google.com/file/d/1Q-zJCivH-QW7hL25idXT_jITfJZUUm1w/view>

**Children’s Hospital Los Angeles**, “Informed Consent Form for **Testosterone Therapy** (for youth on GnRH analogs)” section “Masculinizing Effects”:

“3. It is not known what the effects of testosterone are on fertility. If you started puberty blockers in the early stages of your puberty, then you will not have mature enough eggs to reproduce. Even if you stop taking testosterone and blockers, and progress through your puberty, it is uncertain if you will be able to get pregnant in the future.”

**Children’s Hospital Los Angeles**, “**Informed Consent Form for Feminizing Medications”**

5. Feminizing medications will make the testicles produce less testosterone, which can affect overall sexual function:

• Sperm may not mature, leading to reduced fertility. The ability to make sperm normally may or may not come back even after stopping taking feminizing medication. The options for sperm banking have been explained. People taking estrogen may still be able to make someone pregnant.

• Testicles may shrink by 25 -50%. Regular testicular examinations are still recommended.

• The amount of fluid ejaculated may be reduced.

• There is typically a decrease in morning and spontaneous erections.

• Erections may not be firm enough for penetrative sex.

• Libido (sex drive) may decrease.

“A pathological analysis of the genital tract of 112 FTM subjects who were given androgen for at least 6 months before hystero-salpingo-oophorectomy was performed. In addition, 100 bilateral mastectomies were performed, allowing a study of the breast tissue. Mean ovarian volume was increased, with histological characteristics of polycystic ovaries (PCO), defined as >12 antral follicles per ovary, observed in 89 patients (79.5%). Endometrial atrophy was observed in 45%. Breast examination revealed marked reduction of glandular tissue and increase of fibrous connective tissue in 93%, without atypical hyperplasia or carcinoma. **The present data confirms and expands the putative associations between long-term androgen administration and abnormalities in ovarian architecture with macroscopic and microscopic characteristics of PCO, increased risk of endometrial atrophy and fibrotic breast tissue with marked glandular reduction**.”

Grynberg M, Fanchin R, Dubost G, Colau JC, Brémont-Weil C, Frydman R, Ayoubi JM. Histology of genital tract and breast tissue after long-term testosterone administration in a female-to-male transsexual population. Reprod Biomed Online. 2010 Apr;20(4):553-8. doi: 10.1016/j.rbmo.2009.12.021. Epub 2009 Dec 24. PMID: 20122869.

A Dutch study in 2011 of those on cross-sex hormones (CSH), found that, while outcomes for the female-to-males seemed generally positive, for the much larger male-to-female group—72.6 percent of the total [n=966 MtF vs n=365 FtM]—“total mortality was 51 percent higher than in the general population, mainly from increased mortality rates due to suicide, acquired immunodeficiency syndrome [AIDS], cardiovascular disease, drug abuse, and unknown causes.” The timing of the suicides also provides important information. None occurred within two years of treatment, but “there were six suicides after two to five years, seven after five to ten years, and four after more than ten years of cross-sex hormone treatment”.

Asscheman H, Giltay EJ, Megens JA, de Ronde WP, van Trotsenburg MA, Gooren LJ. A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones. Eur J Endocrinol. 2011 Apr;164(4):635-42. doi: 10.1530/EJE-10-1038. Epub 2011 Jan 25. PMID: 21266549.

The goal is to progressively take female testosterone levels into the adult male range.

"Clinicians can use either parenteral or transdermal preparations to achieve testosterone values in the normal male range (this is dependent on the specific assay, but is typically 320 to 1000 ng/dL)" - JCEM guidelines 2017 p. 3886.

A testosterone of 1000 ng/dl is 20-25 times higher than the upper limit of normal in females (50 ng/dl), perhaps 100 times higher than lower levels for healthy females (10 ng/dL).

Hembree WC, Cohen-Kettenis PT, Gooren L, Hannema SE, Meyer WJ, Murad MH, Rosenthal SM, Safer JD, Tangpricha V, T'Sjoen GG. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab. 2017 Nov 1;102(11):3869-3903. doi: 10.1210/jc.2017-01658. Erratum in: J Clin Endocrinol Metab. 2018 Feb 1;10v b3(2):699. Erratum in: J Clin Endocrinol Metab. 2018 Jul 1;103(7):2758-2759. PMID: 28945902.

"AndroGel 1% delivers physiologic amounts of testosterone, producing circulating testosterone concentrations that approximate normal concentrations (298 - 1043 ng/dL) seen in healthy men. " From the product information under Pharmacokinetics. <https://www.rxabbvie.com/pdf/androgel_PI.pdf>

* Normal male testosterone levels are pathologically high for females.

“AAS [anabolic androgenic steroids] use can lead to profound effects on the brain and behavior. Poor impulse control with aggressive behavior, anxiety, extreme mood swings from depression to mania or hypomania have been linked to AAS use over the past few decades [35 –39].”

“… even the detoxification of AAS abusers represents a poorly studied area [87]. In this regard, a recent review conducted by Medras et al. stressed that during the detoxification phase of AAS abusers somatic and psychic disorders may develop, related to the sudden reduction of circulating testosterone levels [88]. Among these, depression, with suicidal ideation, and sexual dysfunction due to hypogonadism, libido recovery, and erectile dysfunction, are certainly the most serious [85–88].

Bertozzi, G.; Salerno, M.; Pomara, C.; Sessa, F. Neuropsychiatric and Behavioral Involvement in AAS Abusers. A Literature Review. Medicina 2019, 55, 396. [doi.org/10.3390/medicina55070396](https://doi.org/10.3390/medicina55070396)

 Citing:

Mędraś, Marek MD, PhD; Brona, Anna MD, PhD; Jóźków, Paweł MD, PhD The Central Effects of Androgenic-anabolic Steroid Use, Journal of Addiction Medicine: May/June 2018 - Volume 12 - Issue 3 - p 184-192 doi: 10.1097/ADM.0000000000000395.

While questions remain about the psychological effects of exogenous testosterone administration in gender dysphoric females, there is extensive literature showing adverse effects of endogenously produced testosterone in females, for example, with polycystic ovarian syndrome.

Ruth, K.S., Day, F.R., Tyrrell, J. *et al.* Using human genetics to understand the disease impacts of testosterone in men and women.*Nat Med* **26,**252–258 (2020). <https://doi.org/10.1038/s41591-020-0751-5>

**2.B. CSH DISEASE INCURRING**

“Clinicians should be aware of the potential harms associated with hormone therapy, including **compromised fertility, dyslipidemias, thromboembolic disease, erythrocytosis, osteopenia, breast/uterine cancer, and cerebrovascular disease**.”

Radix A, Davis AM. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons. *JAMA.*2017;318(15):1491–1492. doi:10.1001/jama.2017.13540

**General problems of early menopause**:

“The long-term consequences of premature or early menopause include adverse effects on cognition, mood, cardiovascular, bone, and sexual health, as well as an increased risk of early mortality. The use of hormone therapy has been shown to lessen some, although not all of these risks.”

Faubion SS, Kuhle CL, Shuster LT, Rocca WA. Long-term health consequences of premature or early menopause and considerations for management. *Climacteric*. 2015;18(4):483–491. doi:10.3109/13697137.2015.1020484

Table 10. Medical Risks Associated With Sex Hormone Therapy

**Transgender female: estrogen**

Very high risk of adverse outcomes:  Thromboembolic disease

Moderate risk of adverse outcomes: Macroprolactinoma, Breast cancer, Coronary artery disease, Cerebrovascular disease, Cholelithiasis, Hypertriglyceridemia.

**Transgender male: testosterone**

Very high risk of adverse outcomes: Erythrocytosis (hematocrit > 50%)

Moderate risk of adverse outcomes: Severe liver dysfunction (transaminases > threefold upper limit of normal), Coronary artery disease, Cerebrovascular disease, Hypertension, Breast or uterine cancer.

Wylie C Hembree, et al, Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline, *The Journal of Clinical Endocrinology & Metabolism*, Volume 102, Issue 11, 1 November 2017, Pages 3869–3903, <https://doi.org/10.1210/jc.2017-01658>

**Testosterone increases the risk of heart disease in women by 4 fold,**

**Estrogen increases the rate of deep vein thrombosis (blood clots) and stroke by approximately 3 fold in men.**

Alzahrani, Talal, et al. “Cardiovascular Disease Risk Factors and Myocardial Infarction in the Transgender Population.” Circulation: Cardiovascular Quality and Outcomes, vol. 12, no. 4, 2019, doi:10.1161/circoutcomes.119.005597.

[An editorial by Chan discusses some limitations to the study although the author readily accepts multiple gender categories:

Chan PS. Invisible Gender in Medical Research. *Circ Cardiovasc Qual Outcomes* 2019; **12**(4): e005694.]

2. Getahun D, Nash R, Flanders WD, Baird TC, Becerra-Culqui TA, Cromwell L, et al. Cross-sex Hormones and Acute Cardiovascular Events in Transgender Persons: A Cohort Study. Ann Intern Med. [Epub ahead of print 10 July 2018]169:205–213.doi: 10.7326/M17-2785

In a 2019 nationwide cohort study of the Netherlands, of 1129 trans women (natal males) who were taking **estrogen**, **the incidence of breast cancer “was 46-fold higher** than in cisgender men”.

Christel J M de Blok,  et al. “Breast cancer risk in transgender people receiving hormone treatment: nationwide cohort study in the Netherlands..” BMJ 2019; 365. <https://www.bmj.com/content/365/bmj.l1652>

Ve**nous thromboembolism risk is elevated 5 fold in males taking estrogen.**

(Irwig MS. Cardiovascular Health in Transgender People. Rev Endocr Metab Disord. 2018 Aug 3 epub.)

The **increased risk of venous thromboembolism (VTE)** in biological **males taking estrogen increased further with duration of use** from **four-times greater** after two years to over **sixteen-times greater** after eight years of use compared to males not using estrogen.

Getahun D, Nash R, Flanders WD, et al. Cross-sex Hormones and Acute Cardiovascular Events in Transgender Persons: A Cohort Study. *Ann Intern Med* 2018; **169**(4): 205-13. doi: 10.7326/M17-2785.

**Transgendering Men on Estrogen:**

1) **Over twice as many strokes** than women; **2 times more** than non-transgendering men

2) **Over 5 times as many deep vein clots** as women and **4.5 times** as many as non-transgendering men

3) **Over 2 times as many heart attacks** as women

**Transgendering Women on Testosterone:**

**1) Almost 4 times as many heart attacks** as did non-transitioning women

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

Gagnon DR, Zhang T, Brand FN, Kannel WB. Hematocrit and the risk of cardiovascular disease—The Framingham Study: A 34-year follow-up. American Heart Journal. 1994;127(3):674-682.

“A pathological analysis of the genital tract of 112 FTM subjects who were given **androgen** for at least 6 months before hystero-salpingo-oophorectomy was performed. In addition, 100 bilateral mastectomies were performed, allowing a study of the breast tissue. Mean ovarian volume was increased, with histological characteristics of polycystic ovaries (PCO), defined as >12 antral follicles per ovary, observed in 89 patients (79.5%). Endometrial atrophy was observed in 45%. Breast examination revealed marked reduction of glandular tissue and increase of fibrous connective tissue in 93%, without atypical hyperplasia or carcinoma. **The present data confirms and expands the putative associations between long-term androgen administration and abnormalities in ovarian architecture with macroscopic and microscopic characteristics of PCO, increased risk of endometrial atrophy and fibrotic breast tissue with marked glandular reduction**.”

Grynberg M, Fanchin R, Dubost G, Colau JC, Brémont-Weil C, Frydman R, Ayoubi JM. Histology of genital tract and breast tissue after long-term testosterone administration in a female-to-male transsexual population. Reprod Biomed Online. 2010 Apr;20(4):553-8. doi: 10.1016/j.rbmo.2009.12.021. Epub 2009 Dec 24. PMID: 20122869.

**Testosterone** (in FtM) can cause **severe acne**.

British Journal of Dermatology (2019) 180, pp26–30

**Estrogen** causes **increased weight gain** (in MtF)

Journal of Clinical & Translational Endocrinology 21 (2020) 100230

**Estrogen** causes **insulin resistance** (in MtF)

Diabetes Care 2020 Feb; 43(2): 411-417; [World J Diabetes](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7061235/). 2020 Mar 15; 11(3): 66–77

**Immunity: sex hormones DO affect immune function** here: <https://onlinelibrary.wiley.com/doi/abs/10.1111/brv.12243> and here <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4701921/> and here: <https://www.hgh1.com/testosterone/testosterone-deficiency-and-immune-system/>

**2.C. OFF-LABEL USE**

The **Swedish National Council for Medical Ethics** (SMER) recommended of the Ministry of Social Affairs a systematic review of the scientific literature regarding assessment of youths with gender dysphoria, long-term physical and mental effects, desistance, treatment regret, analysis of “**prescribing off-label puberty blockers and cross-sex hormones” to youths**, and an immediate update of the Ministry’s guidance document. SMER was concerned about “**ethical questions around** gender dysphoria, gaps and uncertainties in the knowledge we have on the subject”

 Kjell Asplund, National Council for Medical Ethics (Sweden), 2019-04-26,

 Dnr Komm2019/00368/S1985:A (pdf available on request)

See section GAT RISKS, PUBERTY BLOCKING, 1B.

**3. SURGERY (SRS AKA GRS AKA GCS)**

Known as Sex Reassignment Surgery and Gender Reassignment Surgery and Gender Confirmation Surgery, though non-genital surgeries abound to contour the body to that of the opposite sex.

“Finally I must state that as I regard the transsexual syndrome as a personality and characterological disaster it **cannot be corrected by mutilating operations** which are often carried out in response to **suicide threats** amounting to blackmail.”

Limentani A. The significance of transsexualism in relation to some basic psychoanalytic concepts. *International Review of Psycho-Analysis* 1979; **6**: 139-53.) Quote on p. 149, last paragraph.

**1979**: A study from the **Johns Hopkins U psychiatry** department revealed the **mental and social health of patients undergoing sex reassignment surgery did not improve**. The program closed shortly thereafter.

Meyer J.K. and Reter D. Sex Reassignment Follow up Arch. Gen Psychiatry 36; 1010-1015; 1979

**SRS is cosmetic, creating poorly functioning pseudo-genitalia. Usually no orgasms. Sterility is guaranteed in the absence of ovaries and testicles.**

2019, de Graaf, et al., “…it is important to keep in mind that **physical treatments are not always associated with a resolution** in **mental health difficulties**. In some cases, **mental health problems can emerge while on physical treatment**.”

de Graaf NM, Carmichael P. Reflections on emerging trends in clinical work with gender diverse children and adolescents. *Clinical Child Psychology and Psychiatry*. 2019;24(2):353-364. doi:[10.1177/1359104518812924](https://doi.org/10.1177/1359104518812924)

 “**Genital sensation** after vaginoplasty, phalloplasty, and metoidioplasty may be **markedly reduced** despite advanced techniques to preserve sensation.”

Stephen B. Levine (2018): Informed Consent for Transgendered Patients,

Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2018.1518885

“Because of these limitations, **the creation of a neopenis has often been less than satisfactory**. Recently, penis transplants are being proposed (233).

In fact, most transgender males do not have any external genital surgery because of the lack of access, high cost, and significant **potential complications**.”

Also:

“**Surgery that affects fertility is irreversible**.”

Wylie C Hembree, et al, Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline, *The Journal of Clinical Endocrinology & Metabolism*, Volume 102, Issue 11, 1 November 2017, Pages 3869–3903, Section 5.0 Surgery for Sex Reassignment and Gender Confirmation, <https://doi.org/10.1210/jc.2017-01658>

In 2011 a **30-year population-based matched cohort study of all 324 sex-reassigned adults in** **Sweden** showed a **completed suicide rate 19 times** that of the general population **10 years out**. It also revealed they had nearly **3 times the rate of overall mortality and psychiatric inpatient care**.

Dhejne C, Lichtenstein P, Boman M, Johansson ALV, Langstrom N, et al. (2011) Long-Term Follow-Up of Transsexual Persons Undergoing Sex

Reassignment Surgery: Cohort Study in Sweden. PLoS ONE 6(2): e16885. doi:10.1371/journal.pone.0016885.

A 2016 study of nearly all (98%; n=104) of Dutch patients who underwent **sex reassignment surgery** from 1978-2010 found no significant difference in **psychiatric morbidity or mortality** between male to female and female to male (FtM) “save for the total number of psychiatric diagnoses where FtM held a significantly higher number of psychiatric diagnoses overall.”

* “ Ten individuals [nearly 10% of the study population] were registered as deceased post-SRS with an average age of death of 53.5 years.”
* “This suggests that generally SRS may reduce psychological morbidity for some individuals while increasing it for others.”
* **SRS was not an agent of  statistically significant net benefit**.

Simonsen, R. K., Giraldi, A., Kristensen, E. & Hald, G. M. Long-term follow-up of individuals undergoing sex reassignment surgery: Psychiatric morbidity and mortality. Nord J Psychiatry 70, 241-247, doi:10.3109/08039488.2015.1081405 (2016).

The **Hayes Directory** reviewed all relevant literature on SRS treatments in 2014 and gave it the lowest possible rating: the research findings were “too sparse” and “too limited” even to *suggest* conclusions.

(Hayes, Inc., *Hormone Therapy for the Treatment of Gender Dysphoria*, Hayes Medical Technology Directory (2014).)

“The Centers for Medicare & Medicaid Services (CMS) **is not issuing a National Coverage Determination (NCD) at this time on gender reassignment surgery** for Medicare beneficiaries with gender dysphoria **because the clinical evidence is inconclusive for the Medicare population**.”

Jensen TS, Chin J, Rollins J, Koller E, Gousis L, Szarama K. Decision Memo for Gender Dysphoria and Gender Reassignment Surgery (CAG-00446N). Centers for Medicare & Medicaid Services; August 30, 2016.

**Finland rejects routine “affirmation” pathway for minors with GD. From *Council for Choices in Health Care in Finland (COHERE Finland)* 2020:**

* “Research data on the treatment of dysphoria due to gender identity conflicts in minors is limited.”
* “Surgical treatments are not part of the treatment methods for dysphoria caused by gender-related conflicts in minors.”

<https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en.pdf/aaf9a6e7-b970-9de9-165c-abedfae46f2e/Summary_minors_en.pdf>

**Mastectomies on minors:**

**Questionable claim**: "Chest dysphoria was high among presurgical transmasculine youth, and surgical intervention positively affected both minors and young adults."

Olson-Kennedy J, Warus J, Okonta V, Belzer M, Clark LF. Chest Reconstruction and Chest Dysphoria in Transmasculine Minors and Young Adults: Comparisons of Nonsurgical and Postsurgical Cohorts. *JAMA Pediatr.*2018;172(5):431–436. doi:10.1001/jamapediatrics.2017.5440

**Problems:**

* “Chest dysphoria” is a neologism of convenience, not a DSM-5 diagnosis.
* The “chest dysphoria scale” measuring tool of the authors and "is not yet validated." (p. 435)
* Mastectomies were done on girls as young as 13 or 14 yo lacking the capacity for mature decision making or informed consent.
* Study seems flawed and unethical.

**Meta-analysis of the transgender surgery literature shows the very low quality of data used to support the efficacy of the interventions:**

“***Results.*** Twenty-six studies satisfied the inclusion criteria. **The majority of these studies were retrospective case series of low to intermediate quality**. Outcome of the penile skin inversion technique was reported in 1,461 patients, bowel vaginoplasty in 102 patients. Neovaginal stenosis was the most frequent complication in both techniques. Sexual function and patient satisfaction were overall acceptable, but many different outcome measures were used. QoL was only reported in one study. Comparison between techniques was difficult due to the lack of standardization.”

Horbach SER, Bouman M‐B, Smit JM, Özer M, Buncamper ME, and Mullender MG. Outcome of vaginoplasty in male‐to‐female transgenders: A systematic review of surgical techniques. J Sex Med 2015;12:1499–1512. <http://ts.katja.cz/2015_horbach_et_al.pdf>

A 2018 survey study looking at “Sexuality after Male-to-Female Gender Affirmation Surgery” attempted to validate that these patients achieved superior results than the native, non-surgerized genitals (response rate of 46.9%, 119 of 254, and many survey questions not answered). Regarding intensity of orgasms post-GAS, of only 77 respondents, 55.8% claimed more, 23.4% claimed less, 20.8% reported no difference. Regarding overall sex life satisfaction, on a scale from 0 (“very dissatisfied”) to 10 (“very satisfied”), 24.4% reported 1-3, 25.2% reported 4-6, 24.4% reported 7-10, but 26.6% refused to answer.

* The study authors noted, “The study was limited by its retrospective character with a response rate below 50%.” Yet, for specific questions,  the response rates were lower yet.
* They further asserted, “ Suicide is a very unlikely reason for nonparticipation since the suicide rate after successful GAS is not higher than in the general population [].”  That is contestable. (See Dhejne, 2011, doi:10.1371/journal.pone.0016885.)

Hess J, Henkel A, Bohr J, Rehme C, Panic A, Panic L, Rossi Neto R, Hadaschik B, Hess Y. Sexuality after Male-to-Female Gender Affirmation Surgery. Biomed Res Int. 2018 May 27;2018:9037979. doi: 10.1155/2018/9037979. PMID: 29977922; PMCID: PMC5994261.

One of the **few long-term studies of the urologic complications of trans surgery**.

“With a mean interval of 72 months after **surgery 51% out of 44 patients considered themselves very bothered by their urogynaecological problems**.

In MTF transsexuals, overactive bladder (13/36), stress urinary incontinence (9/36), a reduced urinary flow (7/36), and meatal stenosis (5/36) were common problems. Post void dripping (2/36), fistula (2/36) and urinary tract infection (3/36) had a rather rare occurrence.

Five of eight FTM patients presented with recurrent urinary tract infections. Overactive bladder (2/8), stress urinary incontinence (3/8), post void dripping (3/8), and meatal stenosis (1/8) occurred - but less frequently.”

… “**Patients should be counselled on the risks preoperatively, and lifelong specialized follow-up is necessary for the early detection and treatment of arising problems**.”

Combaz N, Kuhn A. Long-Term Urogynecological Complications after Sex Reassignment Surgery in Transsexual Patients: a Retrospective Study of 44 Patients and Diagnostic Algorithm Proposal, Am J Urol Res. 2017;2(2): 038-043. <https://www.scireslit.com/Urology/AJUR-ID21.pdf>

Veerman H, de Rooij FPW, Al-Tamimi M, et al. Functional **Outcomes and Urological Complications after Genital Gender Affirming Surgery** with Urethral Lengthening in Transgender Men. *J Urol* 2020; **204**(1): 104-9.

**Urethral stricture rate in FtoM phalloplasty**:

“…phalloplasty is a difficult and complex surgery with many potential complications. The most common complications are urinary, mostly comprised of urethrocutaneous (UC) fistulas and urethral strictures.”

“Phalloplasty is a complex surgery associated with a **51% urethral complication rate, decreasing to 24% even in the most experienced hands**. As more transgender men seek gender affirming surgery, one can expect a concomitant increase in the number of urethral complications.”

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6626307/>

Jun MS, Santucci RA. Urethral stricture after phalloplasty. *Transl Androl Urol*. 2019;8(3):266–272. doi:10.21037/tau.2019.05.08

**Complication rates in MtoF inversion vaginoplasty** (13 year follow up).

“**RESULTS:** Progressive obstructive voiding disorder due to **meatal stenosis** was the main complication observed in **40%** of the patients, feasibly corrected during the second setting. **Stricture recurrence was found in 15%.** **Stricture of vaginal introitus** was observed in 15% of the cases followed by 12% and 8% of **vaginal stenosis and lost of vaginal depth**, respectively. **Rectal injury was seen in 3%** and minor wound healing disorders in 33% of the subjects.” …

“Reviewing the literature on surgical outcomes after male to female GRS showed us **several limitations regarding unavailable controlled studies, prospective data collection and high follow-up loss. Furthermore, an extended description of surgical outcomes is found in very few publications**.

Our data show that **gender reassignment surgery, even if performed by trained surgeons in a qualified centre, is still associated with important complication rates**.”

<http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1677-55382012000100014>

Rossi Neto, R., Hintz, F., Krege, S., Rübben, H., & vom Dorp, F.. (2012). Gender reassignment surgery - a 13 year review of surgical outcomes. *International braz j urol*, *38*(1), 97-107. <https://dx.doi.org/10.1590/S1677-55382012000100014>

Kuhn A, Bodmer C, Stadlmayr W, Kuhn P, Mueller MD, Birkhaeuser M. **Quality of life 15 years after sex reassignment surgery** for transsexualism. *Fertility and Sterility* 2009; **92**(5): 1685-9

**High infection/extrusion rate of penile implants in FtoM transgender**:

“Therefore, prosthesis explantation, replacement, or revision surgery **occurred commonly following penile prosthesis implantation. Patients are required to be well-informed preoperatively about such complication rates**.”

van der Sluis, WB, et al., A Retrospective Cohort Study on Surgical Outcomes of Penile Prosthesis Implantation Surgery in Transgender Men After Phalloplasty, Urology, August 2019. DOI: <https://doi.org/10.1016/j.urology.2019.06.010>

<https://www.mdlinx.com/journal-summaries/surgical-outcomes-penile-prosthesis-implantation-surgery/2019/07/30/7573988/>

[90% study exclusion rate and glowing report]

A total of **471 articles were initially identified, of which 46 met our eligibility** criteria. A total of 3716 cases were analyzed. Overall incidence of complications included the following: 2% (1%-6%) fistula, 14% (10%-18%) stenosis and strictures, and 1% (0%-6%) tissue necrosis, and 4% (2%-10%) prolapse (upper and lower limits of the 95% confidence interval). Patient-reported outcomes included a satisfaction rate of 93% (79%-100%) with overall results, 87% (75%-96%) with functional outcomes, and 90% (79%-98%) with esthetic outcomes. Ability to have orgasm was reported in 70% (54%-84%) of patients. The regret rate was 1% (0%-3%).

Manrique, OJ, et al., Complications and Patient-Reported Outcomes in Male-to-Female Vaginoplasty-Where We Are Today: A Systematic Review and Meta-Analysis. [Ann Plast Surg.](https://www.ncbi.nlm.nih.gov/pubmed/29489533/) 2018 Jun;80(6):684-691. doi: 10.1097/SAP.0000000000001393.

<https://www.ncbi.nlm.nih.gov/pubmed/29489533/>

**4. REGRET** (see Detransition section)

Real, present and growing, but hidden by poorly designed studies that draw premature conclusions. Recent example:

“Whilst the data suggests that the vast majority of patients do well post gender-reassignment and that adverse outcomes are rare, the **reliability of these data is weak** and mostly **ignores a large segment of potentially “missing” data** due to **patients who were lost to follow up.** It is not known whether they also have good outcomes, or whether they have not been helped or indeed harmed, and most

concerningly, **it is generally not known whether they are alive or dead.”**

Box 3 of the article cites 5 sample studies where “lost to follow-up” rates ranged from22%-63%.

D’Angelo R. Psychiatry’s ethical involvement in gender-affirming care. *Australasian Psychiatry*. 2018;26(5):460-463. doi:[10.1177/1039856218775216](https://doi.org/10.1177/1039856218775216)

“However, these studies **may understate true regret rates** due to overly stringent

definitions of regret (i.e., requiring an official application for reversal of the legal gender status), very high rates of participant loss to follow-up (22%-63%) (D’Angelo, 2018 )…”

D’Angelo, R., Syrulnik, E., Ayad, S. *et al.* One Size Does Not Fit All: In Support of Psychotherapy for Gender Dysphoria. *Arch Sex Behav* (2020). <https://doi.org/10.1007/s10508-020-01844-2>

Citing:

D’Angelo R. Psychiatry’s ethical involvement in gender-affirming care. *Australasian Psychiatry*. 2018;26(5):460-463. doi:[10.1177/1039856218775216](https://doi.org/10.1177/1039856218775216)

**The Amsterdam Cohort Study**

Concluded: “The percentage of people who regretted gonadectomy remained small and did not show a tendency to increase.”

Wiepjes CM, Nota NM, de Blok CJ, et al. The Amsterdam Cohort of Gender Dysphoria Study (1972–2015): Trends in Prevalence, Treatment, and Regrets. *The Journal of Sexual Medicine* 2018; **15**(4): 582-90. <https://pdfs.semanticscholar.org/4700/0e90e6713eacd61d123001c073beef9fba03.pdf>

**Problems**:

1. **36% loss to follow up**. Over 20% loss usually invalidates a finding. “**A large number of transgender people were lost to follow-up**. “…**(36%)** did not return to our clinic after several years of treatment” (page 9).
2. **Incomplete data**: “**Not all data were available from the hospital registries**, particularly older data or surgeries performed in other centers”
3. **Very narrow regret definition: Regret only** scored for those who had **gonadectomies**.
4. No uniform stats on average follow-up time and variance.
5. **Study closed too soon: Stated the average time until regret was 130 months**. Page 8 admission: “…it **might be too early to examine regret rates** in people who started with HT in the past 10 years.” Many patients arrived later in the study, counted as non-regret without allowing the expected time for such. Shifts results.

“With 85% desistance amongst referred transgender children, and **increasing awareness of detransitioning**, unquestioning ‘affirmation’ as a pathway that leads gender dysphoric patients to irreversible interventions cannot be considered sole or best practice.”

(Salkind, Jessica, et al. “Safeguarding LGBT+ Adolescents.” BMJ, 2019, p. l245., doi:10.1136/bmj.l245.)

Transitioners with regret commonly speak of an initial disillusionment with the medical and mental health professions snf realize the hormones and surgery were unnecessary, so particular patience and compassion are in order.

* Sydney Wright. I Spent a Year as a Trans Man. Doctors Failed Me at Every Turn. [dailysignal.com](http://dailysignal.com), Oct. 7, 2019. <https://www.dailysignal.com//print?post_id=567253>
* [https://4thwavenow.com/2018/12/19/the-theatre-of-the-body-a-detransitioned-epidemiologist-examines-suicidality-affirmation-and-transgender-identity/](https://4thwavenow.com/2018/12/19/the-theatre-of-the-body-a-detransitioned-epidemiologist-examines-suicidality-affirmation-and-transgender-identity/%22%20%5Ct%20%22_blank)
* Stella Morabito. 30 Transgender Regretters Come Out Of The Closet. the[federalist.com](http://federalist.com), Jan. 3, 2019. <https://thefederalist.com/2019/01/03/30-transgender-regretters-come-closet-new-book/>
* Walt Heyer. Hormones, surgery, regret: I was a transgender woman for 8 years — time I can't get back. USAToday.com, Feb. 11, 2019. <https://www.usatoday.com/story/opinion/voices/2019/02/11/transgender-debate-transitioning-sex-gender-column/1894076002/>

We have more on this subject if needed. Hacsi Horvath did some tables and analysis for us. See also his section “Suicide” herein.

Horvath H. The Theatre of the Body: A detransitioned epidemiologist examines suicidality, affirmation, and transgender identity. 2018. <https://4thwavenow.com/2018/12/19/the-theatre-of-the-body-a-detransitioned-epidemiologist-examines-suicidality-affirmation-and-transgender-identity/> (accessed August 28 2020).

UK Story: 'Hundreds' of young trans people seeking help to return to original sex,” News.sky.com, 05 Oct 2019.

A 28 yo detransitioning woman is setting up a charity, The Detransition Advocacy Network. Hundreds have contacted her: “they tend to be around their mid-20s, they're mostly female and mostly same-sex attracted, and often autistic as well."

Some “felt shunned by the LGBT community for being a traitor.”

Prof. Levine: “There is much to suggest that the patient does not always know best—for example, post-transition depression, **detransition,** pre- and postsurgical suicide rates, and that researchers have concluded that postoperative patients need psychiatric care.”

Stephen B. Levine (2019) Informed Consent for Transgendered Patients, Journal of Sex & Marital Therapy, 45:3, 218-229, DOI: [10.1080/0092623X.2018.1518885](https://doi.org/10.1080/0092623X.2018.1518885)

**“His Name is Money”**:  <https://www.facebook.com/hisnameismoney>

* + Documentary of 5 minute interviews.

**Pique Resilience Project** on YouTube [4 detransitioned young women telling their story and answering questions] <https://www.youtube.com/watch?v=kxVmSGTgNxI>

“The tragedy of “gender affirming health care” for minors mirrors the calamities of the **lobotomy movement and California’s former eugenics sterilization program**.”

Andre Van Mol, “Transing California Foster Children & Why Doctors Like Us Opposed It,” PublicDiscourse.com, October 28, 2018. <https://www.thepublicdiscourse.com/2018/10/42612/>)

Renee Gardner, “10 Ways The Transgender Push Mirrors The Lobotomy Craze,” thefederalist.com, March 29, 2017. <https://thefederalist.com/2017/03/29/10-ways-transgender-push-mirrors-lobotomy-craze/>

Interview, “On A 'Eugenics Registry,' A Record Of California's Thousands Of Sterilizations,” NPR.org, Weekend Edition Sunday, December 18, 2016. <https://www.npr.org/2016/12/18/505000554/on-a-eugenics-registry-a-record-of-californias-thousands-of-sterilizations2016>

**FASCADE OF AUTHORITY**

There is **no medical proof of the long-term benefits or safety of a child undergoing hormonal therapy and surgical transitioning. It is impossible to scientifically recommend these to minors**.

**1. WPATH (World Professional Association for Transgender Health)**

**WPATH is not, contra the AMA Amicus in the Harris Funeral Home SCOTUS case, “the consensus** of the medical and mental health community regarding the appropriate treatment for gender dsyphoria.”

It is the former **Harry Benjamin International Gender Dysphoria**

**Association**.

(Zucker, K. J. (2018). The myth of persistence: response to “A critical commentary on follow-up studies and ‘desistance’ theories about transgender and gender nonconforming children” by Temple Newhook et al. International Journal of Transgenderism, 19(2), 231–245. Published online May 29, 2018. <http://doi.org/10.1080/15532739.2018.1468293>)

2001 The Harry Benjamin International Gender Dysphoria Association standards

of care for gender identity disorders, 6th version. http://www.hbigda.org/soc.html.

The World Professional Association for Transgender Health (WPATH, a membership organization for health care professionals that advocates for transgender health care)…

Paul W. Hruz, Lawrence S. Mayer, and Paul R. McHugh, "Growing Pains: Problems with Puberty Suppression in Treating Gender Dysphoria," *The New Atlantis*, Number 52, Spring 2017, pp. 3-36.

WPATH is a advocacy group and not a scientific organization.

“Instead of being a scientifically-based organization, WPATH acts as a politically active entity pushing aggressively for worldwide acceptance of gender incongruence as a biologically-based variation of normal behavior. WPATH pushed the American Psychiatric Association to eliminate GID as a disorder. Dr. Zucker, who chaired the committee to create the DSM-5, fought to retain an entity, which he termed Gender Dysphoria, to describe the emotional suffering of those persons with gender incongruence. This would allow patients to receive insurance coverage for treatments related to resolving the dysphoria. He succeeded in his efforts and the term GID was thus replaced.”

Quentin L. Van Meter. Bringing Transparency to the Treatment of Transgender Persons. Issues in Law & Medicine, Vol. 34, Iss. 2, Fall 2019, pp. 147-152.

“The **World Professional Association for Transgender Health’s Standards of Care** recommend an informed consent process, **which is at odds with its** recommendation of providing hormones on demand.”

Stephen B. Levine (2018): Informed Consent for Transgendered Patients,

Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2018.1518885

The World Professional Association for Transgender Health (WPATH) deems gender identity incongruity not “inherently pathological” and asserts that efforts to “change gender identity and expression to become more congruent” with biological sex ineffective [ignores evidence, see below] and “unethical.”

Coleman E, Bockting W, Botzer M, et al. Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People, Version 7. *International Journal of Transgenderism* 2012; **13**(4): 165-232.

(WPATH’s citation for the alleged lack of success of psychotherapy fail to support their claim. At least 15 studies or case reports exist. Michelle Cretella, Transgender Belief: A Call to Heal Minds, Preserve Bodies, and Save Lives, Joint AAPLOG/ACPeds Matthew Bulfin Medical Education Conference (online: 2020).)

What of WPATH’s SOC **argument that it is unethical to do a controlled study of anything except gender affirmation treatments** because failure to affirm is inherently harmful?

Pediatric endocrinologist **Paul Hruz** (e-mail, 3/29/21)

“The problem with the argument that is is unethical to do a controlled study is the erroneous assumption that the control group will not receive care.  A properly controlled trial provides the same interventions in all aspects of care except for the independent variable.  To be effective while ensuring subject safety, it is necessary to have a clearly developed hypothesis, a single study objective, defined endpoint, a feasible intervention regimen and anticipation of potential problems during the conduct of the experiment. With clear a priori delineation of potential adverse events and use of an "intention to treat" analysis, one can maintain safety without artificially biasing results.”

**Adults: “GD can remit in some [adult]cases** (Marks et al. 2000); **perhaps psychotherapy could facilitate such remission** – or a reduction in GD symptoms… in some subset of the diverse group of adults [who meet the diagnosis of] GD.”

…“**Unfortunately, these possibilities have not yet been investigated, and such investigations are strongly discouraged in the SOC – 7**.”

Zucker KJ, Lawrence AA, Kreukels BP, Gender Dysphoria in Adults, Annual Rev of Clinical Psych, 2016. 12:20.1-20.31, p. 21.

“This makes AAP’s logic entirely backwards: That WPATH’s request to depathologize gender dysphoria was rejected suggests that it is WPATH’s view—and therefore the AAP policy—which fall “outside the mainstream of traditional medical practice.” (!)”

James M. Cantor (2019): Transgender and Gender Diverse Children

and Adolescents: Fact-Checking of AAP Policy, Journal of Sex & Marital Therapy, DOI:10.1080/0092623X.2019.1698481

1. **ENDOCRINE SOCIETY GUIDELINES**

**2017 Endocrine Society Guidelines** for treatment of gender dysphoric/gender-incongruent persons **recommended puberty blocking and cross-sex hormone administration to selected minors citing “low evidence” and genital surgery for selected adults citing “very low evidence.”**

The Guidelines rest largely on a single, uncontrolled, weakly designed study.

(Hembree, Wylie C, et al. “Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society\* Clinical Practice Guideline.” The Journal of Clinical Endocrinology & Metabolism, vol. 102, no. 11, 2017, pp. 3869–3903., doi:10.1210/jc.2017-01658.)

The Endocrine Society specifically stated “guidelines cannot guarantee any specific

outcome, **nor do they** **establish a standard of care**”:

“The guidelines should not be considered inclusive of all proper approaches or methods, or exclusive of others. The guidelines cannot guarantee any specific outcome, nor do they establish a standard of care. The guidelines are not intended to dictate the treatment of a particular patient.” P. 3895.

Wylie C Hembree, et al. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline, *The Journal of Clinical Endocrinology & Metabolism*, Volume 102, Issue 11, 1 November 2017, Pages 3869–3903, <https://doi.org/10.1210/jc.2017-01658>

In 2019 the Endocrine Society, along with an international panel of endocrinology societies, concluded “the only evidence-based indication for testosterone therapy for women is for the treatment of HSDD [Hypoactive sexual desire disorder],” and that “There are insufficient data to support the use of testosterone for the treatment of any other symptom or clinical condition, or for disease prevention.” Also, “The safety of long-term testosterone therapy has not been established.”

Susan R Davis, et al, Global Consensus Position Statement on the Use of Testosterone Therapy for Women, *The Journal of Clinical Endocrinology & Metabolism*, Volume 104, Issue 10, October 2019, Pages 4660–4666, <https://doi.org/10.1210/jc.2019-01603>.

A 2014 Endocrine Society Clinical Practice Guideline had said the same thing.

Margaret E. Wierman, et al. Androgen Therapy in Women: A Reappraisal: An Endocrine Society Clinical Practice Guideline, *The Journal of Clinical Endocrinology & Metabolism*, Volume 99, Issue 10, 1 October 2014, Pages 3489–3510, <https://doi.org/10.1210/jc.2014-2260>

1. **AMERICAN ACADEMY OF PEDIATRIC POLICY**

“In 2016, **the Human Rights Campaign,** an LGBT advocacy group, partnered with the **American Academy of Pediatrics** — the nation’s most prominent professional organization for pediatricians — and the American College of Osteopathic Pediatricians to publish a guide for families of transgender children.”

Paul W. Hruz, Lawrence S. Mayer, and Paul R. McHugh, "Growing Pains: Problems with Puberty Suppression in Treating Gender Dysphoria," *The New Atlantis*, Number 52, Spring 2017, pp. 3-36.

U of Toronto psycholgist James Cantor states, “In fact, **the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing *watchful waiting*.”**

“The AAP statement was also **remarkable in what it left out**—namely, the outcomes research on GD children.” “…***every* follow-up study of GD children, without exception, found the same thing: Over puberty, the majority of GD children ceased to want to transition.**”

 “Rather, AAP’s statement is a systematic exclusion and misrepresentation of entire literatures.  Not only did AAP fail to provide *extraordinary* evidence, it failed to provide the evidence at all.  **Indeed, AAP’s recommendations are *despite* the existing evidence.”**

James M. Cantor (2019): Transgender and Gender Diverse Children

and Adolescents: Fact-Checking of AAP Policy, Journal of Sex & Marital Therapy, DOI:10.1080/0092623X.2019.1698481

“This makes AAP’s logic entirely backwards: That WPATH’s request to depathologize gender dysphoria was rejected suggests that it is WPATH’s view—and therefore the AAP policy—which fall “outside the mainstream of traditional medical practice.” (!)”

James M. Cantor (2019): Transgender and Gender Diverse Children

and Adolescents: Fact-Checking of AAP Policy, Journal of Sex & Marital Therapy, DOI:10.1080/0092623X.2019.1698481

AAP’s HealthDay reported (April 2017) U of Iowa study that kids younger than 14yo could not reliably cross a busy street safely.

* + <https://consumer.healthday.com/kids-health-information-23/child-safety-news-587/at-what-age-can-kids-safely-cross-the-street-721785.html>.
	+ So how can they be competent to choose GAT?

“But the American Academy of Pediatrics is now on record prioritizing the opinion of a five-year-old over the considered judgment of the child’s parents.”

“The AAP would not allow a five-year-old to veto the parent’s decision regarding whether to be vaccinated against diphtheria, which is today a very rare disease. Why is the AAP giving five-year-olds supreme authority for this much more profound decision?”

“These new guidelines are not based in evidence. On the contrary, they contradict the available research.”

Leonard Sax, “Politicizing Pediatrics: How the AAP’s Transgender Guidelines Undermine Trust in Medical Authority,”thepublicdiscourse.com March 13, 2019. <https://www.thepublicdiscourse.com/2019/03/50118/>

“Dr. Joseph Zanga, who serves “as Clinical Professor of Pediatrics at the Medical College of Georgia” and Emeritus  Professor of Pediatrics at Mercer University School of Medicine,  and is a past president of the American Academy of Pediatrics further clarified the policy-making process…:

* Policy Statements are produced by 10-12 member Committees or Councils, or Section (e.g., School Health, Adolescence, or Bioethics) or more commonly by Section Executive Committees, whose members are nominated by their AAP State Chapter Committees (or members of the Section) and selected by Committees of the AAP Board. Confirmation is by the Board of Directors. Section Executive Committees are elected by the Section members.
* The 10 members of the AAP Board of Directors are elected by the AAP members of their district (elections never garner votes from even 40% of members) and the Executive Committee consisting of the president, president-elect, immediate past-president (elected by the AAP members nationally with equally small numbers voting), and the paid executive director (hired by the Board)
* Statements are sent to the board for review and vote. Often there is discussion at a board meeting. Rarely is there outside opinion sought, and there is never a minority report.
* AAP members often don’t even see the report until after it appears in the media. They have no direct input.

Laurie Higgins, Do 66,000 Pediatricians Really Support the AAP’s “Trans”-Affirmative Policy? illinoisfamily.org, April 5, 2017. https://illinoisfamily.org/homosexuality/66000-pediatricians-really-support-aaps-trans-affirmative-policy/

**SCARE TACTICS AND EMOTIONAL BLACKMAIL**

“Finally I must state that as I regard the transsexual syndrome as a personality and characterological disaster it cannot be corrected by mutilating operations which are **often carried out in response to suicide threats amounting to blackmail**.”

(Limentani A. The significance of transsexualism in relation to some basic psychoanalytic concepts. *International Review of Psycho-Analysis* 1979; **6**: 139-53.) Quote on p. 149, last paragraph.

The piece “aims to **call to attention the effects of scare tactics and sensational stereotypes of transgender people used to convince people of the necessity of treatment**.”

(Sadjadi, Sahar. “The Endocrinologist’s Office—Puberty Suppression: Saving Children from a Natural Disaster?” Journal of Medical Humanities, vol. 34, no. 2, 2013, pp. 255–260., doi:10.1007/s10912-013-9228-6.)

British Columbia psychologist Wallace Wong is quoting recommending patients **claim suicidality**, ““So what you need is, you know what? Pull a stunt. Suicide, every time, [then] they will give you what you need,” Wong said, adding that gender-dysphoric kids “learn that. They learn it very fast.”

(<https://thefederalist.com/2019/04/01/doctor-advises-threatening-suicide-get-transgender-treatments-kids/>)

“Ireland's leading endocrinologist, Professor Donal O'Shea, has warned that he

**believes some advocacy groups are prepping patients** to fast-track their way to

gender transition - without undergoing an appropriate mental health

assessment”.

"I have had a number of **patients who have told me that they have been**

**coached in the answers to give** so that they give the 'right' answers to

psychologists and psychiatrists who will be asking them questions before

receiving hormone treatment and gaining access to surgery," Prof O'Shea said.

"And I have been told by patients who have had hormone treatment, who have

had surgery, **who are now unhappy with their decision, that they have been**

**instructed by patient advocates not to report this because it would be bad for**

**the wider community**."

“Patients 'coached to fast-track sex change treatment',” Independent.ie, Sept/ 29, 2019. <https://www.independent.ie/irish-news/health/patients-coached-to-fast-track-sex-change-treatment-38543409.html>

**SUICIDE**

 “**But the best scientific evidence suggests that gender transition is not necessary to prevent suicide**.”

“There is **no persuasive evidence that gender transition reduces gender dysphoric children’s likelihood of killing themselves**.”

“The idea that mental health problems–including suicidality–are caused by gender dysphoria rather than **the other way around** (i.e., mental health and personality issues cause a vulnerability to experience gender dysphoria) is currently popular and politically correct. It is, however, unproven and as likely to be false as true.”

J. Michael Bailey and Ray Blanchard, “Suicide or transition: The only options for gender dysphoric kids?” 4thwavenow.com, Sept. 8, 2017. <https://4thwavenow.com/2017/09/08/suicide-or-transition-the-only-options-for-gender-dysphoric-kids/>

**Professor Michael Biggs of Oxford**

Regarding the UK’s Tavistock and Portman NHS Trust’s Gender Identity Development Service’s experimental trial of puberty blockers for early teenagers with gender dysphoria, Oxford’s Professor Michael Biggs wrote, “This study yielded only one published scientific article on outcomes. It showed **no evidence for the effectiveness of GnRHa: there was no statistically significant difference in psychosocial functioning between the group given blockers and the group given only psychological support.** In addition, there is unpublished evidence that after a year on GnRHa children reported greater self-harm, and that girls experienced more behavioural and emotional problems and expressed greater dissatisfaction with their body—**so puberty blockers exacerbated gender dysphoria**.”

## (Michael Biggs, “Tavistock’s Experimentation with Puberty Blockers: Scrutinizing the Evidence,” TransgenderTrend.com, March 5, 2019. <https://www.transgendertrend.com/tavistock-experiment-puberty-blockers/>)

**Lupron package insert**:

Under “ADVERSE REACTIONS”

“In postmarketing experience, **mood swings, depression, rare reports of suicidal ideation and attempt**, …”

Under “6.5 Postmarketing”

“Like other drugs in this class, **mood swings, including depression**, have been reported. There have been **very rare reports of suicidal ideation and attempt**. Many, but not all, of these patients had a history of depression or other psychiatric illness. **Patients should be counseled on the possibility of development or worsening of depression** during treatment with LUPRON.”

“Finally I must state that as I regard the transsexual syndrome as a personality and characterological disaster it cannot be corrected by mutilating operations which are often carried out in response to **suicide threats amounting to blackmail**.” (Limentani A. The significance of transsexualism in relation to some basic psychoanalytic concepts. *International Review of Psycho-Analysis* 1979; **6**: 139-53.) Quote on p. 149, last paragraph.

A 2016 study of nearly all (98%; n=104) of Dutch patients who underwent **sex reassignment surgery** from 1978-2010 found no significant difference in **psychiatric morbidity or mortality** between male to female and female to male (FtM) “save for the total number of psychiatric diagnoses where FtM held a significantly higher number of psychiatric diagnoses overall.”

* “ Ten individuals [nearly 10% of the study population] were registered as deceased post-SRS with an average age of death of 53.5 years.”
* “This suggests that generally SRS may reduce psychological morbidity for some individuals while increasing it for others.”
* **SRS was not an agent of  statistically significant net benefit**.

Simonsen, R. K., Giraldi, A., Kristensen, E. & Hald, G. M. Long-term follow-up of individuals undergoing sex reassignment surgery: Psychiatric morbidity and mortality. Nord J Psychiatry 70, 241-247, doi:10.3109/08039488.2015.1081405 (2016).

2019, de Graaf, et al., “…it is important to keep in mind that **physical treatments are not always associated with a resolution** in **mental health difficulties**. In some cases, **mental health problems can emerge while on physical treatment**.”

de Graaf NM, Carmichael P. Reflections on emerging trends in clinical work with gender diverse children and adolescents. *Clinical Child Psychology and Psychiatry*. 2019;24(2):353-364. doi:[10.1177/1359104518812924](https://doi.org/10.1177/1359104518812924)

From Hacsi Horvath’s commentary cited below**:**

**The alleged 40% suicide attempt rate of gender dysphoric people is false.**

Three reports in the past five years suggested that the trans-identified suicide attempt rate was over 40% (Haas 2014, James 2015, Toomey 2018).

Haas AP, Rodgers PL, Herman JL, “Suicide Attempts Among Transgender and Gender Non-Conforming Adults: Findings of the National Transgender Discrimination Survey,” Williams Institute, UCLA School of Law, January 2014, [https://williamsinstitute.law.ucla.edu/category/research/transgender-issues](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwj-iPmJ3JLeAhXprlQKHby3DJMQFjAAegQICBAB&url=https%3A%2F%2Fwilliamsinstitute.law.ucla.edu%2Fcategory%2Fresearch%2Ftransgender-issues%2F&usg=AOvVaw3lTMzJb5eMbUfzKDuPCFx7)

James SE, Herman JL, Rankin S, Keisling M, Mottet L, Anafi M. (2016). The Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality. <https://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF>

Toomey RB, Syvertsen AK, Shramko M (2018). Transgender Adolescent Suicide Behavior. Pediatrics. 2018;142(4): e20174218. <https://pediatrics.aappublications.org/content/pediatrics/142/4/e20174218.full.pdf>

**All three reports used convenience sampling, and statistical generalizations cannot be made from convenience samples**.

The William’s Institute, which also produced and promoted the Haas report (2014), was contracted by the state of California to **use appropriate survey methods and found the trans-identified suicide attempt rate was 22%.**

Herman JL, Wilson BD, Becker T. Demographic and Health Characteristics of Transgender Adults in California: Findings from the 2015-2016 California Health Interview Survey. Policy Brief. UCLA Cent Health Policy Res. 2017 Oct;(8):1-10. <https://healthpolicy.ucla.edu/publications/Documents/PDF/2017/transgender-policybrief-oct2017.pdf>

**That is comparable to rates for people with psychological illness, bullying victims, and general LGB-identification**. (<https://4thwavenow.com/2018/12/19/the-theatre-of-the-body-a-detransitioned-epidemiologist-examines-suicidality-affirmation-and-transgender-identity/>)

**Williams Study**.

Haas AP, Rodgers PL, Herman JL (2014). Suicide Attempts among Transgender and Gender Non-Conforming Adults. The Williams Institute, University of California, Los Angeles. Available: <https://williamsinstitute.law.ucla.edu/category/research/transgender-issues>.

* **Only of adults, not teens or children**. Page 3, Methods and Limitations, notes respondents were 18 and over.
* Study **reports 4 flaws and urges interpretive caution**. Here are two:
	+ “*First, the…questionnaire included only a single item about suicidal behavior that asked, “Have you ever attempted suicide?”*
	+ “*Second, the survey did not directly explore mental health status and history,…*”
* See also, Christopher Rosik, Ph.D., “The Creation and Inflation of Prevalence Statistics: The Case of “Conversion Therapy” <https://a20ceadd-0fb7-4982-bbe2-099c8bc1e2ae.filesusr.com/ugd/ec16e9_9d56a183a92c4facb7e12fd773846043.pdf>

“An important note about convenience sampling is that **you cannot make statistical generalizations from research that relies on convenience sampling**.”

“**Convenience sampling is to be avoided *always* in survey research**.”

Lior Gideon, editor. Handbook of Survey Methodology for the Social Sciences. New York: Springer, 2012. ISBN 978-1-4614-3875-5.

Herman JL, Brown TNT, Haas AP. **Suicide Thoughts and Attempts Among Transgender Adults: Findings from the 2015 U.S. Transgender Survey** UCLA School of Law Williams Institute, 2019.

<https://williamsinstitute.law.ucla.edu/wp-content/uploads/Suicidality-Transgender-Sep-2019.pdf>

**96% of US adolescents attempting suicide demonstrate at least one mental illness**.

Nock MK, Green JG, Hwang I, McLaughlin KA, Sampson NA, Zaslavsky AM, Kessler RC. Prevalence, correlates, and treatment of lifetime suicidal behavior among adolescents: results from the National Comorbidity Survey Replication Adolescent Supplement. JAMA Psychiatry. 2013 Mar;70(3):300-10.

A 2003 study showing that **90% of people (adults and adolescents) who completed suicide had unresolved mental disorders**.

Cavanagh, J., Carson, A., Sharpe, M. & Lawrie, S. (2003), Psychological autopsy studies of suicide: a systematic review, Psychological Medicine, 33: 395–405, Cambridge University Press, DOI: 10.1017/S0033291702006943.

Another article: San Too L, Spittal MJ, Bugeja L, Reifels L, Butterworth P, Pirkis J. **The association between mental disorders and suicide:** a systematic review and meta-analysis of record linkage studies. *Journal of Affective Disorders* 2019; **259**: 302-13.

“**Paradox.** Let’s look for a moment **back to 1950**, when gender roles, sex-specific dress codes, laws regulating sexuality and other aspects of social control were much more rigidly “enforced.” The **suicide rate for AYA** in the US was much lower than it is now. **For both sexes, it was only 4.5** suicides per 100,000 AYA.” … “From that year, through our society’s *sturm und drang* of the ‘60s and ‘70s, AYA suicides trended upward, **reaching a peak in 1994 with a combined rate of 13.6.** The overall trend declined slightly and then was **more or less flat until 2011, when it began again to climb**.”

(Hacsi Horvath, “The Theatre of the Body: A detransitioned epidemiologist examines suicidality, affirmation, and transgender identity,” Dec. 19, 2018.)

A 2014 Australian study reported that **a leading reason for suicide** among “LGBTI” individuals was **stress from romantic partners rather than societal rejection**.

Skerrett DM, Kõlves K, De Leo D. Suicides among lesbian, gay, bisexual, and transgender populations in Australia: an analysis of the Queensland Suicide Register. *Asia Pac Psychiatry* 2014; **6**(4): 440-6. DOI: 10.1111/appy.12128.

**And Sex-Reassignement Surgery Can Worsen It.**

A **2011 Swedish study** of **post-gender-reassignment adults showed a suicide rate 19 times** that of the general population. Also nearly 3 times the rate of overall mortality and psychiatric inpatient care. This was a 30-year population-based matched cohort study of all 324 sex-reassigned persons in Sweden.

Dhejne C, Lichtenstein P, Boman M, Johansson ALV, Langstrom N, et al. (2011) Long-Term Follow-Up of Transsexual Persons Undergoing Sex

Reassignment Surgery: Cohort Study in Sweden. PLoS ONE 6(2): e16885. doi:10.1371/journal.pone.0016885.

35 year chart review of 8,263 Dutch patients who attended their primary gender identity clinic. (**Amsterdam Cohort Study 2020 update**)

“Overall suicide deaths did not increase over the years: HR per year 0.97 (95%

CI 0.94–1.00). **In trans women, suicide death rates decreased slightly over time** (per year: HR 0.96, 95% CI 0.93–0.99), **while it did not change in trans men** (per year: HR 1.10, 95% CI 0.97–1.25).”

* During nearly a half century period from 1972 to 2017 in the Netherlands, increasing **cultural acceptance (noted by the study authors) has made little difference in suicide rates, suggesting stigma is not a sufficient explanation for suicides**.

“The mean number of suicides in the years 2013– 2017 was higher in the trans population (40 per 100 000 person years; 43 per 100 000 trans women and 34 per 100 000 trans men) compared with the Dutch population in this time frame (11 per

100 000 person years; 15 per 100 00 registered men and 7 per 100 000 registered women)[].”

* So among people undergoing gender affirming (transition affirming) treatment, MtF transitioners had 2.8 times the completed suicide rate of general Dutch males, and FtM transitioners has 4.8 times the completed suicide rate of general Dutch females.

Study limitations cited by authors: (1) retrospective chart study, (2) “we did not have information about psychological comorbidities or other psychological information…”, and (3) “we only had information about people who actually visited our gender identity clinic.”

Wiepjes CM, den Heijer M, Bremmer MA, Nota NM, de Blok CJM, Coumou BJG, Steensma TD. Trends in suicide death risk in transgender people: results from the Amsterdam Cohort of Gender Dysphoria study (1972-2017). Acta Psychiatr Scand. 2020 Jun;141(6):486-491. doi: 10.1111/acps.13164. Epub 2020 Mar 12. PMID: 32072611; PMCID: PMC7317390.

CDC/MMWR **1994 “Suicide Contagion and the Reporting of Suicide**: Recommendations from a National Workshop”

<https://www.cdc.gov/mmwr/preview/mmwrhtml/00031539.htm>

Subsection: “ASPECTS OF NEWS COVERAGE THAT CAN PROMOTE SUICIDE CONTAGION”

* “Presenting simplistic explanations for suicide.”
	+ “Suicide is never the result of a single factor or event, but rather results from a complex interaction of many factors and usually involves a history of psychosocial problems (12).”
* “Engaging in repetitive, ongoing, or excessive reporting of suicide in the news.”
* “Providing sensational coverage of suicide.”
* “Reporting "how-to" descriptions of suicide.”
* “Presenting suicide as a tool for accomplishing certain ends.”
* “Glorifying suicide or persons who commit suicide.”

**STIGMA**

A 2014 study by **Hatzenbuehler, “Structural stigma and all-cause mortality in sexual minority populations**,”claimed an average life expectancy reduction of 12 years for sexual minorities living in areas with suspected prominent anti-gay sentiment.

([Mark L.Hatzenbuehler](https://www.sciencedirect.com/science/article/pii/S0277953613003353?via%3Dihub#!), et al, “RETRACTED: Structural stigma and all-cause mortality in sexual minority populations,” *Social Science & Medicine,* [*https://doi.org/10.1016/j.socscimed.2013.06.005*](https://doi.org/10.1016/j.socscimed.2013.06.005)).

Mark Regnerus’s team (2017) tried to replicate the results of Hatzenbuehler’s work, and **10 different methods of statistical computation failed to do so**.[[8]](#footnote-7)

(Regnerus M. “Is structural stigma's effect on the mortality of sexual minorities robust? A failure to replicate the results of a published study,” Social Science & Medicine, online 14 Nov 2016 . <http://dx.doi.org/10.1016/j.socscimed.2016.11.018>)

***Social Science & Medicine* eventually retracted the study**, explaining that, “Re-analysis confirmed that the original finding was erroneous and the authors wish to fully retract their original study accordingly.” (Hatzenbuehler, cited above). But citations of Hatzenbuehler’s false conclusions persist, including the AMA amicus brief.

A 2016 study **examined 40 years of data in children** referred to gender dsyphoria and found “In the present study, **once we controlled** for general behavior problems, poor peer relations was no longer a signiﬁcant predictor of suicidal ideation and behavior. **Thus, we cannot argue that social ostracism of gender-referred children was a unique correlate of suicidality**.”

(Aitken, Madison & P. VanderLaan, Doug & Wasserman, Lori & Stojanovski, Sonja & Zucker, Kenneth. **Self-Harm and Suicidality in Children Referred for Gender Dysphoria**. [Journal of the American Academy of Child and Adolescent Psychiatry](http://ib.adnxs.com/seg?add=1&redir=http%3A%2F%2Fib.adnxs.com%2Fseg%3Fadd%3D1%26redir%3Dhttp%253A%252F%252Fib.adnxs.com%252Fseg%253Fadd%253D1%2526redir%253Dhttps%25253A%25252F%25252Fwww.researchgate.net%25252Fjournal%25252F1527-5418_Journal_of_the_American_Academy_of_Child_and_Adolescent_Psychiatry) 55(6) · April 2016, pp. 513-520.)

Mayer and McHugh’s comprehensive review of the scientific literature on sexuality and gender concluded this about stigma reports, “[I]t is important to note that due to the cross-sectional design of these studies, **causal inferences cannot be supported by the data**. . . . In particular, it is **impossible to prove through these studies that stigma leads to poor mental health, as opposed to, for example, poor mental health leading people to report higher levels of stigma, or a third factor being responsible for both poor mental health and higher levels of stigma**.”In the executive summary (p.8) we find, “More high-quality longitudinal studies are necessary for the “social stress model” to be a useful tool for understanding public health concerns.”

Mayer LS, McHugh PR. Sexuality and Gender: Findings from the Biological, Psychological, and Social Sciences. *New Atlantis* 2016; (50): 10-2.

**35 year chart review** of 8,263 Dutch patients who attended their primary gender identity clinic. (**Amsterdam Cohort Study 2020 update**)

“Overall suicide deaths did not increase over the years: HR per year 0.97 (95%

CI 0.94–1.00). **In trans women, suicide death rates decreased slightly over time** (per year: HR 0.96, 95% CI 0.93–0.99), **while it did not change in trans men** (per year: HR 1.10, 95% CI 0.97–1.25).”

* During nearly a **half century period**from 1972 to 2017 in the Netherlands, increasing **cultural acceptance (noted by the study authors) has made little difference in suicide rates** among gender dysphoric patients seen by the nation’s primary gender identity clinic**, suggesting stigma is not a sufficient explanation for suicides**.

Wiepjes CM, den Heijer M, Bremmer MA, Nota NM, de Blok CJM, Coumou BJG, Steensma TD. Trends in suicide death risk in transgender people: results from the Amsterdam Cohort of Gender Dysphoria study (1972-2017). Acta Psychiatr Scand. 2020 Jun;141(6):486-491. doi: 10.1111/acps.13164. Epub 2020 Mar 12. PMID: 32072611; PMCID: PMC7317390.

Michael Bailey, J. **The Minority Stress Model Deserves Reconsideration, Not Just Extension**. *Arch Sex Behav* **49,**2265–2268 (2020). <https://doi.org/10.1007/s10508-019-01606-9>.

* “The [minority stress] model has not yet advanced from the “accumulating empirical associations” stage of empirical inquiry to the “eliminating rival hypotheses” stage. And at least one obvious rival hypothesis exists: That the increased prevalence of mental health problems in non[heterosexual] persons is, at least in part, the cause, rather than the effect, of increased self-reported experiences of stigmatization, prejudice, and discrimination.”
* “The minority stress model should predict that nonheterosexual persons who grow up in especially intolerant or stigmatizing cultures would be at particularly high risk of mental health problems. However, I know of no evidence for this prediction, and there is some evidence against it. Careful surveys conducted in the Netherlands, a highly tolerant culture, have shown

a substantial increase in affective disorders among nonheterosexuals (Sandfort, Bakker, Schellevis, & Vanwesenbeeck, 2006 ; Sandfort, de Graaf, Bijl, & Schnabel, 2001 ). These rates are not significantly lower than found in the less-tolerant U.S. (e.g., Cochran & Mays, 2000 ).”

* Citing:
* Sandfort, T. G., Bakker, F., Schellevis, F. G., & Vanwesenbeeck, I.

(2006). Sexual orientation and mental and physical health status: Findings from a Dutch population survey. American Journal of Public Health, 96, 1119–1125.

* Sandfort, T. G., de Graaf, R., Bijl, R. V., & Schnabel, P. (2001). Same-sex sexual behavior and psychiatric disorders: Findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). Archives of General Psychiatry, 58, 85–91.
* Cochran, S. D., & Mays, V. M. (2000). Relation between psychiatric syndromes and behaviorally defined sexual orientation in a sample of the US population. American Journal of Epidemiology, 151, 516–523.
* “Moreover, the minority stress model has relied exclusively on self-report data to quantitate stigmatization, as Feinstein (2019 ) acknowledges.”
	+ Citing:
		- Feinstein, B. A. (2019). The rejection sensitivity model as a framework for understanding sexual minority mental health. Archives of Sexual Behavior. https ://doi.org/10.1007/s1050 8-019-1428-3.
* “Homosexual men have higher scores on trait neuroticism compared with heterosexual men (Lippa, 2005). . . trait neuroticism is strongly associated with depressive and anxiety disorders (Mineka, Watson, & Clark, 1998).”
	+ Citing:
		- Lippa, R. A. (2005). Sexual orientation and personality. Annual Review of Sex Research, 16, 119–153.
		- Mineka, S., Watson, D., & Clark, L. A. (1998). Comorbidity of anxiety and unipolar mood disorders. Annual Review of Psychology, 49, 377–412.
* “Writing about gender dysphoric persons, Zucker, Lawrence, and Kreukels (2016 ) offered perhaps the most explicit statement of an alternative model postulating a reversed direction of effect. They argued that in the minority stress model “direction of effect cannot be conclusively determined (i.e., whether prejudice and discrimination lead to a greater likelihood of developing mental health problems, or whether mental health problems lead to a greater likelihood of experiencing—or perceiving—prejudice and discrimination)” (p. 230).”
	+ Citing:
		- Zucker, K. J., Lawrence, A. A., & Kreukels, B. P. (2016). Gender dysphoria in adults. Annual Review of Clinical Psychology, 12, 217–247.
* “I am afraid that my fear has largely been realized. The minority stress model has been prematurely accepted as the default explanation for sexual orientation-associated differences in mental health. Yet minority stress research has not generated findings uniquely explicable by the model, and it has ignored the model’s serious limitations.”

It is **disempowering and misleading to teach sexual minority youth that their problems in life are generally imposed by others who simply disagree with them while failing to warn them of more intimate risks**.

**FINANCING THE MOVEMENT & TACTICS**

“The LGBT rights agenda—note the addition of “T”—has become a powerful, aggressive force in American society. Its advocates stand at the top of media, academia, the professions, and, most important, **Big Business and Big Philanthropy**.”

She explains the history of the **Arcus Foudation**, founded in 2000 by Jon Stryker, heir to the Stryker Corporation (surgical supplies and software), and gay-identified.

Also discussed **Tim Gill’s Gill Foundation**, another massive LGBT nonprofit.

“As the example of the Arcus Foundation shows, the LGB civil rights movement of yore has morphed into a relentless behemoth, one that has strong ties to the medical industrial complex and global corporatists. The pharmaceutical lobby is the largest lobbying entity in Congress. **Although activists present the LGBT movement as a weak, powerless group suffering oppression and discrimination, in truth it wields enormous power and influence—power it increasingly uses to remake our laws, schools, and society.”**

Jennifer Bilek, The Billionaires Behind the LGBT Movement, firththings.com, Jan. 21, 2020. <https://www.firstthings.com/web-exclusives/2020/01/the-billionaires-behind-the-lgbt-movement>

 “Exceedingly rich, white men (and women) who invest in biomedical companies are funding myriad transgender organizations whose agenda will make them gobs of money.”

Jennifer Bilek, “Who Are the Rich, White Men Institutionalizing Transgender Ideology?” the federalist.com, Feb. 20, 2018. <https://thefederalist.com/2018/02/20/rich-white-men-institutionalizing-transgender-ideology/>

Bilek, Jennifer. Trans ideology awash with big money from big bio-med and big pharma [Online]. New Weekly, No 3017, 07 April 2018: 14-17. Available at: <https://search.informit.com/au/documentSummary;dn=594421807114599;res-IELAP>

James Kirkup, “The document that reveals the remarkable **tactics of trans lobbyists**,” blogs.spectator.co.uk, 2 Dec 2019. <https://blogs.spectator.co.uk/2019/12/the-document-that-reveals-the-remarkable-tactics-of-trans-lobbyists/>

* How did the trans lobbies so quickly and successfully influence public bodies, politicians, officials, education and even police forces?

Author notes it wasn’t changing societal norms, when even now “society still doesn’t know very much about transgenderism.”

* The manual ["Only adults? Good practices in legal gender recognition for youth](https://www.iglyo.com/wp-content/uploads/2019/11/IGLYO_v3-1.pdf)" (<https://www.iglyo.com/wp-content/uploads/2019/11/IGLYO_v3-1.pdf>) was written by **Dentons** (reportedly the world’s largest law firm), the **Thompson Reuters Foundation** (each claiming the report doesn’t necessarily reflect their views); and **IGLYO** (International Lesbian, Gay, Bisexual, Transgender, Queer and Intersex Youth & Student Organisation).

**The Dentons.Reuters.IGLYO document**: <https://www.iglyo.com/wp-content/uploads/2019/11/IGLYO_v3-1.pdf>

* The handbooks states:
	+ “It is recognised that the requirement for parental consent or the consent of a legal guardian can be restrictive and problematic for minors.”

It aims to remove such parental consent.

* It adds, “states should take action against parents who are obstructing the free development of a young trans person’s identity in refusing to give parental authorisation when required.”
* It recommends “certain techniques…as being effective in progressing trans rights in the “good practice” countries.”
	+ “Get ahead of the Government agenda.”
		- “…there were clear benefits where NGOs managed to get ahead of the government and publish progressive legislative proposal before the government had time to develop their own.”
		- “This will give them far greater ability to shape the government agenda and the ultimate proposal…”
	+ “Tie your campaign to more popular reform.’
		- “‘In Ireland, Denmark and Norway, changes to the law on legal gender recognition were put through at the same time as other more popular reforms such as marriage equality legislation. This provided a veil off of protection…”
	+ “‘Avoid excessive press coverage and exposure.”
		- “…stopping the wider public learning about their proposals.”
* Kirkup, who was once a Parliamentary researcher, finds the recommendations abnormal and unusual, since they bypass the consent of the governed.

He concludes: “no policy made in the shadows can survive in sunlight.”

"Private Health Insurance Plans Fund “Gender-Affirming” LGBT Institutions via Hidden Tax" <https://www.houstoncourant.com/editorial/private-health-insurance-plans-fund-gender-affirming-lgbt-institutions-via-hidden-tax>

* "PCORI was established under Obamacare with the mission to assist people in making informed healthcare decisions. The non-profit is funded by a congressionally authorized tax called a PCORI Fee. The fee hits hundreds of thousands of private health insurance plans each year, extracting millions to create a behemoth non-profit. The 2019 PCORI Annual Report showed revenues of $615,205,771.”…
* "The aforementioned projects may have legitimate medical purposes, but without proper oversight, it appears to be a slush fund for special interest.”

**Consensus is not a proxy for truth. Pro-GAT dogma is, in part, a Castro consensus.**

* “A Castro Consensus is a near-unanimous show of agreement brought about by means other than the honest and uncoerced judgements of individuals.”
* “…once dependence, polarization, and external pressure are introduced…the probability of a false consensus increases dramatically.”
* “We demonstrate how dependence, [external] pressure, and polarization can force a consensus, making reliance on consensus as an indicator of truth unreliable. As a result, a consensus can only be trusted to the extent that individuals are free to disagree with it, without repression or reprisal. Similarly, when strong incentives favor affirmation of a position, a consensus affirming it becomes almost inevitable, and therefore all but meaningless.”

Jarred Allen, Cindy Lay, Geroge D. Montanez. A Castro Consensus: Understanding the Role of Dependence in Consensus Formation. *Proceedings of the 2020 Truth and Trust Online (TTO 2020)*, pages 12–20, Virtual, October 16-17, 2020. <https://www.cs.hmc.edu/~montanez/pdfs/allen-2020-castro-consensus.pdf>

**EUGENICS STERILIZATION, CA and NC**

2012. “N.C. to Compensate Victims of Sterilization in 20th Century Eugenics Program”

“North Carolina will become the first state to compensate victims of a mass sterilization program that targeted poor minorities in a 20th century eugenics program, offering a $50,000 a person.

In a vote today, the Eugenics Compensation Task Force recommended the lump-sum amount, putting a three-year statute of limitations on claiming those funds.”

<https://abcnews.go.com/Health/WomensHealth/north-carolina-compensate-victims-eugenics-program-sterilized/story?id=15328707>

“California Launches Program to Compensate Survivors of State-Sponsored Sterilization”

“For some context and history of the program, state eugenics laws

that were in effect from 1909 through 1979, thousands of people

who lived in California state-run hospitals and institutions were

sterilized. Although these laws were appealed in 1979, it was later

discovered that many of these forced sterilizations continued to

occur in custody at state prisons and other correctional facilities

under the California Department of Corrections and Rehabilitation.”

“Assemblymember Wendy Carrillo (D-Los Angeles) proposed the

program in AB 1007.”

<https://sacramento.cbslocal.com/2021/12/31/california-program-state-sponsored-sterilization-survivors/>

More indepth prior report:

<https://ktla.com/news/california/california-to-pay-victims-forced-coerced-into-sterilization-because-state-deemed-them-unfit-to-have-children/>

**STUDIES, POORLY DONE**

“An important note about convenience sampling is that **you cannot make statistical generalizations from research that relies on convenience sampling**.”

“**Convenience sampling is to be avoided *always* in survey research**.”

Lior Gideon, editor. Handbook of Survey Methodology for the Social Sciences. New York: Springer, 2012. ISBN 978-1-4614-3875-5.

“The fact that modern patterns of the treatment of trans individuals **are not based on controlled or long-term comprehensive follow-up studies** has allowed many ethical tensions to persist.”

Levine, S.B. Reflections on the Clinician’s Role with Individuals Who Self-identify as Transgender. *Arch Sex Behav* (2021). https://doi.org/10.1007/s10508-021-02142-1

**Green**, et al (2020).[[9]](#footnote-8) **The Trevor Project** conducted an on-line survey recruiting adolescents and young adults (AYA) who experienced “sexual orientation or gender identity conversion efforts (SOGICE)” and "who interacted with materials deemed relevant to the LGBTQ community.”

* **Exclusion.** This **design excludes AYAs who do not or no longer identify as LGBTQ nor interact with the LGBTQ community or its materials,** such as those who found therapy helpful. By excluding them it can make no conclusions about them.
* **Bias.** Prior to survey “questions specific to youth mental health and suicidality,” the **LGBTQ-identified AYAs were instructed to contact the** **Trevor Project crisis intervention hot line if needed**, thus revealing the study sponsors and their well-advertised biases.
* **Bias.** **Green’s study defined SOGICE as coercive,** “someone attempted to convince them to change,” **which ethical change-allowing therapists don’t do**.
* **Excluded** 105 participants who said they experienced SOGICE but without someone trying to “convince them change,” so it can claim nothing about non-coercive SOGICE.
* **Association as causation fallacy**. The study asserted that LGBTQ-identified youth who were over 2 times more suicidal were more likely to have experienced SOGICE therapy. The researchers then fully commit to the association as causation fallacy by concluding, “The elevated odds of suicidality observed among young LGBTQ individuals exposed to SOGICE underscore the detrimental effects of this unethical practice…”
	+ No, they don’t. A more suicidal youth is more likely to seek therapy than one who is not. It does not follow that the therapy was causative of suicidality.

**2015 US Transgender Survey**.

James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). The report of the **2015 U.S. Transgender Survey**. Retrieved January 27, 2020 from National Center for Transgender Equality website, https ://www.trans equal ity.org/sites /defau lt/files/docs/USTS-Full-Repor t-FINAL .PDF.

* It was an online survey of transgender-identified and genderqueer adults from trans-affirming websites.
* Recruitment bias is obvious, large and multi-faceted, e.g. only trans-identified adults who are still alive responded.
* Studies based on it are by design retrospective, dependent upon people’s unreliable memories through ill-fitting questions.
* Regarding 2015 USTS: “This survey used convenience sampling, a methodology which generates low-quality data (Bornstein, Jager, & Putnick, 2013). Specifically, the participants were recruited through transgender advocacy organizations and subjects were asked to “pledge” to promote the survey among friends and family. This recruiting method yielded a large but highly skewed sample.”
	+ D’Angelo, R., Syrulnik, E., Ayad, S. *et al.* One Size Does Not Fit All: In Support of Psychotherapy for Gender Dysphoria. *Arch Sex Behav* (2020). <https://doi.org/10.1007/s10508-020-01844-2>
	+ Citing: Bornstein, M. H., Jager, J., & Putnick, D. L. (2013). Sampling in

developmental science: Situations, shortcomings, solutions, and standards. Developmental Review, 33(4), 357–370. https ://doi.

org/10.1016/j.dr.2013.08.003.

* Gideon’s 2012 textbook on survey methodology spells out a very clear warning: “An important note about convenience sampling is that you cannot make statistical generalizations from research that relies on convenience sampling.” He adds, “Convenience sampling is to be avoided *always* in survey research.”

Lior Gideon, editor. Handbook of Survey Methodology for the Social Sciences. New York: Springer, 2012. ISBN 978-1-4614-3875-5.

* Statistical generalizations derived from convenience samples are precisely what these type of studies produce, so they lack validity from the start.
* Andre’s opinion: With enough of these weak studies with pre-ordained conclusions in publication, confirmation bias by citation bias is highly likely. The same erroneous studies get cited in other publications and the general media, and false conclusions become the established norm.

Walter R Schumm*, Assessing Citation Bias in Scientific Literature.* 2020 - 10(3). AJBSR.MS.ID.001514. Walter Schumm, Catherine R. Pakaluk, Duane W. Crawford. *Forty Years of Confirmation Bias in Social Science: Two Case Studies of*

*Selective Citations*. Internal Medicine Review, Vol. 6, Iss. 4 (2020) [doi.org/10.18103/imr.v6i4.875](http://dx.doi.org/10.18103/imr.v6i4.875)

**Amsterdam Cohort Study**

Concluded: “The percentage of people who regretted gonadectomy remained small and did not show a tendency to increase.”

Wiepjes CM, Nota NM, de Blok CJ, et al. The Amsterdam Cohort of Gender Dysphoria Study (1972–2015): Trends in Prevalence, Treatment, and Regrets. *The Journal of Sexual Medicine* 2018; 15(4): 582-90.

**Problems**:

* + “Not all data were available from the hospital registries, particularly older data or surgeries performed in other centers” (p.590)
	+ “A large number of transgender people…were lost to follow-up. Although transgender people receive lifelong care, a large group (36%) did not return to our clinic after several years of treatment” (page 589).
	+ Regret only tabulated for those who had gonadectomies and then requested hormone therapy consist with biological sex “and expressed regret” (p.584); excluded all who died (p.584).
	+ No uniform stats on average follow-up time and variance.
	+ Admitted average regret time was 130 months. Page 589 admission: ““…it might be too early to examine regret rates in people who started with HT in the past 10 years.” Many more patients came later in the study, counted as non-regret without allowing the expected time for such. Shifts results.

**Cornell University “systematic literature review”**

Anonymous. Cornell University, Public Policy Research Portal. “What does the scholarly research say about the effect of gender transition on transgender well-being?” Available: https://whatweknow.inequality.cornell.edu/topics/lgbt-equality/what-does-the-scholarly-research-say-about-the-well-being-of-transgender-people/ [accessed 20 November 2019]

Horvath, Hacsi. (2020). Activist-driven transgender research methods are reckless and will lead to harms. 10.13140/RG.2.2.22455.55206.

* “In 2017, anonymous authors at Cornell University produced a document titled “What does thescholarly research say about the effect of gender transition on transgender well-being?”[3]. This document purports to be a “systematic literature review.” In reality, it is a piece of propaganda, created by activists.”
* “Conclusions: The so-called “systematic literature review” produced at Cornell was nothing of the kind. “Findings” of this document should be ignored.”

**Turban JL**, King D, Carswell JM, et al. **Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation**.

Pediatrics Feb 2020, 145 (2) e20191725; **DOI:** 10.1542/peds.2019-1725

* “Using a cross-sectional survey of 20 619 transgender adults aged 18 to 36 years…” [2015 U.S Transgender Survey. Online survey of transgender and “genderqueer” adults recruited from trans-friendly websites.]
	+ Retrospective, cross-sectional (“…cross-sectional design, which does not allow for determination of causation.”).
	+ Self-reporting of history of adolescent puberty suppression.
	+ Not controlled for other mental health factors. “…it is plausible that those without suicidal ideation had better mental health when seeking care and thus were more likely to be considered eligible for pubertal suppression.” Those with worse mental health would often be denied puberty blockage
	+ Desisters and regretters would not likely be in this study group, which also only included adults, so “it does not include outcomes for people who may have initiated pubertal suppression and subsequently no longer identify as transgender.” A very limited group of respondents.
* “those who received treatment with pubertal suppression, when compared with those who wanted pubertal suppression but did not receive it, had **lower odds of lifetime suicidal ideation** (adjusted odds ratio = 0.3; 95% confidence interval = 0.2– 0.6).”
	+ This was one measure of 9 that were evaluated, the only positive result reaching statistical significance.
	+ But again, “…cross-sectional design, which does not allow for determination of causation.”
* However, Table 3. Under “Suicidality (past 12 mo)” reductions for suppressed group v non were seen for ideation (50.6% v 64.8%) and “ideation with plan” (55.6% v 58.2%). But “ideation with plan and attempt” for the suppressed group went up to 24.4% v 21.5% for non. “Attempt resulting in inpatient care” was 45.5% for suppression groups vs 22.8% for non.
* This study, and most any based on the US Transgender Survery, really tells us little about the effects of puberty suppression on children with gender dysphoria.

**Also contra Turban 2020**:

Michael Biggs, Puberty Blockers and Suicidality in Adolescents Suffering from Gender Dysphoria. Archives of Sexual Behavior, accepted 14 May 2020, DOI: 10.1007/s10508-020-01743-6

* **Outstanding refutation of both Turban study and general use of US Transgender Survey**.

**Citation allowing Turban to cite himself as a source**:

“In contrast to the low rates of persistence from childhood into adolescence, it appears that the vast majority of transgender adolescents persist in their transgender identity (76).”

Turban JL, DeVries ALC, Zucker K. Gender Incongruence & Gender Dysphoria. In Martin A, Block MH, Volkmar FR: *Lewis’s Child and Adolescent Psychiatry*: *A Comprehensive Text, 5th ed*. Philadelphia, Wolters Kluwer, 2018.

Citing: Cohen-Kettenis PT, Pfafflin F: *Transgenderism and Intersexuality in Childhood and Adolescence: Making Choices*. London, Sage, 2003.

See Mike Laidlaw and Paul Hruz’s confirmation that the chapter in question in this book lacks internal support. It makes claims without substantiation. However, it became a source of confirmation and citation bias as Turban keeps quoting it, thus himself.

Turban, J. L., Beckwith, N., Reisner, S. L., & Keuroghlian, A. S. (2020).

**Association between recalled exposure to gender identity conversion**

**efforts and psychological distress and suicide attempts among**

**transgender adults**. JAMA Psychiatry, 77(1), 68–76. https ://doi.

org/10.1001/jamap sychi atry.2019.2285.

* **Detailed critique** (open source):

D’Angelo, R., Syrulnik, E., Ayad, S. *et al.* One Size Does Not Fit All: In Support of Psychotherapy for Gender Dysphoria. *Arch Sex Behav*(2020). <https://doi.org/10.1007/s10508-020-01844-2>

* LTEs against Turban in *Pediatrics*: (All LTEs come under a single URL) <https://pediatrics.aappublications.org/content/145/2/e20191725/tab-e-letters#re-pubertal-suppression-for-transgender-youth-and-risk-of-suicidal-ideation>
	+ Scott S. Field, Den A. Trumbull, RE: Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation.
	+ Patrick H Clarke, RE: Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation.
		- “The following is a brief summary of the flaws in the Turban et al.’s study, which render their conclusions misleading:

1. The source study, the United States Transgender Survey 2015 (USTS), employed a non representative, biased convenience sample. The results from this survey are unreliable.3
2. Over 70% of the USTS respondents demonstrably did not know what puberty blockers were, claiming to have commenced treatment after age 18. Although Turban et al. attempted to control for this, a proper adjustment was not possible.
3. There was no control for underlying mental health. Since more stable individuals are more likely to be eligible for puberty suppression, one cannot discern mental health benefits or harms of puberty suppression without controlling for pre-treatment mental health.
4. Turban et al. ignored their own finding that a history of puberty suppression was associated with an increase in recent serious suicide attempts.”

**Summary of : D’Angelo**, R., Syrulnik, E., Ayad, S. *et al.* One Size Does Not Fit All: In Support of Psychotherapy for Gender Dysphoria. *Arch Sex Behav* (2020). https://doi.org/10.1007/s10508-020-01844-2

* Turban et al, claimed that those responding yes to 2015 U.S. Transgender Survey (USTS) question 13.2 -- “Did any professional (such as a psychologist, counselor, religious advisor) try to make you identify only with your sex assigned at birth (in other words, try to stop you being trans)?” – has worse mental health than those answering no, and concluded that gender identity conversion efforts (GICE) should be avoided in all ages.
* Regarding 2015 USTS: “This survey used convenience sampling, a methodology which generates low-quality data (Bornstein, Jager, & Putnick, 2013). Specifically, the participants were recruited through transgender advocacy organizations and subjects were asked to “pledge” to promote the survey among friends and family. This recruiting method yielded a large but highly skewed sample.”
* Section “Invalid Measure of Gender Conversion Therapy” re USTS question 13.2: “Firstly, the question conflates mental health encounters with interactions with other types of professionals. Secondly, there is no information about whether the recalled encounter was self-initiated or coerced. Thirdly, it does not differentiate between diagnostic evaluations or a specific therapeutic intervention. There is also no information about whether the focus of the encounter was gender dysphoria or another condition. And finally, it does not determine whether shaming, threats, or other unethical tactics were utilized during the encounter.”
* “Their analysis is compromised by serious methodological flaws, including the use of a biased data sample, reliance on survey questions with poor validity, and the omission of a key control variable, namely subjects’ baseline mental health status.”
* Misinterpretation of K-6 scale. “The K-6 scale, and its cutoff score of ≥ 13, was specifically developed by Kessler et al. (2003 ) in order to discriminate

between cases of non-specific psychological distress and cases of serious mental illness (SMI). Scoring ≥ 13 is predictive of having a DSM diagnosis of schizophrenia, bipolar disorder, and a range of other major mental health conditions that cause serious functional impairment (Substance Abuse

and Mental Health Services Administration, 2020 ). Thus, Turban et al.’s (2020 ) finding of an association between the recall of GICE and scoring ≥ 13 actually suggests that the USTS participants recalling GICE were more likely to have a severe mental illnesses diagnosis than those not recalling

GICE.”

* Section “Omission of a Key Control Variable”: “In fact, failure to control for the subjects’ baseline mental health makes it impossible to determine whether the mental health or the suicidality of subjects worsened, stayed the

same, or potentially even improved after the non-affirming encounter.”

* Section “Internal Inconsistencies in Mental Health”: “Another measure of

psychological distress chosen by Turban et al.—substance misuse—was not significantly different between GICE and the non-GICE group. More importantly, there is a lack of consistency in the suicide measures. While lifetime suicide attempts were elevated among the GICE group, total suicide attempts in the prior 12 months, as well as suicide attempts requiring hospitalization, which generally indicate more serious attempts rather than non-suicidal self-injury, were not significantly different between the two groups.”

* “Further, Turban et al.’s choice to interpret the said association as evidence of harms of GICE disregards the fact that neither the presence nor the direction of causation can be discerned from this study due to its cross-sectional design.”
* “Arguably, even more problematic than the flawed analysis itself is the simplistic “affirmation” versus “conversion” binary, which permeates Turban et al.’s (2020 ) narrative and establishes the foundation for their analysis and conclusions.” … “at worst, it effectively mis-categorizes ethical psychotherapies that do not fit the “affirmation” descriptor as conversion therapies. Stigmatizing non-“affirmative” psychotherapy for GD as “conversion” will reduce access to treatment alternatives for patients seeking non-biomedical solutions to their distress.”
* “Turban et al.’s (2020 ) unproven assertion that non-affirming therapies are dangerous stands in contrast to the documented risks and uncertainties associated with hormonal and surgical interventions that are a core part of the “affirmation” treatment path.”
* “We call on the scientific community to resist the stigmatization of psychotherapy for GD and to support rigorous outcome research investigating the effectiveness of various psychological treatments aimed at ameliorating or resolving GD.”

**2018. Tobin J** et al, The effect of GnRHa treatment on **bone density in young adolescents with gender dysphoria**: findings from a large national cohort, *Endocrine Abstracts* (2018) **58** OC8.2 | DOI: [10.1530/endoabs.58.OC8.2](https://doi.org/10.1530/endoabs.58.OC8.2).

* **Per Mike Laidlaw**: For the 39 adolescent girls, “Initially, they were in the 40th percentile for bone density. By the end of two years, however, they were in the lower 3rd percentile for bone density.”
* In the study’s conclusion:

“We have shown that there is no actual change in BMAD or tBMD in young

transgender adolescents on long term GnRHa therapy, and certainly no true fall as initially suspected. We suggest that yearly DEXA scans may not be necessary. We also suggest that reference ranges may need to be re-defined for this patient cohort.”

**Bränström R, Pachankis** JE: **Reduction in mental health treatment utilization among transgender individuals after gender-affirming surgeries**: a total population study. Am J Psychiatry 2020; 177:727–734. <https://doi.org/10.1176/appi.ajp.2019.19010080>

**Detailed version**:

* Total population study of Sweden 9.7M:
* Claimed that **gender-affirming surgeries (SRS)** **reduced mental health treatment** use in **transgender-identified individuals**.
	+ While admitting **“gender-affirming hormone treatment**” provided **no improvement**.
* Our Team found many problems with the study (endo Michael Laidlaw, child and adolescent psychiatrist Miriam Grossman, and Prof Paul McHugh of Johns Hopkins)
* We authored a LTE of AJP critical of Branstrom.
	+ Andre Van Mol, Michael K. Laidlaw, Miriam Grossman, Paul R. McHugh. Gender-Affirmation Surgery Conclusion Lacks Evidence. Am J Psychiatry 2020; 177:765–766; doi: 10.1176/appi.ajp.2020.19111130
* **August 1, 10 months later, 7 critical letters were published, including**

**ours.** Why the wait?

* + AJP issued a **major “correction” retracting** the study’s main finding.

Kalin NH: Reassessing mental health treatment utilization reduction in transgender individuals after gender-affirming surgeries: a comment by the editor on the process (letter). Am J Psychiatry 2020; 177:765 <https://doi.org/10.1176/appi.ajp.2020.20060803>

* + AJP editors expressed the need “to **seek statistical consultations.”**
	+ Consultants mostly agreed with us, authors reanalyzing their data.
	+ Branstrom & Pachankis LTE admitted their **“conclusion” “was too strong.”**

Richard Bränström and John E. Pachankis. Toward Rigorous Methodologies for Strengthening Causal Inference in the Association Between Gender-Affirming Care and Transgender Individuals’ Mental Health: Response to Letters. American Journal of Psychiatry 2020 177:8, 769-772  doi: 10.1176/appi.ajp.2020.20050599.

* **Table 1** of their letter **compared their 3 end-points for GI patients receiving and GI patients not receiving gender-affirmative surgery**. Psychiatric outpatient visits for any mood or anxiety disorder, prescribed medications for the same, and hospitalization after suicide attempts were **all worse for the GI group receiving gender-affirmative surgery** (not all statistically significant) than for those that did not.
	+ AJP correction found **“no advantage to surgery”** for GD regarding their **3 endpoints**:
		- prescriptions or health-care visits for mood or anxiety disorders
		- post-suicide attempt hospitalizations
* With neither **“gender-affirming hormone treatment**” **nor “surgery”** providing **improvement : The study now seems invalidated**.
* **Study Shortcomings were many**:

The **lack of control subjects, the limited 1-year time frame, retrospective design, major loss to follow up, and the avoidance of examining completed suicides and psychiatric hospitalizations**

* **Shortcomings**:
	+ **Retrospective, not longitudinal –** looking back, not following during.
		- Figure 1, “time since last gender affirming surgery” is easily misinterpreted as a prospective 10-year follow-up that did not occur
	+ lack of control population
	+ the limited 1-year time frame
		- Though for all living individuals in Sweden, only for calendar year 2015 for those alive on one day, Dec 31, 2014.
	+ **Loss to follow up strongly implied:**
		- **Low numbers:** The **2,679 individuals diagnosed with gender incongruence in a total population study of Sweden is a full order of magnitude below prevalence expectations from DSM-5.**
			* Where did they go?
		- **Only 3 measured outcomes:** prescriptions or health-care visits for mood or anxiety disorders, and hospitalizations post-suicide attempt
			* **That avoids looking at completed suicides, health care visits and hospitalizations for all other medical or psychological issues still related** to GAS/SRS. Ignored them!
		- **So few having had surgery of reproductive organs when such is free in Sweden**.
			* Table 3: 38% of these individuals had any kind of gender-affirming surgery, but only 53% [20%] of those had surgery of reproductive organs.
			* [For those whose last surgery was 10 or more years earlier, how many completed suicide, died of other causes, or left Sweden prior to study initiation? ]
		- **Findings are accessible in the Swedish national registers,** these omissions are glaring.

**Quick summary version**:

In 2019 (online) **Bränström and Pachankis** published the first total population study of 9.7 million Swedish residents titled, “Reduction in mental health treatment utilization among transgender individuals after gender-affirming surgeries: a total population study.” Looking at three limited measures of mental health service usage, they claimed that although **“**gender-affirming hormone treatment” provided no improvement, “gender-affirming surgeries” did.

* The online August 1, 2020 American J of Psychiatry edition contained seven critical letters, including ours; a major “correction” paragraph from the editors retracting the studies main finding, and a letter from the study authors conceding their  “conclusion” “was too strong.”
* In effect, the Bränström and Pachankis study demonstrated that neither “gender-affirming hormone treatment” nor “surgery” provided reductions of the mental health treatment benchmarks examined in transgender-identified people.
	+ Bränström R, Pachankis JE: Reduction in mental health treatment utilization among transgender individuals after gender-affirming surgeries: a total population study. Am J Psychiatry 2020; 177:727–734. <https://doi.org/10.1176/appi.ajp.2019.19010080>
	+ Andre Van Mol, Michael K. Laidlaw, Miriam Grossman, Paul R. McHugh. Gender-Affirmation Surgery Conclusion Lacks Evidence. Am J Psychiatry 2020; 177:765–766; doi: 10.1176/appi.ajp.2020.19111130.

[Other six are found in the endnotes of Branstrom Response to Letters below. doi: 10.1176/appi.ajp.2020.20050599.]

* + Kalin NH: Reassessing mental health treatment utilization reduction in transgender individuals after gender-affirming surgeries: a comment by the editor on the process (letter). Am J Psychiatry 2020; 177:765  <https://doi.org/10.1176/appi.ajp.2020.20060803>
	+ Richard Bränström and John E. Pachankis. Toward Rigorous Methodologies for Strengthening Causal Inference in the Association Between Gender-Affirming Care and Transgender Individuals’ Mental Health: Response to Letters. American Journal of Psychiatry  2020  177:8, 769-772  doi: 10.1176/appi.ajp.2020.20050599.

**Mastectomies on minors:**

**Questionable claim**: "Chest dysphoria was high among presurgical transmasculine youth, and surgical intervention positively affected both minors and young adults."

Olson-Kennedy J, Warus J, Okonta V, Belzer M, Clark LF. Chest Reconstruction and Chest Dysphoria in Transmasculine Minors and Young Adults: Comparisons of Nonsurgical and Postsurgical Cohorts. *JAMA Pediatr.*2018;172(5):431–436. doi:10.1001/jamapediatrics.2017.5440

**Problems:**

* “Chest dysphoria” is a neologism of convenience, not a DSM-5 diagnosis.
* The “chest dysphoria scale” measuring tool of the authors and "is not yet validated." (p. 435)
* Mastectomies were done on girls as young as 13 or 14 yo lacking the capacity for mature decision making or informed consent.
* Study seems flawed and unethical.

**Professor Michael Biggs of Oxford, 2019**

Regarding the UK’s Tavistock and Portman NHS Trust’s Gender Identity Development Service’s experimental trial of puberty blockers for early teenagers with gender dysphoria. Oxford’s Professor Michael Biggs wrote, “To summarize, GIDS launched a study to **administer experimental drugs to children suffering from gender dysphoria.**”

“after a year on GnRHa [puberty blockers] children **reported greater self-harm**, and that girls experienced more behavioral and emotional problems and expressed greater dissatisfaction with their body—**so puberty blockers exacerbated gender dysphoria**.”

## (Michael Biggs, “Tavistock’s Experimentation with Puberty Blockers: Scrutinizing the Evidence,” TransgenderTrend.com, March 5, 2019. <https://www.transgendertrend.com/tavistock-experiment-puberty-blockers/>)

**UK Tavistock/GIDS study 2020**: “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.”

**"Results** 44 patients had data at 12 months follow-up, 24 at 24 months and 14 at 36 months. All had normal karyotype and endocrinology consistent with birth-registered sex. All achieved suppression of gonadotropins by 6 months. At the end of the study one ceased GnRHa and 43 (98%) elected to start cross-sex hormones.

There was no change from baseline in spine BMD at 12 months nor in hip BMD at 24 and 36 months, but at 24 months lumbar spine BMC and BMD were higher than at baseline (BMC +6.0 (95% CI: 4.0, 7.9); BMD +0.05 (0.03, 0.07)). There were no changes from baseline to 12 or 24 months in CBCL or YSR total t-scores or for CBCL or YSR self-harm indices, nor for CBCL total t-score or self-harm index at 36 months. Most participants reported positive or a mixture of positive and negative life changes on GnRHa. Anticipated adverse events were common.

**Conclusions** Overall patient experience of changes on GnRHa treatment was positive. We identified no changes in psychological function. Changes in BMD were consistent with suppression of growth. Larger and longer-term prospective studies using a range of designs are needed to more fully quantify the benefits and harms of pubertal suppression in GD."

Polly Carmichael, Gary Butler, Una Masic, Tim J Cole, Bianca L De Stavola, SarahDavidson, Elin M. Skageberg, Sophie Khadr, Russell Viner. 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. medRxiv 2020.12.01.20241653; doi:https://doi.org/10.1101/2020.12.01.20241653 <https://www.medrxiv.org/content/10.1101/2020.12.01.20241653v1>

BBC summary:  <https://www.bbc.com/news/uk-55282113>

Points:

* Took 9 years to produce yet had only 44 participants, suggesting ample loss to follow up or removal from study.
* No control group of GD youth not given PBs.
* “All had normal karyotype and endocrinology” function in GD youth.
	+ More proof that DSDs/Intersex are not GD issues.
* 98% went on from puberty blocking to CSH.
	+ GnRHas are gateway drugs, stepping stones to GAT/TAT.
* BMD and growth/height both showed “suppression of growth” precisely when they should be having the surge of the lifetime.
	+ “As anticipated, pubertal suppression reduced growth that was dependent on puberty hormones, i.e. height and BMD. Height growth continued for those not yet at final height, but more slowly than for their peers so height z-score fell. Similarly for bone strength, BMD and BMC increased in the lumbar spine indicating greater bone strength, but more slowly than in peers so BMD z-score fell.”
* Self-harm did not improve and “no changes in psychological function,” meaning no improvement. (Also, “YSR [Youth Self Report] data at 36 months (n = 6) were not analysed.”)
	+ “We found no differences between baseline and later outcomes for overall psychological distress as rated by parents and young people, nor for self-harm.”
	+ “We found no evidence of change in psychological function with GnRHa treatment as indicated by parent report (CBCL) or self-report (YSR) of overall problems, internalising or externalising problems or self-harm. This is in contrast to the Dutch study which reported improved psychological function across total problems, externalising and internalising scores for both CBCL and YSR and small improvements in CGAS.”
1. [↑](#footnote-ref-0)
2. <https://transcare.ucsf.edu/guidelines/youth> [↑](#footnote-ref-1)
3. [Karolinska Policyförändring K2021-3343 March 2021 (Swedish).pdf](https://segm.org/sites/default/files/Karolinska%20Policyfo%CC%88ra%CC%88ndring%20K2021-3343%20March%202021%20%28Swedish%29.pdf);

[Karolinska Policy Change K2021-3343 March 2021 (English, unofficial translation).pdf](https://segm.org/sites/default/files/Karolinska%20Policy%20Change%20K2021-3343%20March%202021%20%28English%2C%20unofficial%20translation%29.pdf) [↑](#footnote-ref-2)
4. <https://www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/> [↑](#footnote-ref-3)
5. Annelou L.C. de Vries. Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents. Pediatrics Sep 2020, e2020010611; DOI: 10.1542/peds.2020-010611 [↑](#footnote-ref-4)
6. [Karolinska Policyförändring K2021-3343 March 2021 (Swedish).pdf](https://segm.org/sites/default/files/Karolinska%20Policyfo%CC%88ra%CC%88ndring%20K2021-3343%20March%202021%20%28Swedish%29.pdf);

[Karolinska Policy Change K2021-3343 March 2021 (English, unofficial translation).pdf](https://segm.org/sites/default/files/Karolinska%20Policy%20Change%20K2021-3343%20March%202021%20%28English%2C%20unofficial%20translation%29.pdf) [↑](#footnote-ref-5)
7. <https://www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/> [↑](#footnote-ref-6)
8. [↑](#footnote-ref-7)
9. Green, A.E., Price-Feeney, M., Dorison, S.H., Pick, C.J. (2020). Self-reported conversion efforts and suicidality among US LGBTQ youths and young adults, 2018. American Journal of Public Health, Open-Themes Research, 110(8), 1221-1227. https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2020.305701 [↑](#footnote-ref-8)