

No. 23-12155

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**UNITED STATES COURT OF APPEALS  
FOR THE ELEVENTH CIRCUIT**

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*August Dekker et al.,*  
Plaintiffs-Appellees,

v.

*Secretary, Florida Agency for Health Care Administration et al.,*  
Defendants-Appellants.

U.S. District Court for the Northern District of Florida, No. 4:22-cv-325  
(Hinkle, J.)

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**APPELLANTS' APPENDIX – VOLUME IV OF XXI**

**Part 2 of 2**

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Dated: October 13, 2023

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**3.3 Effects of surgeries on assigned males at birth:** Table 5 summarizes the evidence about the effects of all surgeries on surgical outcomes among assigned at birth males. We used information from 3 systematic reviews.<sup>16 18 19</sup> Due to the nature of the outcomes (i.e. they can only be experienced by people who undergo surgeries), there cannot be studies comparing the outcomes between a group of people with gender dysphoria who undergo surgeries and another who does not.

Studies, therefore, assessed the outcomes among a group of people with gender dysphoria after surgery. The findings are:

- $\bar{A}$  There is low certainty evidence suggesting that the percentage of people who are satisfied after vaginoplasty is high (91%)
- $\bar{A}$  There is very low certainty evidence about the percentage of people who are satisfied, the rate of complications, and the rate of reoperations after chest surgery (see Table 5 for details)
- $\bar{A}$  There is low certainty evidence suggesting that the percentage of people who have regret after vaginoplasty is low (2%)
- $\bar{A}$  There is very low certainty evidence about the rate of complications and the rate of reoperations after vaginoplasty (see Table 5 for details)

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**Table 5: All surgeries compared to no surgeries in assigned males at birth (<21 years old) with gender dysphoria**

Patient or population: assigned males at birth (<21 years old) with gender dysphoria  
 Intervention: surgeries  
 Comparison: no surgeries

Outcomes	Risk / mean with no surgery	Risk/ mean with surgery (95% CI)	Relative effect (95% CI)	No of participants (studies)	Certainty of the evidence (GRADE)	What happens
<b>Chest surgery</b>						
<b>Satisfaction</b> assessed with: percentage of people who reported being satisfied (Oles 2022) Range of follow up: 12 months to 17 years	NA	Range 75% (80/107) to 95% (33/35) <sup>1</sup>	NA	142 (2 studies)	⊕○○○ VERY LOW <sup>2</sup>	We are very uncertain about the percentage of people who report being satisfied
<b>Surgical complications</b> assessed with: rate of complications across patients (Oles 2022) Range of follow up: 2 weeks to 16 years	NA	The complication rates were: - 3.8% (range 0% to 5.5%) of capsular contracture - 2.2% of major hematoma - 2.2% of implant extrusion <sup>3</sup>	NA	432 (5 studies)	⊕○○○ VERY LOW <sup>2</sup>	We are very uncertain about the rate of surgical complications
<b>Reoperation</b> assessed with: rate of reoperation across patients (Oles 2022) Range of follow up: Not reported	NA	8.6% Range (4.4% to 10.4%)	NA	291 (2 studies)	⊕○○○ VERY LOW <sup>2</sup>	We are very uncertain about the rate of reoperation
<b>Bottom surgery</b>						



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Patient or population: assigned males at birth (<21 years old) with gender dysphoria  
 Intervention: surgeries  
 Comparison: no surgeries

Outcomes	Anticipated absolute effects* (95% CI) Risk/ mean with no surgery	Risk/ mean with surgery	Relative effect (95% CI)	No of participants (studies)	Certainty of the evidence (GRADE)	What happens
<b>Satisfaction</b> assessed with: percentage of people who reported being satisfied for overall outcomes (Bustos SS, 2021) Range of follow up: 1 week to 11.3 years	NA	91% (81% to 98%) <sup>4</sup>	NA	1230 (12 studies)	⊕⊕○○ LOW <sup>5</sup>	The percentage of people who report being satisfied with overall outcomes may be 91%
<b>Regret</b> assessed with: percentage of people who reported regret (Bustos SS, 2021) Range of follow up: 2 months to 24.1 years	NA	2% (1% to 3%)	NA	1137 (15 studies)	⊕⊕○○ LOW <sup>6</sup>	The percentage of people who report regret may be 2%
<b>Surgical complications</b> assessed with: rate of complications across patients (Bustos SS, 2021) Range of follow up: 3 weeks to 24.1 years	NA	The complication rates were: - 1% (95% CI, <0.1% to 2%) of fistula - 11% (95% CI, 8% to 14%) of stenosis and/or strictures - 4% (95% CI, 1% to 9%) of tissue necrosis - 3% (95% CI, 1% to 4%) of prolapse <sup>7</sup>	NA	4196 (42 studies) <sup>3</sup>	⊕○○○ VERY LOW <sup>8</sup>	We are very uncertain about the rate of surgical complications

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Patient or population: assigned males at birth (<21 years old) with gender dysphoria  
 Intervention: surgeries  
 Comparison: no surgeries

Outcomes	Anticipated absolute effects* (95% CI) Risk / mean with no surgery	Risk/ mean with surgery	Relative effect (95% CI)	No of participants (studies)	Certainty of the evidence (GRADE)	What happens
<b>Reoperation</b> assessed with: rate of reoperation across patients (Tay, 2021) Range of follow up: 6 weeks to 14.8 months	NA	One study reported a surgical revision rate of 9% (1/11 patients), and a second study reported that 13% (19/145) patients required repeat surgery due to complications.	NA	156 (2 studies)	 VERY LOW <sup>s</sup>	We are very uncertain about the percentage of people who undergo reoperations

CI: Confidence interval  
 NA: Not applicable

**GRADE Working Group grades of evidence**

**High certainty:** We are very confident that the true effect lies close to that of the estimate of the effect

**Moderate certainty:** We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different

**Low certainty:** Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect

**Very low certainty:** We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

**Explanations**

1. **1.Ā** Another systematic review, Sijben 2021, reported satisfaction from 3 additional studies: 82% (113/138) were satisfied or very satisfied, 93% (32/34) were happier and more satisfied with their chest, and 79% (28/36) were very satisfied with the overall cosmetic result (very low certainty of evidence due to risk of bias, imprecision, and indirectness).
2. **2.Ā** Rated down due to risk of bias, indirectness (the included studies were not restricted to youth or young adults), and imprecision (too few participants included, not meeting optimal information size).

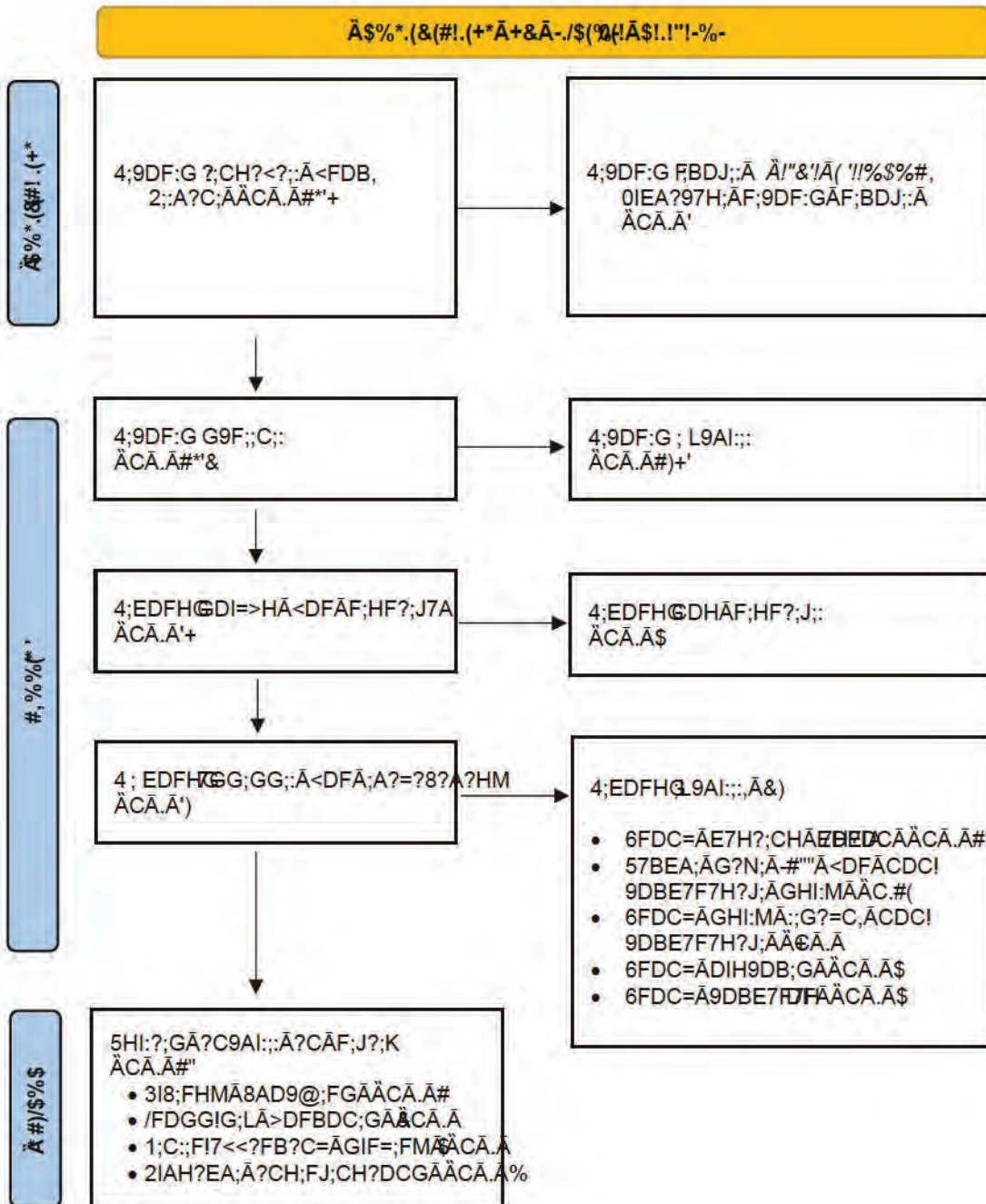


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3. Another systematic review, Sijben 2021, reported similar ranges for rates of complication requiring reoperation from 7 studies (835 patients): capsular contraction (range 0.0-5.6%), asymmetry (3.6%), hematoma (range 0.0-2.9%), infection (range 0.0-0.9%), striae distensae (0.7%), implant rupture (0.7%), abscess (0.4%), scarring (0.0%), hypersensitivity (0.0%), and numbness (0.0%) (very low certainty of evidence due to risk of bias, imprecision, and indirectness)
4. Bustos SS *et al.* 2021 additionally reported on satisfaction for functional (87%, 95% CI 77% to 94%) and aesthetic (90%, 95% CI 84% to 94%) outcomes. Another systematic review and meta-analysis, Oles 2022b, similarly reported that 92.3% (range 23.1% to 100%) of patients (2410/2601) were satisfied after vaginoplasty (very low certainty of evidence due to risk of bias, imprecision, and indirectness).
5. Rated down due to risk of bias (the systematic review authors reported the quality of the included studies to be low to moderate using the New Castle Ottawa scale), and indirectness as the included studies were not restricted to youth or young adults. We did not rate down for imprecision or inconsistency despite high  $I^2$  values as a satisfaction rate of 80% or above was deemed as a minimum threshold for clinical importance.
6. Rated down due to risk of bias (the systematic review authors reported the quality of the included studies to be low to moderate using the New Castle Ottawa scale), and indirectness as the included studies were not restricted to youth or young adults.
7. Another systematic review, Oles 2022b, similarly reported the percentage of patients experiencing complications from 51 studies, ranging from 2.4% to 12.0% (range 0% to 88%) for minor complications (intraoperative injury, wound dehiscence, superficial necrosis, infection, urinary issues, vaginal prolapse, stenosis, and bleeding) and 1.6% to 2.1% (range 0% to 31%) for major complications (flap/graft necrosis and infection) after genitoplasty (very low certainty of evidence due to risk of bias, imprecision, and indirectness).
8. Rated down due to risk of bias (the systematic review authors reported the quality of the included studies to be low to moderate using the New Castle Ottawa scale), imprecision and inconsistency, with wide confidence intervals and  $I^2$  values ranging from 65.8% to 94.3%, and indirectness as the included studies were not restricted to youth or young adults.
9. Rated down due to risk of bias, indirectness (the age range of patients in the included studies was 24 to 39 years; the studies included were restricted to those that investigated the use of peritoneum in neovagina construction), and imprecision (too few participants included, not meeting optimal information size).



**Results from search for studies not included in the systematic reviews:** After screening 1854 records found through our searches, we found 10 eligible studies (figure 5). From these, 8 were comparative observational studies<sup>20-27</sup> and 2 were non-comparative<sup>28,29</sup>. We provide reasons for excluding studies in appendix 2.



**Figure 5:** PRISMA flow diagram for the selection of primary studies. From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: <http://www.prisma-statement.org/>



None of the studies were judged as likely to importantly change the conclusions obtained from the systematic reviews (Tables 6 and 7). The main limitations of the comparative studies were risk of bias concerns (Figures 6 and 7) due to confounding, classification of intervention, and missing data; as well as small sample sizes. Although non-comparative studies were at lower risk of bias, because their results were consistent with those of the included evidence, they were also judged as unlikely to change the conclusions importantly.

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**Table 6: Characteristics of eligible comparative observational studies**

Study ID	Sample size*	Study design	Intervention	Comparator	Outcomes measured	Likely to change conclusions	Reasons
VanDerMiesen, 2020	450	Retrospective cohort study	Puberty blockers	Waiting for puberty blockers	Self-harm/suicidality, internalizing behaviors	No	Reports a small benefit on suicidality and moderate on internalizing behaviours, but high risk of bias
Becker-Hebly, 2021	75	Prospective cohort study	1. Puberty blockers 2. Cross-sex hormones 3. Surgery	No medical intervention yet; psychosocial intervention only	Health-related quality of life	No	Critical risk of bias (missing data due to low response rate, and confounding). Reports small benefit in mean change score for mental and physical dimension QoL as compared to no medical treatment. Imprecision; the 95% CIs for mean change scores are wide.
Green, 2021	3235	Cross-sectional study	Cross-sex hormones	Would like to take cross-sex hormones	Depression, suicidality	No	Critical risk of bias, no follow up of patients (measurement of current outcomes and not adjusting for baseline)
Tordoff, 2022	84	Prospective cohort study	1. Puberty blockers 2. Cross-sex hormones	No intervention	Depression, anxiety, suicidal thoughts	No	Moderate risk of bias, small sample size
Turban, 2022	9341	Cross-sectional study	Cross-sex hormones	Desired but never accessed gender affirming hormones	Suicidal ideation, suicidal attempt	No	Critical risk of bias, no follow up of patients (measurement of current outcomes and not adjusting for baseline)
Grannis, 2021	47	Cross-sectional study	Cross-sex hormones	No intervention yet	Anxiety, depression	No	Critical risk of bias, no follow up of patients, small sample size
Fontanari, 2020	350	Cross-sectional study	1. Cross-sex hormones 2. Cross-sex hormones or surgery	1. Waiting for cross-sex hormones 2. No intervention	Anxiety, depression, gender distress	No	Critical risk of bias (confounding, self-reported classification of interventions). Online cross-sectional survey reported small benefit in anxiety and depression mean scores, and little to no effect on gender distress with cross-sex hormones and/or surgery. Non-randomized comparative study provides very low certainty evidence due to



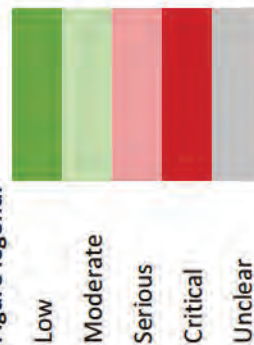


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Figure 6: Risk of bias judgements for comparative studies

Study ID	Intervention	Confounding	Classification of the intervention	Deviations from intended interventions	Missing data	Measurement of outcome	Overall
Becker-Hebly, 2021	Puberty blockers, cross-sex hormones, or surgery	Critical	Low	Low	Critical	Low	CRITICAL
Castelo-Branco, 2021	Cross-sex hormones	Critical	Low	Unclear	Low	Low	CRITICAL
Fontanari, 2020	Cross-sex hormones, cross-sex hormones or surgery	Critical	Moderate	Unclear	Low	Low	CRITICAL
Grannis, 2021	Cross-sex hormones	Critical	Low	Unclear	Low	Low	CRITICAL
Green, 2021	Cross-sex hormones	Critical	Critical	Unclear	Low	Low	CRITICAL
Tordoff, 2022	Puberty blockers, cross-sex hormones	Low	Low	Unclear	Low	Low	MODERATE
Turban, 2022	Cross-sex hormones	Critical	Critical	Unclear	Low	Low	CRITICAL
Van Der Miesen, 2020	Puberty blockers	Moderate	Low	Unclear	Low	Low	SERIOUS

Figure legend:



Effects of gender affirming therapies in people with gender dysphoria: evaluation of the best available evidence. Dr. Romina Brignardello-Petersen and Dr. Wojtek Wiercioch; Results; May 16, 2022

**Figure 7: Risk of bias judgements for non-comparative studies**

Study ID	Intervention	Representativeness of sample	Classification of intervention	Deviation from intended interventions	Missing data	Measurement of outcome	Overall
Bordas, 2021	FtM bottom surgery	Low	Low	Low	Low	Low	LOW
Elias, 2022	FtM top surgery	Moderate	Moderate	Moderate	High	Moderate	MODERATE

Figure legend:





## References

1. Ramos GGF, Mengai ACS, Daltro CAT, et al. Systematic Review: Puberty suppression with GnRH analogues in adolescents with gender incongruity. *Journal of endocrinological investigation* 2021;44(6):1151-58. doi: <https://dx.doi.org/10.1007/s40618-020-01449-5>
2. Rew L, Young CC, Monge M, et al. Review: Puberty blockers for transgender and gender diverse youth-a critical review of the literature. *Child and adolescent mental health* 2021;26(1):3-14. doi: <https://dx.doi.org/10.1111/camh.12437>
3. Excellence NifHaC. Evidence review: Gonadotrophin releasing hormone analogues for children and adolescents with gender dysphoria, 2020.
4. Quality AfHRA. Topic Brief: Treatments for Gender Dysphoria in Transgender Youth, 2021.
5. Baker KE, Wilson LM, Sharma R, et al. Hormone Therapy, Mental Health, and Quality of Life Among Transgender People: A Systematic Review. *Journal of the Endocrine Society* 2021;5(4):bvab011. doi: 10.1210/jendso/bvab011
6. Fledderus AC, Gout HA, Ogilvie AC, et al. Breast malignancy in female-to-male transsexuals: systematic review, case report, and recommendations for screening. *Breast (Edinburgh, Scotland)* 2020;53(9213011):92-100. doi: <https://dx.doi.org/10.1016/j.breast.2020.06.008>
7. Haupt C, Henke M, Kutschmar A, et al. Antiandrogen or estradiol treatment or both during hormone therapy in transitioning transgender women. *The Cochrane database of systematic reviews* 2020;11:CD013138. doi: 10.1002/14651858.CD013138.pub2
8. Karalexi MA, Georgakis MK, Dimitriou NG, et al. Gender-affirming hormone treatment and cognitive function in transgender young adults: a systematic review and meta-analysis. *Psychoneuroendocrinology* 2020;119:104721. doi: 10.1016/j.psyneuen.2020.104721
9. Kotamarti VS, Greige N, Heiman AJ, et al. Risk for Venous Thromboembolism in Transgender Patients Undergoing Cross-Sex Hormone Treatment: A Systematic Review. *The journal of sexual medicine* 2021 doi: 10.1016/j.jsxm.2021.04.006
10. Mattawanon N, Charoenkwan K, Tangpricha V. Sexual Dysfunction in Transgender People: A Systematic Review. *The Urologic clinics of North America* 2021;48(4):437-60. doi: 10.1016/j.ucl.2021.06.004
11. Totaro M, Palazzi S, Castellini C, et al. Risk of Venous Thromboembolism in Transgender People Undergoing Hormone Feminizing Therapy: A Prevalence Meta-Analysis and Meta-Regression Study. *Frontiers in endocrinology* 2021;12:741866. doi: 10.3389/fendo.2021.741866
12. Excellence NifHaC. Evidence review: Gender-affirming hormones for children and adolescents with gender dysphoria., 2020.
13. Eftekhari Ardebili M, Janani L, Khazaei Z, et al. Quality of life in people with transsexuality after surgery: a systematic review and meta-analysis. *Health and quality of life outcomes* 2020;18(1):264. doi: 10.1186/s12955-020-01510-0
14. Bustos VP, Bustos SS, Mascaro A, et al. Regret after Gender-affirmation Surgery: A Systematic Review and Meta-analysis of Prevalence. *Plastic and reconstructive surgery Global open* 2021;9(3):e3477. doi: 10.1097/GOX.0000000000003477
15. Oles N, Darrach H, Landford W, et al. Gender Affirming Surgery: A Comprehensive, Systematic Review of All Peer-reviewed Literature and Methods of Assessing Patient-centered Outcomes (Part 2: Genital Reconstruction). *Annals of surgery* 2022;275(1):e67-e74. doi: 10.1097/SLA.0000000000004717
16. Oles N, Darrach H, Landford W, et al. Gender Affirming Surgery: A Comprehensive, Systematic Review of All Peer-Reviewed Literature and Methods of Assessing Patient-Centered Outcomes (Part 1: Breast/Chest, Face, and Voice). *Annals of surgery* 2022 doi: 10.1097/SLA.0000000000004728
17. Bustos VP, Bustos SS, Mascaro A, et al. Transgender and Gender-nonbinary Patient Satisfaction after Transmasculine Chest Surgery. *Plastic and reconstructive surgery Global open* 2021;9(3):e3479. doi: 10.1097/GOX.0000000000003479
18. Bustos SS, Bustos VP, Mascaro A, et al. Complications and Patient-reported Outcomes in Transfemale Vaginoplasty: An Updated Systematic Review and Meta-analysis. *Plastic and reconstructive surgery Global open* 2021;9(3):e3510. doi: 10.1097/GOX.0000000000003510
19. Tay YT, Lo CH. Use of peritoneum in neovagina construction in gender-affirming surgery: A systematic review. *ANZ journal of surgery* 2021 doi: 10.1111/ans.17147



20. Becker-Hebly I, Fahrenkrug S, Champion F, et al. Psychosocial health in adolescents and young adults with gender dysphoria before and after gender-affirming medical interventions: a descriptive study from the Hamburg Gender Identity Service. *European child & adolescent psychiatry* 2021;30(11):1755-67. doi: <https://dx.doi.org/10.1007/s00787-020-01640-2>
21. Castelo-Branco C, RiberaTorres L, Gomez-Gil E, et al. Psychopathological symptoms in Spanish subjects with gender dysphoria. A cross-sectional study. *Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology* 2021;37(6):534-40. doi: <https://dx.doi.org/10.1080/09513590.2021.1913113>
22. Fontanari AMV, Vilanova F, Schneider MA, et al. Gender Affirmation Is Associated with Transgender and Gender Nonbinary Youth Mental Health Improvement. *LGBT health* 2020;7(5):237-47. doi: <https://dx.doi.org/10.1089/lgbt.2019.0046>
23. Grannis C, Leibowitz SF, Gahn S, et al. Testosterone treatment, internalizing symptoms, and body image dissatisfaction in transgender boys. *Psychoneuroendocrinology* 2021;132(7612148, qgc):105358. doi: <https://dx.doi.org/10.1016/j.psyneuen.2021.105358>
24. Green AE, DeChants JP, Price MN, et al. Association of Gender-Affirming Hormone Therapy With Depression, Thoughts of Suicide, and Attempted Suicide Among Transgender and Nonbinary Youth. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine* 2022;70(4):643-49. doi: <https://dx.doi.org/10.1016/j.jadohealth.2021.10.036>
25. Tordoff DM, Wanta JW, Collin A, et al. Mental Health Outcomes in Transgender and Nonbinary Youths Receiving Gender-Affirming Care. *JAMA network open* 2022;5(2):e220978. doi: <https://dx.doi.org/10.1001/jamanetworkopen.2022.0978>
26. Turban JL, King D, Kobe J, et al. Access to gender-affirming hormones during adolescence and mental health outcomes among transgender adults. *PloS one* 2022;17(1):e0261039. doi: <https://dx.doi.org/10.1371/journal.pone.0261039>
27. van der Miesen AIR, Steensma TD, de Vries ALC, et al. Psychological Functioning in Transgender Adolescents Before and After Gender-Affirmative Care Compared With Cisgender General Population Peers. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine* 2020;66(6):699-704. doi: <https://dx.doi.org/10.1016/j.jadohealth.2019.12.018>
28. Bordas N, Stojanovic B, Bizic M, et al. Metoidioplasty: Surgical Options and Outcomes in 813 Cases. *Frontiers in endocrinology* 2021;12(101555782):760284. doi: <https://dx.doi.org/10.3389/fendo.2021.760284>
29. Elias N, Rysin R, Kwartin S, et al. Breaking the Binary: The Approach to Chest Masculinizing Gender-Affirming Surgery in Transgender Men. *The Israel Medical Association journal : IMAJ* 2022;24(1):20-24.



ID	Study	Reason
#534	Abu-Ghname 2020	Wrong population: non transgender men
#434	Aires 2022	Wrong interventions: Other type of surgery: glottoplasty Wrong outcomes: It does not include any outcome of interest. Includes: serum total testosterone concentration, body fat redistribution, breast development, and facial/body hair reduction
#514	Angus 2021	Wrong intervention. Continuing vs stopping estrogen during perioperative period of vaginoplasty
#318	Baddredine 2022	Wrong outcomes: only clinical outcomes are sperm count, testicular histology, hormone levels, etc.
#40	Baram 2019	Wrong outcomes: sexual satisfaction, desire, and function outcomes only
#145	Barcelos 2022	No outcome data
#60	Boczar 2021	Wrong population: unclear that more than 80% are transgender
#386	Bouman 2014	Wrong intervention: nipple areola reconstruction
#208	Bustos 2021	Wrong outcomes: Blood pressure
#54	Connelly 2021	Wrong intervention: facial gender surgery
#43	Coon 2022	Wrong design: narrative review
#34	D'Angelo 2018	Wrong outcomes: bone density
#165	Delgado-Ruiz 2019	Other type of surgery: facial surgery
#355	Escandon 2022	Wrong outcomes: bone mass
#129	Fighera 2019	Practice guideline, does not report the methods/ results of the systematic review in details
#597	Hembree 2017	Wrong outcomes: histological findings
#120	Kakadekar 2021	Wrong intervention: self administered hormones
#451	Kennedy 2021	Wrong outcomes: sexual health and satisfaction outcomes only
#375	Kloer 2021	More than 20% participants did not have gender dysphoria
#439	Kovar 2019	Wrong outcomes: aggression and hostility
#297	Kristensen 2021	Wrong design: commentary of a systematic review
#637	Leclere 2015	Published in abstract format only
#293	Miranda 2021	Wrong intervention: facial feminization surgery
#624	Morrison 2016	Wrong design: narrative review
#270	Narayan 2021	Wrong intervention: phonosurgery
#119	Nolan 2019	Wrong intervention: facial hair transplantation
#167	Patel 2021	Wrong population: cisgender is the population of interest, transgender included as indirect evidence and not in a systematic manner
#287	Ray 2020	Published in abstract format only
#518	Rozga 2020	Wrong population: More than 20% participants did not have gender dysphoria
#265	Sariyaka 2017	Wrong intervention: facial masculinization surgery
#35	Sayegh 2019	Wrong intervention: laryngeal surgery
#124	Schwarz 2017	



#97	Siringo 2021	Wrong intervention: facial feminization surgery
#253	Song 2016	Wrong intervention: phonosurgery
#250	Song 2017	Wrong intervention: phonosurgery
#104	Spanos 2020	Wrong outcomes: lean mass, fat mass or insulin resistance
#257	Therattil 2017	Wrong intervention: thyroid cartilage reduction surgery
#328	Tirrell 2022	Wrong intervention: facial feminization surgery
#676	Traish 2010	Wrong design: narrative review
#279	VanDamme 2017	Wrong intervention: voice pitch raising surgery
#171	Vellho 2017	Wrong outcomes: BMI, blood pressure, hematocrit, hemoglobin, lipid profile, and liver enzymes
#112	Wilson 2020	Wrong outcomes: prolactine related outcomes (levels, hyperprolactinemia, prolactinoma)
#245	Worth 2018	Unable to access full text
#122	Ziegler 2018	Wrong outcomes: voice parameters and satisfaction with voice
#499	Zucker 2021	Unable to access full text

<b>ID</b>	<b>Study</b>	<b>Reason</b>
#1458	Al-Tamimi 2019	Wrong patient population
#287	Al-Tamimi 2020	Wrong study design: non comparative
#403	Alcon 2021	Wrong study design: non comparative
#214	Aldridge 2021	Wrong study design: non comparative
#54	Almazan 2021	Wrong patient population
#1387	Boas 2019	Wrong patient population
#1323	Branstrom 2020	Wrong patient population
#1447	Breidenstein 2019	Wrong study design: non comparative
#114	Briles 2022	Insufficient Sample Size <100
#1804	Butler 2019	Wrong patient population
#716	Carmichael 2021	Wrong study design: non comparative
#622	Cocchetti 2021	Wrong outcomes
#1067	Coon 2020	Wrong patient population
#1835	Cristofari 2019	Wrong patient population
#1486	Cuccolo 2019	Wrong patient population
#1276	deBlok 2020	Wrong patient population
#577	deRooij 2021	Wrong patient population
#1625	DeWolf 2019	Wrong patient population
#1759	Djordjevic 2019	Wrong patient population
#244	Falcone 2020	Insufficient Sample Size <100
#258	FosterSkewis 2021	Wrong comparator
#1583	Gallagher 2019	Wrong patient population
#139	Gumussoy 2022	Wrong study design: non comparative
#515	Hisle-Gorman 2021	Wrong study design: non comparative
#350	Hougen 2021	Insufficient Sample Size <100
#1007	Meyer 2020	Wrong study design: non comparative
#499	Miller 2021	Wrong patient population
#621	Mullins 2021	Wrong study design: non comparative
#1653	Naeimi 2019	Insufficient Sample Size <100
#1691	Namba 2019	Insufficient Sample Size <100
#1770	Neuville 2019	Insufficient Sample Size <100
#623	Neuville 2021	Insufficient Sample Size <100
#644	Nieder 2021	Insufficient Sample Size <100
#1624	Nikkels 2019	Wrong patient population
#353	Opsomer 2021	Wrong patient population
#1306	Papadopulos 2020	Wrong comparator
#640	Papadopulos 2021	Insufficient Sample Size <100
#1472	Pigot 2019	Wrong patient population
#899	Pigot 2020	Insufficient Sample Size <100
#1212	Segev-Becker 2020	Insufficient Sample Size <100
#1351	Staples 2020	Wrong outcomes
#645	Staud 2021	Insufficient Sample Size <100
#864	Terrier 2020	Insufficient Sample Size <100
#1083	vanderSluis 2020	Insufficient Sample Size <100

#1204	Veerman 2020	Insufficient Sample Size <100
#1409	Watanabe 2019	Wrong patient population
#512	Waterschoot 2021	Insufficient Sample Size <100

## Appendix Attachment

1d

## ATTACHMENT D



# **THE SCIENCE OF GENDER DYSPHORIA AND TRANSSEXUALISM**

**REPORT SUBMITTED TO THE  
FLORIDA AGENCY FOR HEALTHCARE ADMINISTRATION**

**JAMES M. CANTOR, PHD**

**17 MAY 2022**

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## I.Ā Background & Credentials

1.Ā I am a research scientist and clinical psychologist and am currently the Director of the Toronto Sexuality Centre in Canada. For my education and training, I received my Bachelor of Science degree from Rensselaer Polytechnic Institute, where I studied mathematics, physics, and computer science. I received my Master of Arts degree in psychology from Boston University, where I studied neuropsychology. I earned my Doctoral degree in psychology from McGill University, which included successfully defending my doctoral dissertation studying the effects of psychiatric medication and neurochemical changes on sexual behavior, and included a clinical internship assessing and treating people with a wide range of sexual and gender identity issues.

2.Ā Over my academic career, my posts have included Senior Scientist and Psychologist at the Centre for Addiction and Mental Health (CAMH), Head of Research for CAMH's Sexual Behaviour Clinic, Associate Professor of Psychiatry on the University of Toronto Faculty of Medicine, and Editor-in-Chief of the peer reviewed journal, *Sexual Abuse*. That journal is one of the top-impact, peer-reviewed journals in sexual behavior science and is the official journal of the Association for the Treatment of Sexual Abusers. In that appointment, I was charged to be the final arbiter for impartially deciding which contributions from other scientists in my field merited publication. I believe that appointment indicates not only my extensive experience evaluating scientific claims and methods, but also the faith put in me by the other scientists in my field. I have also served on the Editorial Boards of the *Journal of Sex Research*, the *Archives of Sexual Behavior*, and *Journal of Sexual Aggression*. Thus, although I cannot speak for other scientists, I regularly interact with and am routinely exposed to the views and opinions of most of the scientists active in our field today, within the United States and throughout the world.

3.Ā My scientific expertise spans the biological and non-biological development



of human sexuality, the classification of sexual interest patterns, the assessment and treatment of atypical sexualities, and the application of statistics and research methodology in sex research. I am the author of over 50 peer-reviewed articles in my field, spanning the development of sexual orientation, gender identity, hypersexuality, and atypical sexualities collectively referred to as *paraphilias*. I am the author of the past three editions of the gender identity and atypical sexualities chapter of the *Oxford Textbook of Psychopathology*. These works are now routinely cited in the field and are included in numerous other textbooks of sex research.

4.Ä I began providing clinical services to people with gender dysphoria in 1998. I trained under Dr. Ray Blanchard of CAMH and have participated in the assessment and treatment of over one hundred individuals at various stages of considering and enacting both transition and detransition, including its legal, social, and medical (both cross-hormonal and surgical) aspects. My clinical experience includes the assessment and treatment of several thousand individuals experiencing other atypical sexuality issues. I am regularly called upon to provide objective assessment of the science of human sexuality by the courts (prosecution and defense), professional media, and mental health care providers.

5.Ä A substantial proportion of the existing research on gender dysphoria comes from two clinics, one in Canada and one in the Netherlands. The CAMH gender clinic (previously, Clarke Institute of Psychiatry) was in operation for several decades, and its research was directed by Dr. Kenneth Zucker. I was employed by CAMH between 1998 and 2018. Although I was a member of the hospital's adult forensic program, I remained in regular contact with members of the CAMH child psychiatry program (of which Dr. Zucker was a member), and we collaborated on multiple research projects.

## **II.Ä Summary of Conclusions**



- The scientific research consistently demonstrates that there is more than one distinct phenomenon that can lead to gender dysphoria. These types are distinguished by differing epidemiological and demographic patterns, unique psychological and behavioral profiles, and differing responses to the treatment options.
- Studies show that otherwise mentally healthy adults—undergoing thorough assessment (1–2 year Real Life Experience) and supervised by clinics engaged in gate-keeping roles—adjust well to life as the opposite sex.
- Regarding pre-pubescent children with gender dysphoria, there have been 11 outcomes studies. All 11 reported the majority of children to cease to feel dysphoric by puberty. They typically report being gay or lesbian instead.
- Regarding pubescent and adolescent age minors, there have been (also) 11 follow-up studies of puberty blockers and cross-sex hormones. In four, mental health failed to improve at all. In five, mental health improved, but because psychotherapy and medical interventions were both provided, which one caused the improvement could not be identified. The two remaining studies employed methods that did permit psychotherapy effects to be distinguished from medical effects, and neither found medical intervention to be superior to psychotherapy-only.
- The research importantly distinguishes completed suicides—which occur primarily in biological males and involve the intent to die—from suicidal ideation, gestures, and attempts—which occur primarily in biological females and represent psychological distress and cries for help. The evidence is minimally consistent with transphobia being the predominant cause of suicidality. The evidence is very strongly consistent with the hypothesis that other mental health issues, such as Borderline Personality Disorder (BPD), cause suicidality and unstable identities, including gender identity confusion.
- The international consensus of public health care services is that there remains no evidence to support medicalized transition for youth. The responses in the U.S. stand in stark contrast with Sweden, Finland, France, and the United Kingdom, which are issuing increasingly restrictive statements and policies, including bans on all medical transition of minors.

### **III. Science of Gender Dysphoria and Transsexualism**

6. One of the most widespread public misunderstandings about transsexualism and people with gender dysphoria is that all cases of gender dysphoria represent the same phenomenon; however, the clinical science has long and consistently demonstrated that gender dysphoric children (cases of *early-onset* gender dysphoria) do not represent the same phenomenon as adult gender dysphoria



(cases of *late-onset* gender dysphoria),<sup>1</sup> merely attending clinics at younger ages. That is, gender dysphoric children are not simply younger versions of gender dysphoric adults. They differ in every known regard, from sexual interest patterns, to responses to treatments. A third presentation has recently become increasingly observed among people presenting to gender clinics: These cases appear to have an onset in adolescence in the absence of any childhood history of gender dysphoria. Such cases have been called adolescent-onset or “rapid-onset” gender dysphoria (ROGD). Very many public misunderstandings and expert misstatements come from misattributing evidence or personal experience from one of these types to another.

### **A. Adult-Onset Gender Dysphoria**

7. People with adult-onset gender dysphoria typically attend clinics requesting transition services in mid-adulthood, usually in their 30s or 40s. Such individuals are nearly exclusively biological males.<sup>2</sup> They typically report being sexually attracted to women and sometimes to both men and women. Some cases profess asexuality, but very few indicate any sexual interest in or behavior involving men.<sup>3</sup> Cases of adult-onset gender dysphoria are typically associated with a sexual interest pattern (medically, a *paraphilia*) involving themselves in female form.<sup>4</sup>

#### **1. Outcome Studies of Transition in Adult-Onset Gender Dysphoria**

8. Clinical research facilities studying gender dysphoria have repeatedly reported low rates of regret (less than 3%) among adult-onset patients who underwent complete transition (*i.e.*, social, plus hormonal, plus surgical transition). This has been widely reported by clinics in Canada,<sup>5</sup> Sweden,<sup>6</sup> and the Netherlands.<sup>7</sup>

9. Importantly, each of the Canadian, Swedish, and Dutch clinics for adults

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<sup>1</sup> Blanchard, 1985.

<sup>2</sup> Blanchard, 1990, 1991.

<sup>3</sup> Blanchard, 1988.

<sup>4</sup> Blanchard 1989a, 1989b, 1991.

<sup>5</sup> Blanchard, *et al.*, 1989.

<sup>6</sup> Dhejneberg, *et al.*, 2014.

<sup>7</sup> Wiepjes, *et al.*, 2018.



with gender dysphoria all performed “gate-keeping” procedures, disqualifying from medical services people with mental health or other contraindications. One would not expect the same results to emerge in the absence of such gate-keeping or when gate-keepers apply only minimal standards or cursory assessment.

10. An important caution applies to interpreting these results: The side-effect of removing these people from the samples of transitioners is that if a researcher compared the average mental health of individuals coming into the clinic with the average mental health of individuals going through medical transition, then the post-transition group would appear to show a substantial improvement, even though transition had *no effect at all*: The removal of people with poorer mental health created the statistical illusion of improvement among the remaining people.

## **2. Mental Health Issues in Adult-Onset Gender Dysphoria**

11. The research evidence on mental health issues in gender dysphoria indicates it to be different between adult-onset versus adolescent-onset versus prepubescent-onset types. The co-occurrence of mental illness with gender dysphoria in adults is widely recognized and widely documented.<sup>8</sup> A research team in 2016 published a comprehensive and systematic review of all studies examining rates of mental health issues in transgender adults.<sup>9</sup> There were 38 studies in total. The review indicated that many studies were methodologically weak, but nonetheless demonstrated (1) that rates of mental health issues among people are highly elevated both before *and after* transition, (2) but that rates were less elevated among those who completed transition. Analyses were not conducted in a way so as to compare the elevation in mental health issues observed among people newly attending clinics to improvement after transition. Also, several studies showed more than 40% of patients to become “lost to follow-up.” With attrition rates that high, it is unclear to what

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<sup>8</sup> See, e.g., Hepp, *et al.*, 2005.

<sup>9</sup> Dhejne, *et al.*, 2016.



extent the information from the remaining participants would accurately reflect the whole population. The very high rate of “lost to follow-up” leaves open the possibility of considerably more negative results overall.

12. The long-standing and consistent finding that gender dysphoric adults continue to show high rates of mental health issues after transition indicates a critical point: To the extent that gender dysphoric children resemble adults, we should not expect mental health to improve as a result of transition—that is, transition does not appear to be what causes mental health improvement. Rather, mental health issues should be resolved before any transition, as has been noted in multiple standards of care documents, as detailed in their own section of this report.

## **B. Childhood Onset (Pre-Puberty) Gender Dysphoria**

### **1. Follow-up Studies Show Most Children Desist by Puberty**

13. Prepubescent children (and their parents) have been approaching mental health professionals for help with their unhappiness with their sex and belief they would be happier living as the other for many decades. The large majority of childhood onset cases of gender dysphoria occur in biological males, with clinics reporting 2–6 biological male children to each female.<sup>10</sup>

14. In total, there have been 11 outcomes studies of these children, listed in Appendix 1. In sum, despite coming from a variety of countries, conducted by a variety of labs, using a variety of methods, all spanning four decades, every study without exception has come to the identical conclusion: Among prepubescent children who feel gender dysphoric, the majority cease to want to be the other gender over the course of puberty—ranging from 61–88% desistance across the large, prospective studies. Such cases are often referred to as “desisters,” whereas children who continue to feel gender dysphoric are often called “persisters.”

15. Notably, in most cases, these children were receiving professional

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<sup>10</sup> Cohen-Kettenis, *et al.*, 2003; Steensma, *et al.*, 2018; Wood, *et al.*, 2013.



psychosocial support across the study period aimed, not at affirming cross-gender identification, but at resolving stressors and issues potentially interfering with desistance. While beneficial to these children and their families, the inclusion of therapy in the study protocol represents a complication for the interpretation of the results: It is not possible to know to what extent the outcomes were influenced by the psychosocial support or would have emerged regardless. In science, this is referred to as a confound.

16.Ā While the absolute number of those who present as prepubescent children with gender dysphoria and “persist” through adolescence is very small in relation to the total population, persistence in some subjects was observed in each of these studies. Thus, a clinician cannot take either outcome for granted.

17.Ā It is because of this long-established and unanimous research finding of desistance being probable but not inevitable, that the “watchful waiting” method became the standard approach for assisting gender dysphoric children. The balance of potential risks to potential benefits is very different for groups likely to desist versus groups unlikely to desist: If a child is very likely to persist, then taking on the risks of medical transition might be more worthwhile than if that child is very likely to desist in transgender feelings.

18.Ā The consistent observation of high rates of desistance among pre-pubertal children who present with gender dysphoria demonstrates a pivotally important—yet often overlooked—feature: because gender dysphoria so often desists on its own, clinical researchers cannot assume that therapeutic intervention cannot facilitate or speed desistance for at least some patients. That is, gender identity is not the same as sexual orientation, and it cannot be assumed that gender identity is as unchangeable as is sexual orientation. Such is an empirical question, and there has not yet been any such study.

19.Ā It is also important to note that research has not yet identified any reliable



procedure for discerning which children who present with gender dysphoria will persist, as against the majority who will desist, absent transition and “affirmation.” Such a method would be valuable, as the more accurately that potential persisters can be distinguished from desisters, the better the risks and benefits of options can be weighted. Such “risk prediction” and “test construction” are standard components of applied statistics in the behavioral sciences. Multiple research teams have reported that, on average, groups of persisters are somewhat more gender non-conforming than desisters, but not so different as to usefully predict the course of a particular child.<sup>11</sup>

20. In contrast, one research team (the aforementioned Olson group) claimed the opposite, asserting that they developed a method of distinguishing persisters from desisters, using a single composite score representing a combination of children’s “peer preference, toy preference, clothing preference, gender similarity, and gender identity.”<sup>12</sup> They reported a statistical association (mathematically equivalent to a correlation) between that composite score and the probability of persistence. As they indicated, “Our model predicted that a child with a gender-nonconformity score of .50 would have roughly a .30 probability . . . of socially transitioning. By contrast, a child with gender-nonconformity score of .75 would have roughly a .48 probability.”<sup>13</sup> Although the Olson team declared that “social transitions may be predictable from gender identification and preferences,”<sup>14</sup> their actual results suggest the opposite: The gender-nonconforming group who went on to transition (socially) had a mean composite score of .73 (which is less than .75), and the gender-nonconforming group who did not transition had a mean composite score of .61, also less than .75.<sup>15</sup> Both of those are lower than the value of .75, so both of those would be more likely than not

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<sup>11</sup> Singh, *et al.* (2021); Steensma *et al.*, 2013.

<sup>12</sup> Rae, *et al.*, 2019, at 671.

<sup>13</sup> Rae, *et al.*, 2019, at 673.

<sup>14</sup> Rae, *et al.*, 2019, at 669.

<sup>15</sup> Rae, *et al.*, 2019, Supplemental Material at 6, Table S1, bottom line.



to desist, rather than to proceed to transition. That is, Olson’s model does not distinguish likely from unlikely to transition; rather, it distinguishes unlikely from even less likely to transition.

21. Although it remains possible for some future discovery to yield a method to identify with sufficient accuracy which gender dysphoric children will persist, there does not exist such a method at the present time. Moreover, in the absence of long-term follow-up, it cannot be known what proportions come to regret having transitioned and then *detransition*. Because only a minority of gender dysphoric children persist in feeling gender dysphoric in the first place, “transition-on-demand” increases the probability of unnecessary transition and unnecessary medical risks.

## **2. “Watchful Waiting” and “The Dutch Protocol”**

22. It was this state of the science—that the majority of prepubescent children will desist in their feelings of gender dysphoria and that we lack an accurate method of identifying which children will persist—that led to the development of a clinical approach, The Dutch Protocol,<sup>16</sup> including its “Watchful Waiting” period. Internationally, the Dutch Protocol remains the most empirically supported protocol for the treatment of children with gender dysphoria.

23. The purpose of the protocol was to compromise the conflicting needs among: clients’ initial wishes upon assessment, the long-established and repeated observation that those wishes will change in the majority of (but not in all) childhood cases, and that cosmetic aspects of medical transition are perceived to be better when they occur earlier rather than later.

24. The Dutch Protocol was developed over many years by the Netherlands’ child gender identity clinic, incorporating the accumulating findings from their own research as well as those reported by other clinics working with gender dysphoric

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<sup>16</sup> Delemarre-van de Waal & Cohen-Kettenis (2006).



children. They summarized and explicated the approach in their peer-reviewed report, *Clinical management of gender dysphoria in children and adolescents: The Dutch Approach*.<sup>17</sup> The components of the Dutch Approach are:

- no social transition at all considered before age 12 (watchful waiting period),
- no puberty blockers considered before age 12,
- cross-sex hormones considered only after age 16, and
- resolution of mental health issues before any transition.

25. For youth under age 12, “the general recommendation is watchful waiting and carefully observing how gender dysphoria develops in the first stages of puberty.”<sup>18</sup>

26. The age cut-offs of the Dutch Approach were not based on any research demonstrating their superiority over other potential age cut-off’s. Rather, they were chosen to correspond to the ages of consent to medical procedures under Dutch law. Nevertheless, whatever the original rationale, the data from this clinic simply contain no information about the safety or efficacy of employing these measures at younger ages.

27. The authors of the Dutch Approach repeatedly and consistently emphasize the need for extensive mental health assessment, including clinical interviews, formal psychological testing with validated psychometric instruments, and multiple sessions with the child and the child’s parents.

28. Within the Dutch approach, there is no social transition before age twelve. That is, social affirmation of the new gender may not begin until age 12—as desistance is less likely to occur past that age. “Watchful Waiting” refers to a child’s developmental period up to that age. Watchful waiting does not mean do nothing but passively observe the child. Rather, such children and families typically present with substantial distress involving both gender and non-gender issues, and it is during the watchful waiting period that a child (and other family members as appropriate) would

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<sup>17</sup> de Vries & Cohen-Kettenis, 2012

<sup>18</sup> de Vries & Cohen-Kettenis, 2012, at 301.



undergo therapy, resolving other issues which may be exacerbating psychological stress or dysphoria. As noted by the Dutch clinic, “[T]he adolescents in this study received extensive family or other social support . . . [and they] were all regularly seen by one of the clinic’s psychologists or psychiatrists.”<sup>19</sup> One is actively treating the person, while carefully “watching” the dysphoria.

### **3. Follow-Up Studies of Puberty Blockers and Cross-Sex Hormones**

29. Very many strong claims have appeared in the media and on social media asserting that transition results in improved mental health or, contradictorily, in decreased mental health. In the highly politicized context of gender and transgender research, many outlets have cited only the findings which appear to support one side, cherry-picking from the complete set of research reports. In total, there have been 11 prospective outcomes studies following up gender dysphoric children undergoing medically induced suppression of puberty or cross-sex hormone treatment. Four studies failed to find evidence of improvement in mental health functioning at all, and some groups deteriorated on some variables.<sup>20</sup> Five studies successfully identified evidence of improvement, but because patients received psychotherapy along with medical services, which of those treatments caused the improvement is unknowable.<sup>21</sup> In the remaining two studies, both psychotherapy and medical interventions were provided, but the studies were designed in such a way as to allow the effects of psychotherapy to be separated from the effects of the puberty-blocking medications.<sup>22</sup> As detailed in the following, neither identified benefits of medication over psychotherapy alone.

#### **a. Four studies found no mental health improvement**

30. Carmichael, *et al.* (2021) recently released its findings from the Tavistock

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<sup>19</sup> de Vries, *et al.*, 2011, at 2280-2281.

<sup>20</sup> Carmichael, *et al.*, 2021; Hisle-Gorman, *et al.*, 2021; Kaltiala, *et al.*, 2020; Kuper, *et al.*, 2020.

<sup>21</sup> de Vries, *et al.*, 2011; Tordoff, *et al.*, 2022; van der Miesen, *et al.*, 2020.

<sup>22</sup> Achille, *et al.*, 2020; Costa, *et al.*, 2015.



and Portman clinic in the U.K.<sup>23</sup> Study participants were ages 12–15 (Tanner stage 3 for natal males, Tanner stage 2 for natal females) and were repeatedly tested before beginning puberty-blocking medications and then every six months thereafter. Cases exhibiting serious mental illnesses (*e.g.*, psychosis, bipolar disorder, anorexia nervosa, severe body-dysmorphic disorder unrelated to gender dysphoria) were excluded. Relative to the time point before beginning puberty suppression, there were *no* significant changes in any psychological measure, from either the patients' or their parents' perspective.

31. In Kuper, *et al.* (2020), a multidisciplinary team from Dallas published a prospective follow-up study which included 25 youths as they began puberty suppression.<sup>24</sup> (The other 123 study participants were undergoing cross-sex hormone treatment.) Interventions were administered according to practice guidelines from the Endocrine Society.<sup>25</sup> Their analyses found *no statistically significant changes* in the group undergoing puberty suppression on any of the nine measures of wellbeing measured, spanning tests of body satisfaction, depressive symptoms, or anxiety symptoms.<sup>26</sup> Notably, whereas the Dutch Protocol includes age 12 as a minimum for puberty suppression treatment, this team provided such treatment beginning at age 9.8 years (full range: 9.8–14.9 years).<sup>27</sup>

32. Hisle-Gorman, *et al.* (2021) analyzed military families' healthcare data to compare 963 transgender and gender-diverse youth before versus after hormonal treatment, with their non-gender dysphoric siblings as controls. The study participants included youth undergoing puberty-blocking as well as those undergoing cross-sex hormone treatment, but these subgroups did not differ from each other. Study participants had a mean age of 18 years when beginning the study, but their

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<sup>23</sup> Carmichael, *et al.*, 2021.

<sup>24</sup> Kuper, *et al.*, 2020, at 5.

<sup>25</sup> Kuper, *et al.*, 2020, at 3, referring to Hembree, *et al.*, 2017.

<sup>26</sup> Kuper, *et al.*, 2020, at Table 2.

<sup>27</sup> Kuper, *et al.*, 2020, at 4.



initial clinical contacts and diagnoses occurred at a mean age of 10 years. According to the study, “mental health care visits overall did not significantly change following gender-affirming pharmaceutical care,”<sup>28</sup> yet, “psychotropic medication use *increased*,”<sup>29</sup> indicating *deteriorating* mental health.

33. Kaltiala et al. (2020) similarly reported that after cross-sex hormone treatment, “Those who had psychiatric treatment needs or problems in school, peer relationships and managing everyday matters outside of home continued to have problems during real-life.”<sup>30</sup> They concluded, “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.”<sup>31</sup>

**b. Five studies confounded psychotherapy and medical treatment**

34. The initial enthusiasm for medical blocking of puberty followed largely from early reports from the Dutch clinical research team suggesting at least some mental health improvement.<sup>32</sup> It was when subsequent research studies failed to replicate those successes that it became apparent that the successes were due, not to the medical interventions, but to the psychotherapy that accompanied such interventions in most clinics, including the Dutch clinic.

35. The Dutch clinical research team followed up a cohort of youth at their clinic undergoing puberty suppression<sup>33</sup> and later cross-hormone treatment and surgical sex reassignment.<sup>34</sup> The youth improved on several variables upon follow-up as compared to pre-suppression measurement, including depressive symptoms and

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<sup>28</sup> Hisle-Gorman, et al., 2021, at 1448.

<sup>29</sup> Hisle-Gorman, et al., 2021, at 1448, emphasis added.

<sup>30</sup> Kaltiala et al., 2020, at 213.

<sup>31</sup> Kaltiala et al., 2020, at 213.

<sup>32</sup> de Vries, *et al.*, 2011; de Vries, *et al.*, 2014

<sup>33</sup> de Vries, *et al.*, 2011.

<sup>34</sup> de Vries, *et al.*, 2014.



general functioning. No changes were detected in feelings of anxiety or anger or in gender dysphoria as a result of puberty suppression; however, natal females using puberty suppression suffered *increased* body dissatisfaction both with their secondary sex characteristics and with nonsexual characteristics.<sup>35</sup>

36. As the report authors noted, while it is possible that the improvement on some variables was due to the puberty-blockers, it is also possible that the improvement was due to the mental health support, and it is possible that the improvement occurred only on its own with natural maturation. So any conclusion that puberty blockers improved the mental health of the treated children is not justified by the data. Because this study did not include a control group (another group of adolescents matching the first group, but *not* receiving medical or social support), these possibilities cannot be distinguished from each other. The authors of the study were explicit in noting this themselves: “All these factors may have contributed to the psychological well-being of these gender dysphoric adolescents.”<sup>36</sup>

37. In a 2020 update, the Dutch clinic reported continuing to find improvement in transgender adolescents’ psychological functioning, reaching age-typical levels, “after the start of specialized transgender care involving puberty suppression.”<sup>37</sup> Unfortunately, because the transgender care method of that clinic involves both psychosocial support and puberty suppression, it again cannot be known which of those (or their combination) is driving the improvement. Also, the authors indicate that the changing demographic and other features among gender dysphoric youth might have caused the treated group to differ from the control group in unknown ways. As the study authors noted again, “The present study can, therefore, not provide evidence about the direct benefits of puberty suppression over time and long-

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<sup>35</sup> Biggs, 2020.

<sup>36</sup> de Vries, *et al.* 2011, at 2281.

<sup>37</sup> van der Miesen, *et al.*, 2020, at 699.



term mental health outcomes.”<sup>38</sup>

38. Allen, *et al.* (2019) reported on a sample of 47 youth, ages 13–20, undergoing cross-sex hormone treatment. They reported observing increases in measures of well-being and decreases in measures of suicidality; however, as the authors also noted, “whether a patient is actively receiving psychotherapy” may have been a confounding variable.<sup>39</sup>

39. Tordoff, *et al.* (2022) reported on a sample of youth, ages 13–20 years, treated with either puberty blockers or cross-sex hormones. There were improvements in mental health functioning; however, 62.5% of the sample was again receiving mental health therapy.<sup>40</sup>

**c. Two studies showed no superiority of medical intervention above psychotherapy**

40. Costa, *et al.* (2015) reported on preliminary outcomes from the Tavistock and Portman NHS Foundation Trust clinic in the UK. They compared the psychological functioning of one group of youth receiving psychological support with a second group receiving both psychological support as well as puberty blocking medication. Both groups improved in psychological functioning over the course of the study, but no statistically significant differences between the groups was detected at any point.<sup>41</sup> As those authors concluded, “Psychological support and puberty suppression were both associated with an improved global psychosocial functioning in GD adolescence. Both these interventions may be considered effective in the clinical management of psychosocial functioning difficulties in GD adolescence.”<sup>42</sup> Because psychological support does not pose the physical health risks that hormonal interventions or surgery does (such as loss of reproductive function) however, one

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<sup>38</sup> van der Miesen, *et al.*, 2020, at 703.

<sup>39</sup> Allen, *et al.*, 2019.

<sup>40</sup> Tordoff, *et al.*, 2022, Table 1.

<sup>41</sup> Costa, *et al.*, at 2212 Table 2.

<sup>42</sup> Costa, *et al.*, at 2206.



cannot justify taking on the greater risks of social transition, puberty blockers or surgery without evidence of such treatment producing superior results. Such evidence does not exist. Moreover, this clinical team subsequently released the final version of this preliminary report, finding that neither group actually experienced significant improvement,<sup>43</sup> making moot any discussion of the source any improvement.

41. Achille, *et al.* (2020) at Stony Brook Children’s Hospital in New York treated a sample of 95 youth with gender dysphoria, providing follow-up data on 50 of them. (The report did not indicate how these 50 were selected from the 95.) As well as receiving puberty blocking medications, “Most subjects were followed by mental health professionals. Those that were not were encouraged to see a mental health professional.”<sup>44</sup> The puberty blockers themselves “were introduced in accordance with the Endocrine Society and the WPATH guidelines.”<sup>45</sup> Upon follow-up, some incremental improvements were noted; however, after statistically adjusting for psychiatric medication and engagement in counselling, “*most predictors did not reach statistical significance.*”<sup>46</sup> That is, puberty blockers did not improve mental health any more than did mental health care on its own.

#### **d. Conclusions**

42. The authors of the original Dutch studies were careful not to overstate the implications of their results, “We *cautiously* conclude that puberty suppression *may be a valuable element* in clinical management of adolescent gender dysphoria.”<sup>47</sup> Nonetheless, many other clinics and clinicians intrepidly proceeded on the basis of only the perceived positives, broadened the range of people beyond those represented in the research findings, and removed the protections applied in the procedures that

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<sup>43</sup> Carmichael, *et al.*, 2021.

<sup>44</sup> Achille, *et al.*, 2020, at 2.

<sup>45</sup> Achille, *et al.*, 2020, at 2.

<sup>46</sup> Achille, *et al.*, 2020, at 3 (italics added).

<sup>47</sup> de Vries, *et al.* 2011, at 2282, italics added.



led to those outcomes. Many clinics and individual clinicians have reduced the minimum age for transition to 10 instead of 12. While the Dutch Protocol involves interdisciplinary teams of clinicians, many clinics now rely on a single assessor, in some cases one without adequate professional training in childhood and adolescent mental health. Comprehensive, longitudinal assessments (*e.g.*, 1 to 2 years<sup>48</sup>) became approvals after one or two assessment sessions. Validated, objective measures of youths' psychological functioning were replaced with clinicians' subjective (and first) opinions, often reflecting only the clients' own self-report. Systematic recordings of outcomes, so as to allow for detection and correction of clinical deficiencies, were eliminated.

43. Notably, Dr. Thomas Steensma, central researcher of the Dutch clinic, has decried other clinics for "blindly adopting our research" despite the indications that those results may not actually apply: "We don't know whether studies we have done in the past are still applicable to today. Many more children are registering, and also a different type."<sup>49</sup> Steensma opined that "every doctor or psychologist who is involved in transgender care should feel the obligation to do a good pre- and post-test." But few if any are doing so.

#### **4. Mental Health Issues in Childhood-Onset Gender Dysphoria**

44. As shown by the outcomes studies, there is little evidence that transition improves the mental well-being of children. As shown repeatedly by clinical guidelines from multiple professional associations, mental health issues are expected or required to be resolved *before* undergoing transition. The reasoning behind these conclusions is that children may be expressing gender dysphoria, not because they are experiencing what gender dysphoric adults report, but because they mistake what their experiences indicate or to what they might lead. For example, a child

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<sup>48</sup> de Vries, *et al.*, 2011.

<sup>49</sup> Tetelepta, 2021.



experiencing depression from social isolation might develop the hope—and the unrealistic expectation—that transition will help them fit in, this time as and with the other sex.

45.Ā If a child undergoes transition, discovering only then that their mental health or social situations will not in fact change, the medical risks and side-effects (such as sterilization) will have been borne for no reason. If, however, a child resolves the mental health issues first, with the gender dysphoria resolving with it (which the research literature shows to be the case in the large majority), then the child need not undergo transition at all, but retains the opportunity to do so later.

46.Ā Elevated rates of multiple mental health issues among gender dysphoric children are reported throughout the research literature. A formal analysis of children (ages 4–11) undergoing assessment at the Dutch child gender clinic showed 52% fulfilled criteria for a DSM axis-I disorder.<sup>50</sup> A comparison of the children attending the Canadian versus Dutch child gender dysphoria clinic showed only few differences between them, but a large proportion in both groups were diagnosable with clinically significant mental health issues. Results of standard assessment instruments (Child Behavior Check List, or CBCL) demonstrated that the average score was in the clinical rather than healthy range, among children in both clinics.<sup>51</sup> When expressed as percentages, among 6–11-year-olds, 61.7% of the Canadian and 62.1% of the Dutch sample were in the clinical range.

47.Ā A systematic, comprehensive review of all studies of Autism Spectrum Disorders (ASDs) and Attention-Deficit Hyperactivity Disorder (ADHD) among children diagnosed with gender dysphoria was recently conducted. It was able to identify a total of 22 studies examining the prevalence of ASD or ADHD in youth with gender dysphoria. Studies reviewing medical records of children and adolescents

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<sup>50</sup> Wallien, *et al.*, 2007.

<sup>51</sup> Cohen-Kettenis, *et al.*, 2003, at 46.



referred to gender clinics showed 5–26% to have been diagnosed with ASD.<sup>52</sup> Moreover, those authors gave specific caution on the “considerable overlap between symptoms of ASD and symptoms of gender variance, exemplified by the subthreshold group which may display symptoms which could be interpreted as either ASD or gender variance. Overlap between symptoms of ASD and symptoms of GD may well confound results.”<sup>53</sup> As noted elsewhere herein, when two or more issues are present at the same time, researchers cannot distinguish when a result is associated with or caused by the issue of interest or one of the side issues.<sup>54</sup> The rate of ADHD among children with GD was 8.3–11%. Conversely, in data from children (ages 6–18) with Autism Spectrum Disorders (ASDs) show they are more than seven times more likely to have parent-reported “gender variance.”<sup>55</sup>

### **C. Adolescent-Onset Gender Dysphoria**

#### **1. Features of Adolescent-Onset Gender Dysphoria**

48. In the social media age, a third profile has recently begun to present clinically or socially, characteristically distinct from the two previously identified profiles.<sup>56</sup> Unlike adult-onset or childhood-onset gender dysphoria, this group is predominately biologically female. This group typically presents in adolescence, but lacks the history of cross-gender behavior in childhood like the childhood-onset cases have. It is that feature which led to the term Rapid Onset Gender Dysphoria (ROGD).<sup>57</sup> The majority of cases appear to occur within clusters of peers and in association with increased social media use<sup>58</sup> and especially among people with autism or other neurodevelopmental or mental health issues.<sup>59</sup>

49. It cannot be easily determined whether the self-reported gender dysphoria

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<sup>52</sup> Thrower, *et al.*, 2020.

<sup>53</sup> Thrower, *et al.*, 2020, at 703.

<sup>54</sup> Cohen-Kettenis *et al.*, 2003, at 51; Skelly *et al.*, 2012.

<sup>55</sup> Janssen, *et al.*, 2016.

<sup>56</sup> Kaltiala-Heino, *et al.*, 2015; Littman, 2018.

<sup>57</sup> Littman, 2018.

<sup>58</sup> Littman, 2018.

<sup>59</sup> Kaltiala-Heino, *et al.*, 2015; Littman, 2018; Warrier, *et al.*, 2020.



is a result of other underlying issues or if those mental health issues are the result of the stresses of being a sexual minority, as some writers are quick to assume.<sup>60</sup> (The science of the *Minority Stress Hypothesis* appears in its own section.) Importantly, and unlike other presentations of gender dysphoria, people with rapid-onset gender dysphoria often (47.2%) experienced *declines* rather than improvements in mental health when they publicly acknowledged their gender status.<sup>61</sup> Although long-term outcomes have not yet been reported, these distinctions demonstrate that one cannot apply findings from the other types of gender dysphoria to this type. That is, in the absence of evidence, researchers cannot assume that the pattern found in childhood-onset or adult-onset gender dysphoria also applies to adolescent-onset gender dysphoria. The multiple differences already observed between these groups argue against predicting that features present in one type would generalize to be present in all types of gender dysphoria.

## **2. Social Transition and Puberty Blockers with Adolescent Onset**

50. There do not yet exist prospective outcomes studies either for social transition or for medical interventions for people whose gender dysphoria began in adolescence. That is, instead of taking a sample of individuals and following them forward over time (thus permitting researchers to account for people dropping out of the study, people misremembering the order of events, etc.), all studies have thus far been *retrospective*. It is not possible for such studies to identify what factors caused what outcomes. No study has yet been organized in such a way as to allow for an analysis of the adolescent-onset group, as distinct from childhood-onset or adult-onset cases. Many of the newer clinics (not the original clinics which systematically tracked and reported on their cases' results) fail to distinguish between people who had childhood-onset gender dysphoria and have aged into adolescence versus people

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<sup>60</sup> Boivin, *et al.*, 2020.

<sup>61</sup> Biggs, 2020; Littman, 2018.



whose onset was not until adolescence. (Analogously, there are reports failing to distinguish people who had adolescent-onset gender dysphoria and aged into adulthood from adult-onset gender dysphoria.) Studies selecting groups according to their current age instead of their ages of onset produces confounded results, representing unclear mixes according to how many of each type of case wound up in the final sample.

### 3. Mental Illness in Adolescent-Onset Gender Dysphoria

51. In 2019, a Special Section appeared in the *Archives of Sexual Behavior* titled, “Clinical Approaches to Adolescents with Gender Dysphoria.” It included this brief yet thorough summary of rates of mental health issues among adolescents expressing gender dysphoria, by Dr. Aron Janssen of the Department of Child and Adolescent Psychiatry of New York University.<sup>62</sup> The literature varies in the range of percentages of adolescents with co-occurring disorders. The range for depressive symptoms ranges was 6–42%,<sup>63</sup> with suicide attempts ranging 10 to 45%.<sup>64</sup> Self-injurious thoughts and behaviors range 14–39%.<sup>65</sup> Anxiety disorders and disruptive behavior difficulties including Attention Deficit/Hyperactivity Disorder are also prevalent.<sup>66</sup> Gender dysphoria also overlaps with Autism Spectrum Disorder.<sup>67</sup>

52. Of particular concern in the context of adolescent onset gender dysphoria is Borderline Personality Disorder (BPD; diagnostic criteria to follow). It is increasingly hypothesized that very many cases appearing to be adolescent-onset gender dysphoria actually represent cases of BPD.<sup>68</sup> That is, some people may be misinterpreting their experiencing of the broader “identity disturbance” of symptom Criterion 3 to represent a gender identity issue specifically. Like adolescent-onset

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<sup>62</sup> Janssen, *et al.*, 2019.

<sup>63</sup> Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013; Wallien, *et al.*, 2007.

<sup>64</sup> Reisner, *et al.*, 2015.

<sup>65</sup> Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013.

<sup>66</sup> de Vries, *et al.*, 2011; Mustanski, *et al.*, 2010; Wallien, *et al.*, 2007.

<sup>67</sup> de Vries, *et al.*, 2010; Jacobs, *et al.*, 2014; Janssen, *et al.*, 2016; May, *et al.*, 2016; Strang, *et al.*, 2014, 2016.

<sup>68</sup> *E.g.*, Anzani, *et al.*, 2020; Zucker, 2019.



gender dysphoria, BPD begins to manifest in adolescence, is three times more common in biological females than males, and occurs in 2–3% of the population, rather than 1-in-5,000 people. (Thus, if even only a portion of people with BPD experienced an identity disturbance that focused on gender identity and were mistaken for transgender, they could easily overwhelm the number of genuine cases of gender dysphoria.)

53.Ã DSM-5-TR Diagnostic Criteria for Borderline Personality Disorder:

A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:

- 1.ÃFrantic efforts to avoid real or imagined abandonment. (Note: Do not include suicidal or self-mutilating behaviour covered in Criterion 5.)
- 2.ÃA pattern of unstable and intense interpersonal relationship characterized by alternating between extremes of idealization and devaluation.
- 3.Ã*Identity disturbance: markedly and persistently unstable self-image or sense of self.*
- 4.ÃImpulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). (Note: Do not include suicidal or self-mutilating behavior covered in Criterion 5.)
- 5.Ã*Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behavior.*
- 6.ÃAffective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
- 7.ÃChronic feelings of emptiness.
- 8.ÃInappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).
- 9.ÃTransient, stress-related paranoid ideation or severe dissociative symptoms.

(Italics added.)

54.Ã Mistaking cases of BPD for cases of Gender Dysphoria may prevent such youth from receiving the correct mental health services for their condition, and a primary cause for concern is symptom Criterion 5: Recurrent suicidality. (The research on suicide and suicidality are detailed in their own section herein.)



Regarding the provision of mental health care, the distinction between these conditions is crucial: A person with BPD going undiagnosed will not receive the appropriate treatments (the currently most effective of which is Dialectical Behavior Therapy). A person with a cross-gender identity would be expected to feel relief from medical transition, but someone with BPD would not: The problem was not about *gender* identity, but about having an *unstable* identity. Moreover, after a failure of medical transition to provide relief, one would predict for these people increased levels of hopelessness and increased risk of suicidality.

55. Regarding research, there have now been several attempts to document rates of suicidality among gender dysphoric adolescents. The scientific concern presented by BPD is that it poses a potential confound: Samples of gender dysphoric adolescents could appear to have elevated rates of suicidality, not because of the gender dysphoria (or transphobia in society), but because of the number of people with BPD in the sample.

#### **IV. Other Scientific Claims Assessed**

##### **A. Suicide and Suicidality**

56. Social media increasingly circulate demands for transition accompanied by hyperbolic warnings of suicide should there be delay or obstacle. Claims accompany admissions that “I’d rather have a trans daughter than a dead son,” and such threats are treated as the justification for referring to affirming gender transitions as ‘life-saving’ or ‘medically necessary’. Such claims convey only grossly misleading misrepresentations of the research literature, however, deploying terms for their shock value rather than accuracy, and exploiting common public misperceptions about suicide. Indeed, suicide prevention research and public health campaigns repeatedly warn against circulating such exaggerations, due to the risk of copy-cat



behavior they encourage.<sup>69</sup>

57.Ā Despite that the media treat them as near synonyms, suicide and suicidality are distinct phenomena. They represent different behaviors with different motivations, with different mental health issues, and with different clinical needs. *Suicide* refers to completed suicides and the sincere intent to die. It is substantially associated with impulsivity, using more lethal means, and being a biological male.<sup>70</sup> *Suicidality* refers to parasuicidal behaviors, including suicidal ideation, threats, and gestures. These typically represent cries for help rather than an intent to die and are more common among biological females. Suicidal threats can indicate any of many problems or represent emotional blackmail, as typified by “If you leave me, I will kill myself.” Professing suicidality is also used for attention-seeking or for the support or sympathy it evokes from others, denoting distress much more frequently than an intent to die.

58.Ā Notwithstanding public misconceptions about the frequency of suicide and related behaviors, the highest rates of suicide are among middle-aged and elderly men in high income countries.<sup>71</sup> Biological males are at three times greater risk of death by suicide than are biological females, whereas suicidal ideation, plans, and attempts are three times more common among biological females.<sup>72</sup> In contrast with completed suicides, the frequency of suicidal ideation, plans, and attempts is highest during adolescence and young adulthood, with reported ideation rates spanning 12.1–33%.<sup>73</sup> Relative to other countries, Americans report elevated rates of each of suicidal ideation (15.6%), plans (5.4%), and attempts (5.0%).<sup>74</sup> Suicide attempts occur up to 30

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<sup>69</sup> Gould & Lake, 2013.

<sup>70</sup> Freeman, *et al.*, 2017.

<sup>71</sup> Turecki & Brent, 2016

<sup>72</sup> Klonsky *et al.*, 2016; Turecki & Brent, 2016

<sup>73</sup> Borges *et a.*, 2010; Nock *et al.*, 2008

<sup>74</sup> Klonsky, *et al.*, 2016.



times more frequently than completed suicides.<sup>75</sup> The rate of completed suicides in the U.S. population is 14.5 per 100,000 people.<sup>76</sup> The widely discrepant numbers representing completed suicides versus transient suicidal ideation has left those statistics open to substantial abuse in the media and social media. Despite public media guidelines urging “Avoid dramatic headlines and strong terms such as ‘suicide epidemic,’”<sup>77</sup> that is exactly what mainstream outlets have done.<sup>78</sup>

59. There is substantial research associating sexual orientation with suicidality, but much less so with completed suicide.<sup>79</sup> More specifically, there is some evidence suggesting gay adult men are more likely to die by suicide than are heterosexual men, but there is less evidence of an analogous pattern among lesbian women. Regarding suicidality, surveys of self-identified LGB Americans repeatedly report rates of suicidal ideation and suicide attempts 2–7 times higher than their heterosexual counterparts. Because of this association of suicidality with sexual orientation, one must apply caution in interpreting findings allegedly about gender identity: Because of the overlap between people who self-identify as non-heterosexual and as non-cis-gendered, correlations detected between suicidality and gender dysphoria may instead reflect (be confounded by) homosexuality. Indeed, other authors have made explicit their surprise that so many studies, purportedly of gender identity, entirely omitted measurement or consideration of sexual orientation, creating the situation where features that seem to be associated with gender identity instead reflect the sexual orientation of the members of the sample.<sup>80</sup>

60. Among post-transition transsexuals, completed suicide rates are elevated,

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<sup>75</sup> Bachman, 2018.

<sup>76</sup> World Health Organization, 2022.

<sup>77</sup> Samaritans, 2020.

<sup>78</sup> E.g., MSNBC, 2015, *Trans youth and suicide: An epidemic*.

<sup>79</sup> Haas, *et al.*, 2011.

<sup>80</sup> McNeil, *et al.* (2017)



but are nonetheless rare.<sup>81</sup> Regarding suicidality, there have been three recent, systematic reviews of the research literature.<sup>82</sup> All three included specific methods to minimize any potential effects of cherry-picking findings from within the research literature. Compiling the results of 108 articles reported from 64 research projects, Adams and Vincent (2019) found an overall average rate of 46.55% for suicidal ideation (ranging 18.18%–95.5%) and an overall average rate of 27.19% for suicidal attempts (ranging 8.57%–52.4%). These findings confirmed those reported by McNeil, *et al.* (2017), whose review of 30 articles revealed a range of 37%–83% for suicidal ideation and 9.8%–43% for suicidal attempts. Thus, on the one hand, these ranges are greater than those reported for the mainstream population—They instead approximate the rates reported among sexual orientation minorities. On the other hand, with measures so lacking in reliability that they produce every result from ‘rare’ to ‘almost everyone’, it is unclear which, if any of them, represents a valid conclusion.

61. McNeil *et al.* (2017) observed also the research to reveal rates of suicidal ideation and suicidal attempts to be related—not to transition status—but to the social support received: The studies reviewed showed support to decrease suicidality, but transition not to. Indeed, in some situations, social support was associated with *increased* suicide attempts, suggesting the reported suicidality may represent attempts to evoke more support.<sup>83</sup>

62. Marshall *et al.* (2016) identified and examined 31 studies, again finding rates of suicidal ideation and suicide attempts to be elevated, particularly among biological females, indicating that suicidality patterns correspond to biological sex rather than self-identified gender.<sup>84</sup>

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<sup>81</sup> Wiepjes, *et al.*, 2020.

<sup>82</sup> Adams & Vincent, 2019; Marshall, *et al.*, 2016; McNeil, *et al.* (2017).

<sup>83</sup> Bauer, *et al.*, 2015; Canetto, *et al.*, 2021.

<sup>84</sup> Marshall, *et al.*, 2016.



63. Despite that mental health issues, including suicidality, are repeatedly required by clinical standards of care to be resolved before transition, threats of suicide are instead oftentimes used as the very justification for labelling transition a ‘medical necessity’. However plausible it might seem that failing to affirm transition causes suicidality, the epidemiological evidence indicates that hypothesis to be incorrect: Suicide rates remains elevated even after complete transition, as shown by a comprehensive review of 17 studies of suicidality in gender dysphoria.<sup>85</sup>

64. The scientific study of suicide is inextricably linked to that of mental illness, and Borderline Personality Disorder is repeatedly documented to be greatly elevated among sexual minorities<sup>86</sup>.

### **B. Conversion Therapy**

65. Activists and social media increasingly, but erroneously, apply the term “conversion therapy” moving farther and farther from what the research has reported. “Conversion therapy” (or “reparative therapy” and other names) was the attempt to change a person’s sexual orientation; however, with the public more frequently accustomed to “LGB” being expanded to “LGBTQ+”, the claims relevant only to sexual orientation are being misapplied to gender identity. The research has repeatedly demonstrated that once one explicitly acknowledges being gay or lesbian, this is only very rarely are mistaken. That is entirely unlike gender identity, wherein the great majority of children who declare cross-gender identity cease to do so by puberty, as already shown unanimously by all follow-up studies. As the field grows increasingly polarized, any therapy failing to provide affirmation-on-demand is mislabeled “conversion therapy.”<sup>87</sup> Indeed, even actions of non-therapists, unrelated

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<sup>85</sup> McNeil, *et al.*, 2017.

<sup>86</sup> Reuter, *et al.*, 2016; Rodriguez-Seiljas, *et al.*, 2021; Zanarni, *et al.*, 2021.

<sup>87</sup> D’Angelo, *et al.*, 2021.



to any therapy, have been labelled conversion therapy, including the prohibition of biological males competing on female teams.<sup>88</sup>

**C. Assessing Demands for Social Transition and Affirmation-Only or Affirmation-on-Demand Treatment in Pre-Pubertal Children.**

66.Ā Colloquially, affirmation refers broadly to any actions that treat the person as belonging to a new gender. In different contexts, that could apply to social actions (use of a new name and pronouns), legal actions (changes to birth certificates), or medical actions (hormonal and surgical interventions). That is, social transition, legal transition, and medical transition (and subparts thereof) need not, and rarely do, occur at the same time. In practice, there are cases in which a child has socially only partially transitioned, such as presenting as one gender at home and another at school or presenting as one gender with one custodial parent and another gender with the other parent.

67.Ā Referring to “affirmation” as a treatment approach is ambiguous: Although often used in public discourse to take advantage of the positive connotations of the term, it obfuscates what exactly is being affirmed. This often leads to confusion, such as quoting a study of the benefits and risks of social affirmation in a discussion of medical affirmation, where the appearance of the isolated word “affirmation” refers to entirely different actions.

68.Ā It is also an error to divide treatment approaches into affirmative versus non-affirmative. As noted already, the widely adopted Dutch Approach (and the guidelines of the multiple professional associations based on it) cannot be said to be either: It is a staged set of interventions, wherein social transition (and puberty blocking) may not begin until age 12 and cross-sex hormonal and other medical interventions, later.

69.Ā Formal clinical approaches to helping children expressing gender dysphoria

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<sup>88</sup> Turban, 2021, March 16.



employ a gate-keeper model, with decision trees to help clinicians decide when and if the potential benefits of affirmation of the new gender would outweigh the potential risks of doing so. Because the gate-keepers and decision-trees generally include the possibility of affirmation in at least some cases, it is misleading to refer to any one approach as “the affirmation approach.” The most extreme decision-tree would be accurately called *affirmation-on-demand*, involving little or no opportunity for children to explore at all whether the distress they feel is due to some other, less obvious, factor, whereas more moderate gate-keeping would endorse transition only in select situations, when the likelihood of regretting transition is minimized.

70. Many outcomes studies have been published examining the results of gate-keeper models, but no such studies have been published regarding *affirmation-on-demand* with children. Although there have been claims that *affirmation-on-demand* causes mental health or other improvement, these have been the result only of “retrospective” rather than “prospective” studies. That is, such studies did not take a sample of children and follow them up over time, to see how many dropped out altogether, how many transitioned successfully, and how many transitioned and regretted it or detransitioned. Rather, such studies took a sample of successfully transitioned adults and asked them retrospective questions about their past. In such studies, it is not possible to know how many other people dropped out or regretted transition, and it is not possible to infer causality from any of the correlations detected, despite authors implying and inferring causality.

#### **D. Assessing the “Minority Stress Hypothesis”**

71. The elevated levels of mental health problems among lesbian, gay, and bisexual populations is a well-documented phenomenon, and the idea that it is caused by living within a socially hostile environment is called the *Minority Stress Hypothesis*.<sup>89</sup> The association is not entirely straight-forward, however. For example,

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<sup>89</sup> Meyer, 2003.



although lesbian, gay, and bisexual populations are more vulnerable to suicide ideation overall, the evidence specifically on adult lesbian and bisexual women is unclear. Meyer did not include transgender populations in originating the hypothesis, and it remains a legitimate question to what extent and in what ways it might apply to gender identity.

72.Ã Minority stress is associated, in large part, with being a visible minority. There is little evidence that transgender populations show the patterns suggested by the hypothesis. For example, the minority stress hypothesis would predict differences according to how visibly a person is discernable as a member of the minority, which often changes greatly upon transition. Biological males who are very effeminate stand out throughout childhood, but in some cases can successfully blend in as adult females; whereas the adult-onset transitioners blend in very much as heterosexual cis-gendered males during their youth and begin visibly to stand out in adulthood, only for the first time.

73.Ã Also suggesting minority stress cannot be the full story is that the mental health symptoms associated with minority stress do not entirely correspond with those associated with gender dysphoria. The primary symptoms associated with minority stress are depressive symptoms, substance use, and suicidal ideation.<sup>90</sup> The symptoms associated with gender dysphoria indeed include depressive symptoms and suicidal ideation, but also include anxiety symptoms, Autism Spectrum Disorders, and personality disorders.

74.Ã A primary criterion for readiness for transition used by the clinics demonstrating successful transition is the absence or resolution of other mental health concerns, such as suicidality. In the popular media, however, indications of mental health concerns are instead often dismissed as an expectable result caused by Sexual Minority Stress (SMS). It is generally implied that such symptoms will resolve

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<sup>90</sup> Meyer, 2003.



upon transition and integration into an affirming environment.

## **V.Ā Assessing Statements from Professional Associations**

### **A. Understanding the Value of Statements from Professional Associations**

75.Ā The value of position statements from professional associations should be neither over- nor under-estimated. In the ideal, an organization of licensed health care professionals would convene a panel of experts who would systematically collect all the available evidence about an issue, synthesizing it into recommendations or enforceable standards for clinical care, according to the quality of the evidence for each alternative. For politically neutral issues, with relevant expertise contained among association members, this ideal can be readily achievable. For controversial issues with no clear consensus, the optimal statement would summarize each perspective and explicate the strengths and weaknesses of each, providing relatively reserved recommendations and suggestions for future research that might resolve the continuing questions. Several obstacles can hinder that goal, however. Committees within professional organizations are typically volunteer activities, subject to the same internal politics of all human social structures. That is, committee members are not necessarily committees of experts on a topic—they are often committees of generalists handling a wide variety of issues or members of an interest group who feel strongly about political implications of an issue, instead of scientists engaged in the objective study of the topic.

76.Ā Thus, documents from professional associations may represent required standards, the violation of which may merit sanctions, or may represent only recommendations or guidelines. A document may represent the views of an association's full membership or only of the committee's members (or majorities thereof). Documents may be based on systematic, comprehensive reviews of the available research or selected portions of the research. In sum, the weight best placed



on any association's statement is the amount by which that association employed evidence versus other considerations in its process.

**B. Misrepresentations of statements of professional associations.**

77. In the presently highly politicized context, official statements of professional associations have been widely misrepresented. In preparing the present report, I searched the professional research literature for documentation of statements from these bodies and from my own files, for which I have been collecting such information for many years. I was able to identify statements from six such organizations. Although not strictly a medical association, the World Professional Association for Transgender Health (WPATH) also distributed a set of guidelines in wide use and on which other organizations' guidelines are based.

78. Notably, despite that all these medical associations reiterate the need for mental health issues to be resolved before engaging in medical transition, only the AACAP members have medical training in mental health. The other medical specialties include clinical participation with this population, but their assistance in transition generally assumes the mental health aspects have already been assessed and treated beforehand.

79. With the broad exception of the AAP, their statements repeatedly noted instead that:

- Desistance of gender dysphoria occurs in the majority of prepubescent children.
- Mental health issues need to be assessed as potentially contributing factors and need to be addressed before transition.
- Puberty-blocking medication is an experimental, not a routine, treatment.
- Social transition is not generally recommended until after puberty.

Although some other associations have published broad statements of moral support for sexual minorities and against discrimination, they did not include any specific standards or guidelines regarding medical- or transition-related care.



### 1. World Professional Association for Transgender Health (WPATH)

80. The WPATH standards as they relate to prepubescent children begin with the acknowledgement of the known rates of desistance among gender dysphoric children:

[I]n follow-up studies of prepubertal children (mainly boys) who were referred to clinics for assessment of gender dysphoria, the dysphoria persisted into adulthood for only 6–23% of children (Cohen-Kettenis, 2001; Zucker & Bradley, 1995). Boys in these studies were more likely to identify as gay in adulthood than as transgender (Green, 1987; Money & Russo, 1979; Zucker & Bradley, 1995; Zuger, 1984). Newer studies, also including girls, showed a 12–27% persistence rate of gender dysphoria into adulthood (Drummond, Bradley, Peterson-Badali, & Zucker, 2008; Wallien & Cohen-Kettenis, 2008).<sup>91</sup>

81. That is, “In most children, gender dysphoria will disappear before, or early in, puberty.”<sup>92</sup>

82. Although WPATH does not refer to puberty blocking medications as “experimental,” the document indicates the non-routine, or at least inconsistent availability of the treatment:

Among adolescents who are referred to gender identity clinics, the number considered eligible for early medical treatment—starting with GnRH analogues to suppress puberty in the first Tanner stages—differs among countries and centers. Not all clinics offer puberty suppression. If such treatment is offered, the pubertal stage at which adolescents are allowed to start varies from Tanner stage 2 to stage 4 (Delemarre-van de Waal & Cohen-Kettenis, 2006; Zucker et al., [2012]).<sup>93</sup>

83. WPATH neither endorses nor proscribes social transitions before puberty, instead recognizing the diversity among families’ decisions:

Social transitions in early childhood do occur within some families with early success. This is a controversial issue, and divergent views are held by health professionals. The current evidence base is insufficient to predict the long-term outcomes of completing a gender role transition during early childhood.<sup>94</sup>

84. It does caution, however, “Relevant in this respect are the previously described relatively low persistence rates of childhood gender dysphoria.”<sup>95</sup>

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<sup>91</sup> Coleman, *et al.*, 2012, at 172.

<sup>92</sup> Coleman, *et al.*, 2012, at 173.

<sup>93</sup> Coleman, *et al.*, 2012, at 173.

<sup>94</sup> Coleman, *et al.*, 2012, at 176.

<sup>95</sup> Coleman, *et al.*, 2012, at 176 (quoting Drummond, *et al.*, 2008; Wallien & Cohen-Kettenis, 2008).



85. The WPATH standards have been subjected to standardized evaluation, the Appraisal of Guidelines for Research and Evaluation (“AGREE II”) method, as part of an appraisal of all published Clinical Practice Guidelines (CPGs) regarding sex and gender minority healthcare.<sup>96</sup> Utilizing community stakeholders to set domain priorities for the evaluation, the assessment concluded that the guidelines regarding HIV and its prevention were of high quality, but that “[t]ransition-related CPGs tended to lack methodological rigour and rely on patchier, lower-quality primary research.”<sup>97</sup> The WPATH guidelines were recommended for use. Indeed, the WPATH guidelines received unanimous ratings of “Do not recommend.”<sup>98</sup>

86. Finally, it should be noted that WPATH is in stark opposition to international standards: Public healthcare systems throughout the world have instead been ending the practice of medical transition of minors, responding to the increasingly recognized risks associated with hormonal interventions and the now clear lack of evidence that medical transition was benefitting most children, as opposed to the mental health counseling accompanying transition.

## **2. Endocrine Society (ES)**

87. The 150,000-member Endocrine Society appointed a nine-member task force, plus a methodologist and a medical writer, who commissioned two systematic reviews of the research literature and, in 2017, published an update of their 2009 recommendations, based on the best available evidence identified. The guideline was co-sponsored by the American Association of Clinical Endocrinologists, American Society of Andrology, European Society for Paediatric Endocrinology, European Society of Endocrinology, Pediatric Endocrine Society (PES), and the World Professional Association for Transgender Health (WPATH).

88. The document acknowledged the frequency of desistance among gender

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<sup>96</sup> Dahlen, *et al.*, 2021.

<sup>97</sup> Dahlen, *et al.*, 2021, at 6.

<sup>98</sup> Dahlen, *et al.*, 2021, at 7.



dysphoric children:

Prospective follow-up studies show that childhood GD/gender incongruence does not invariably persist into adolescence and adulthood (so-called “desisters”). Combining all outcome studies to date, the GD/gender incongruence of a minority of prepubertal children appears to persist in adolescence. . . . In adolescence, a significant number of these desisters identify as homosexual or bisexual.<sup>99</sup>

89.Ā The statement similarly acknowledges inability to predict desistance or persistence, “With current knowledge, we cannot predict the psychosexual outcome for any specific child.”<sup>100</sup>

90.Ā Although outside their area of professional expertise, mental health issues were also addressed by the Endocrine Society, repeating the need to handle such issues before engaging in transition, “In cases in which severe psychopathology, circumstances, or both seriously interfere with the diagnostic work or make satisfactory treatment unlikely, clinicians should assist the adolescent in managing these other issues.”<sup>101</sup> This ordering—to address mental health issues before embarking on transition—avoids relying on the unproven belief that transition will solve such issues.

91.Ā The Endocrine Society did not endorse any affirmation-only approach. The guidelines were neutral with regard to social transitions before puberty, instead advising that such decisions be made only under clinical supervision: “We advise that decisions regarding the social transition of prepubertal youth are made with the assistance of a mental health professional or similarly experienced professional.”<sup>102</sup>

92.Ā The Endocrine Society guidelines make explicit that, after gathering information from adolescent clients seeking medical interventions and their parents, the clinician “provides correct information to prevent unrealistically high expectations [and] assesses whether medical interventions may result in unfavorable

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<sup>99</sup> Hembree, *et al.*, 2017, at 3876.

<sup>100</sup> Hembree, *et al.*, 2017, at 3876.

<sup>101</sup> Hembree, *et al.*, 2017, at 3877.

<sup>102</sup> Hembree, *et al.*, 2017, at 3872.



psychological and social outcomes.”<sup>103</sup>

### **3. Pediatric Endocrine Society and Endocrine Society (ES/PES)**

93. In 2020, the 1500-member Pediatric Endocrine Society partnered with the Endocrine Society to create and endorse a brief, two-page position statement.<sup>104</sup> Although strongly worded, the document provided no specific guidelines, instead deferring to the Endocrine Society guidelines.<sup>105</sup>

94. It is not clear to what extent this endorsement is meaningful, however. According to the PES, the Endocrine Society “recommendations include evidence that treatment of gender dysphoria/gender incongruence is medically necessary and should be covered by insurance.”<sup>106</sup> However, the Endocrine Society makes neither statement. Although the two-page PES document mentioned insurance coverage four times, the only mention of health insurance by the Endocrine Society was: “If GnRH analog treatment is not available (insurance denial, prohibitive cost, or other reasons), postpubertal, transgender female adolescents may be treated with an antiandrogen that directly suppresses androgen synthesis or action.”<sup>107</sup> Despite the PES asserting it as “medically necessary,” the Endocrine Society stopped short of that. Its only use of that phrase was instead limiting: “We recommend that a patient pursue genital gender-affirming surgery only after the MHP and the clinician responsible for endocrine transition therapy both agree that surgery is medically necessary and would benefit the patient’s overall health and/or well-being.”<sup>108</sup>

### **4. American Academy of Child & Adolescent Psychiatry (AACAP)**

95. The 2012 statement of the American Academy of Child & Adolescent Psychiatry (AACAP) is not an affirmation-only policy. It notes:

Just as family rejection is associated with problems such as depression,

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<sup>103</sup> Hembree, *et al.*, 2017, at 3877.

<sup>104</sup> PES, online; Pediatric Endocrine Society & Endocrine Society, Dec. 2020.

<sup>105</sup> Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1; Hembree, *et al.*, 2017.

<sup>106</sup> Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1.

<sup>107</sup> Hembree, *et al.* 2017, at 3883.

<sup>108</sup> Hembree, *et al.*, 2017 at 3872, 3894.



suicidality, and substance abuse in gay youth, the proposed benefits of treatment to eliminate gender discordance in youth must be carefully weighed against such possible deleterious effects. . . . In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood, or at least until the wish to change sex is unequivocal, consistent, and made with appropriate consent.<sup>109</sup>

96.Ā The AACAP’s language repeats the description of the use of puberty blockers only as an exception: “For situations in which deferral of sex reassignment decisions until adulthood is *not clinically feasible*, one approach that has been described in case series is sex hormone suppression under endocrinological management with psychiatric consultation using gonadotropin-releasing hormone analogues.”<sup>110</sup>

97.Ā The AACAP statement acknowledges the long-term outcomes literature for gender dysphoric children: “In follow-up studies of prepubertal boys with gender discordance—including many without any mental health treatment—the cross gender wishes usually fade over time and do not persist into adulthood,”<sup>111</sup> adding that “[c]linicians should be aware of current evidence on the natural course of gender discordance and associated psychopathology in children and adolescents in choosing the treatment goals and modality.”<sup>112</sup>

98.Ā The policy similarly includes a provision for resolving mental health issues: “Gender reassignment services are available in conjunction with mental health services focusing on exploration of gender identity, cross-sex treatment wishes, counseling during such treatment if any, and *treatment of associated mental health problems*.”<sup>113</sup> The document also includes minority stress issues and the need to deal with mental health aspects of minority status (*e.g.*, bullying).<sup>114</sup>

99.Ā Rather than endorse social transition for prepubertal children, the AACAP

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<sup>109</sup> Adelson & AACAP, 2012, at 969.

<sup>110</sup> Adelson & AACAP, 2012, at 969 (*italics added*).

<sup>111</sup> Adelson & AACAP, 2012, at 963.

<sup>112</sup> Adelson & AACAP, 2012, at 968.

<sup>113</sup> Adelson & AACAP, 2012, at 970 (*italics added*).

<sup>114</sup> Adelson & AACAP, 2012, at 969.



indicates: “There is similarly no data at present from controlled studies to guide clinical decisions regarding the risks and benefits of sending gender discordant children to school in their desired gender. Such decisions must be made based on clinical judgment, bearing in mind the potential risks and benefits of doing so.”<sup>115</sup>

### **5. American College of Obstetricians & Gynecologists (ACOG)**

100. The American College of Obstetricians & Gynecologists (ACOG) published a “Committee Opinion” expressing recommendations in 2017. The statement indicates it was developed by the ACOG’s Committee on Adolescent Health Care, but does not indicate participation based on professional expertise or a systematic method of objectively assessing the existing research. It includes the disclaimer: “This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.”<sup>116</sup>

101. Prepubertal children do not typically have clinical contact with gynecologists, and the ACOG recommendations include that the client additionally have a primary health care provider.<sup>117</sup>

102. The ACOG statement cites the statements made by other medical associations—European Society for Pediatric Endocrinology (ESPE), PES, and the Endocrine Society—and by WPATH.<sup>118</sup> It does not cite any professional association of *mental* health care providers, however. The ACOG recommendations repeat the previously mentioned eligibility/readiness criteria of having no mental illness that would hamper diagnosis and no medical contraindications to treatment. It notes: “*Before* any treatment is undertaken, the patient must display eligibility and readiness (Table 1), meaning that the adolescent has been evaluated by a mental

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<sup>115</sup> Adelson & AACAP, 2012, at 969.

<sup>116</sup> ACOG, 2017, at 1.

<sup>117</sup> ACOG, 2017, at 1.

<sup>118</sup> ACOG, 2017, at 1, 3.



health professional, has no contraindications to therapy, and displays an understanding of the risks involved.”<sup>119</sup>

103. The “Eligibility and Readiness Criteria” also include, “Diagnosis established for gender dysphoria, transgender, transsexualism.”<sup>120</sup> This standard, requiring a formal diagnosis, forestalls affirmation-on-demand because self-declared self-identification is not sufficient for DSM diagnosis.

104. ACOG’s remaining recommendations pertain only to post-transition, medically oriented concerns. Pre-pubertal social transition is not mentioned in the document, and the outcomes studies of gender dysphoric (prepubescent) children are not cited.

#### **6. American College of Physicians (ACP)**

105. The American College of Physicians published a position paper broadly expressing support for the treatment of LGBT patients and their families, including nondiscrimination, antiharassment, and defining “family” by emotional rather than biological or legal relationships in visitation policies, and the inclusion of transgender health care services in public and private health benefit plans.<sup>121</sup>

106. ACP did not provide guidelines or standards for child or adult gender transitions. The policy paper opposed attempting “reparative therapy;” however, the paper confabulated sexual orientation with gender identity in doing so. That is, on the one hand, ACP explicitly recognized that “[s]exual orientation and gender identity are inherently different.”<sup>122</sup> It based this statement on the fact that “the American Psychological Association conducted a literature review of 83 studies on the efficacy of efforts to change *sexual orientation*.”<sup>123</sup> The APA’s document, entitled “Report of the American Psychological Task Force on appropriate therapeutic responses to

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<sup>119</sup> ACOG, 2017, at 1, 3 (citing the Endocrine Society guidelines) (italics added).

<sup>120</sup> ACOG, 2017, at 3 Table 1.

<sup>121</sup> Daniel & Butkus, 2015a, 2015b.

<sup>122</sup> Daniel & Butkus, 2015b, at 2.

<sup>123</sup> Daniel & Butkus, 2015b, at 8 (italics added).



*sexual orientation*” does not include or reference research on gender identity.<sup>124</sup> Despite citing no research about transgenderism, the ACP nonetheless included in its statement: “Available research does not support the use of reparative therapy as an effective method in the treatment of LGBT persons.”<sup>125</sup> That is, the inclusion of “T” with “LGB” is based on something other than the existing evidence.

107. There is another statement,<sup>126</sup> which was funded by ACP and published in the *Annals of Internal Medicine* under its “*In the Clinic*” feature, noting that “‘In the Clinic’ does not necessarily represent official ACP clinical policy.”<sup>127</sup> The document discusses medical transition procedures for adults rather than for children, except to note that “[n]o medical intervention is indicated for prepubescent youth,”<sup>128</sup> that a “mental health provider can assist the child and family with identifying an appropriate time for a social transition,”<sup>129</sup> and that the “child should be assessed and managed for coexisting mood disorders during this period because risk for suicide is higher than in their cisgender peers.”<sup>130</sup>

### **7. American Academy of Pediatrics (AAP)**

108. The policy of the American Academy of Pediatrics (AAP) is unique among the major medical associations in being the only one to endorse an affirmation-on-demand policy, including social transition before puberty without any watchful waiting period. Although changes in recommendations can obviously be appropriate in response to new research evidence, the AAP provided none. Rather, the research studies AAP cited in support of its policy simply did not say what AAP claimed they did. In fact, the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing watchful waiting.<sup>131</sup> Moreover, of all

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<sup>124</sup> APA, 2009 (italics added).

<sup>125</sup> Daniel & Butkus, 2015b, at 8 (italics added).

<sup>126</sup> Safer & Tangpricha, 2019.

<sup>127</sup> Safer & Tangpricha, 2019, at ITC1.

<sup>128</sup> Safer & Tangpricha, 2019, at ITC9.

<sup>129</sup> Safer & Tangpricha, 2019, at ITC9.

<sup>130</sup> Safer & Tangpricha, 2019, at ITC9.

<sup>131</sup> Cantor, 2020.



the outcomes research published, the AAP policy cited *one*, and that without mentioning the outcome data it contained.<sup>132</sup>

109. Immediately following the publication of the AAP policy, I conducted a point-by-point fact-check of the claims it asserted and the references it cited in support. I submitted that to the *Journal of Sex & Marital Therapy*, a well-known research journal of my field, where it underwent blind peer review and was published. I append that article as part of this report. See Appendix 2. A great deal of published attention ensued; however, the AAP has yet to respond to the errors I demonstrated its policy contained. Writing for *The Economist* about the use of puberty blockers, Helen Joyce asked AAP directly, “Has the AAP responded to Dr Cantor? If not, have you any response now?” The AAP Media Relations Manager, Lisa Black, responded: “We do not have anyone available for comment.”

#### **8. The ESPE-LWPES GnRH Analogs Consensus Conference Group**

110. Included in the interest of completeness, there was also a collaborative report in 2009, between the European Society for Pediatric Endocrinology (ESPE) and the Lawson Wilkins Pediatric Endocrine Society (LWPES).<sup>133</sup> Thirty experts were convened, evenly divided between North American and European labs and evenly divided male/female, who comprehensively rated the research literature on gonadotropin-release hormone analogs in children.

111. The effort concluded that “[u]se of gonadotropin-releasing hormone analogs for conditions other than central precocious puberty requires additional investigation and cannot be suggested routinely.”<sup>134</sup> However, gender dysphoria was not explicitly mentioned as one of those other conditions.

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<sup>132</sup> Cantor, 2020, at 1.

<sup>133</sup> Carel et al., 2009.

<sup>134</sup> Carel et al. 2009, at 752.



## VI.Ā International Health Care Consensus

### 1. United Kingdom

112.Ā The National Health Service (NHS) of the United Kingdom centralizes gender counselling and transitioning services in a single clinic, the Gender Identity Development Service (GIDS) of the Tavistock and Portman NHS Foundation Trust. Between 2008 and 2018, the number of referrals to the clinic had increased by a factor of 40, leading to a government inquiry into the causes<sup>135</sup>. The GIDS was repeatedly accused of over-diagnosing and permitting transition in cases despite indicators against patient transition, including by 35 members of the GIDS staff, who resigned by 2019<sup>136</sup>.

113.Ā The NHS appointed Dr. Hilary Cass, former President of the Royal College of Paediatrics and Child Health, to conduct an independent review<sup>137</sup>. That review included a systematic consolidation of all the research evidence, following established procedures for preventing the “cherry-picking” or selective citation favouring or down-playing any one conclusion<sup>138</sup>. The review’s results were unambiguous: “The critical outcomes for decision making are the impact on gender dysphoria, mental health and quality of life. The quality of evidence for these outcomes was assessed as very low”<sup>139</sup>, again using established procedures for assessing clinical research evidence (called GRADE). The review also assessed as “very low” the quality of evidence regarding “body image, psychosocial impact, engagement with health care services, impact on extent of an satisfaction with surgery and stopping treatment”<sup>140</sup>. The report concluded that of the existing research, “The studies included in this evidence review are all small, uncontrolled observational studies, which are subject to bias and confounding....They suggest little change with GnRH analogues [puberty

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<sup>135</sup> Marsh, 2020; Rayner, 2018.

<sup>136</sup> BBC, 2021; Donnelly, 2019.

<sup>137</sup> National Health Service, 2020, Sept. 22.

<sup>138</sup> National Institute for Health and Care Excellence, 2020.

<sup>139</sup> National Institute for Health and Care Excellence, 2020, p. 4.

<sup>140</sup> National Institute for Health and Care Excellence, 2020, p. 5.



blockers] from baseline to follow-up”<sup>141</sup>.

## 2. Finland

114. In Finland, the assessments of mental health and preparedness of minors for transition services are centralized by law into two research clinics, Helsinki University Central Hospital and Tampere University Hospital. The eligibility of minors began in 2011. In 2019, Finnish researchers published an analysis of the outcomes of adolescents diagnosed with transsexualism and receiving cross-sex hormone treatment<sup>142</sup>. That study showed that despite the purpose of medical transition to improve mental health: “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”<sup>143</sup>. The patients who were functioning well after transition were those who were already functioning well before transition, and those who were functioning poorly, continued to function poorly after transition.

115. Consistent with the evidence, Finland’s health care service (Council for Choices in Health Care in Finland—COHERE) thus ended the surgical transition of minors, ruling in 2020 that “Surgical treatments are not part of the treatment methods for dysphoria caused by gender-related conflicts in minors” (COHERE, 2020). The review of the research concluded that “[N]o conclusions can be drawn on the stability of gender identity during the period of disorder caused by a psychiatric illness with symptoms that hamper development.” COHERE also greatly restricted access to puberty-blocking and other hormonal treatments, indicating they “may be considered if the need for it continues *after* the other psychiatric symptoms have

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<sup>141</sup> National Institute for Health and Care Excellence, 2020, p. 13.

<sup>142</sup> Kaltiala et al., 2020.

<sup>143</sup> Kaltiala et al., 2020, p. 213.



ceased and adolescent development is progressing normally”<sup>144</sup>. The council was explicit in noting the lack of research needed for decision-making, “There is also a need for more information on the *disadvantages* of procedures and on people who regret them”<sup>145</sup>.

### 3. Sweden

116. Sweden’s national health care policy regarding trans issues has developed quite similarly to that of the UK. (Already in place 20 years ago, Swedish health care policy permitted otherwise eligible minors to receive puberty-blockers beginning at age 14 and cross-sex hormones at age 16.) At that time, only small numbers of minors sought medical transition services. An explosion of referrals ensued in 2013–2014. Sweden’s Board of Health and Welfare reported that, in 2018, the number of diagnoses of gender dysphoria was 15 times higher than 2008 among girls ages 13–17.

117. Sweden has long been very accepting with regard to sexual and gender diversity. In 2018, a law was proposed to lower the age of eligibility for surgical care from age 18 to 15, remove the requirement for parental consent, and lower legal change of gender to age 12. A series of cases of regret and suicide were reported in the Swedish media, leading to questions of mental health professionals failing to consider. In 2019, the Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU) therefore conducted its own comprehensive review of the research<sup>146</sup>. Like the UK, the Swedish investigation employed methods to ensure the encapsulation of the all the relevant evidence<sup>147</sup>.

118. The SBU report came to the same conclusions as the UK commission. From 2022 forward, the Swedish National Board or Health and Welfare therefore

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<sup>144</sup> Council for Choices in Health Care in Finland, 2020; italics added.

<sup>145</sup> Council for Choices in Health Care in Finland, 2020; italics added.

<sup>146</sup> Orange, 2020, Feb 22.

<sup>147</sup> Swedish Agency for Health Technology Assessment and Assessment of Social Services, 2019.



“recommends restraint when it comes to hormone treatment...Based on the results that have emerged, the National Board of Health and Welfare’s overall conclusion is that the risks of anti-puberty and sex-confirming hormone treatment for those under 18 currently outweigh the possible benefits for the group as a whole”<sup>148</sup>. Neither puberty blockers nor cross-sex hormones would be provided under age 16, and patients ages 16–18 would receive such treatments only within research settings (clinical trials monitored by the appropriate Swedish research ethics board).

#### 4.ÅFrance

119.Å In 2022, the Académie Nationale de Médecine of France issued a strongly worded statement, citing the Swedish ban on hormone treatments. “[A] great medical caution must be taken in children and adolescents, given the vulnerability, particularly psychological, of this population and the many undesirable effects, and even serious complications, that some of the available therapies can cause...such as impact on growth, bone fragility, risk of sterility, emotional and intellectual consequences and, for girls, symptoms reminiscent of menopause”<sup>149</sup>. For hormones, the Académie concluded “the greatest reserve is required in their use,” and for surgical treatments, “[T]heir irreversible nature must be emphasized.” The Académie did not outright ban medical interventions, but warned “the risk of over-diagnosis is real, as shown by the increasing number of transgender young adults wishing to “detransition”. Rather than medical interventions, it advised health care providers “to extend as much as possible the psychological support phase.” The Académie reviewed and emphasized the evidence indicating the very large and very sudden increase in youth requesting medical transition. It attributed the change, not to society now being more accepting of sexual diversity, but to social media, “underlining the addictive character of excessive consultation of social networks which is both

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<sup>148</sup> Swedish National Board of Health and Welfare, 2022.

<sup>149</sup> Académie Nationale de Médecine, 2022, Feb. 25.



harmful to the psychological development of young people and responsible, for a very important part, of the growing sense of gender incongruence.”



## REFERENCES

- Académie Nationale de Médecine. (2022, Feb. 25). Medicine and gender transidentity in children and adolescents. Retrieved from <https://www.academie-medecine.fr/la-medecine-face-a-la-transidentite-de-genre-chez-les-enfants-et-les-adolescents/?lang=en>
- Achille, C., Taggart, T., Eaton, N. R., Osipoff, J., Tafuri, K., Lane, A., & Wilson, T. A. (2020). Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths: Preliminary results. *International Journal of Pediatric Endocrinology*. doi: 10.1186/s13633-020-00078-2
- Adams, N. J., & Vincent, B. (2019). Suicidal thoughts and behaviors among transgender adults in relation to education, ethnicity, and income: A systematic review. *Transgender Health, 4*, 226–246.
- Adelson, S. L., & American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues. (2012). Practice parameter on gay, lesbian, or bisexual sexual orientation, gender nonconformity, and gender discordance in children and adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 51*, 957–974.
- Allen, L. R., Watson, L. B., Egan, A. M., & Moser, C. N. (2019). Well-being and suicidality among transgender youth after gender-affirming hormones. *Clinical Practice in Pediatric Psychology, 7*, 302-311.
- American College of Obstetricians and Gynecologists. (2017). Care for transgender Adolescents. Committee Opinion No. 685. Retrieved from [www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/01/care-for-transgender-adolescents](http://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/01/care-for-transgender-adolescents)
- American Psychiatric Association. (2022). Diagnostic and statistical manual for mental disorders, fifth edition, text revision (DSM-5-TR). Washington, DC: Author.
- American Psychological Association, Task Force on Appropriate Therapeutic Responses to Sexual Orientation. (2009). Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation. Retrieved from <http://www.apa.org/pi/lgbc/publications/therapeutic-resp.html>
- Anzani, A., De Panfilis, C., Scandurra, C., & Prunas, A. (2020). Personality disorders and personality profiles in a sample of transgender individuals requesting gender-affirming treatments. *International Journal of Environmental Research and Public Health, 17*, 1521. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7084367/>
- Bachmann, S. (2018). Epidemiology of suicide and the psychiatric perspective. *International Journal of Environmental Research and Public Health, 15*, 1425.
- Bauer, G. R., Scheim, A. I., Pyne, J., Travers, R., & Hammond, R. (2015). Intervenable factors associated with suicide risk in transgender persons: A respondent driven sampling study in Ontario, Canada. *BMC Public Health, 15*,



525.

- BBC News. (2021, Sept. 5). NHS child gender identity clinic whistleblower wins tribunal. *British Broadcasting Company*. Retrieved from <https://www.bbc.com/news/uk-58453250>
- Biggs, M. (2019). A letter to the editor regarding the original article by Costa et al: Psychological support, puberty suppression, and psychosocial functioning in adolescents with gender dysphoria. *Journal of Sexual Medicine, 16*, 2043.
- Biggs, M. (2020). Gender dysphoria and psychological functioning in adolescents treated with GnRHa: Comparing Dutch and English prospective studies. *Archives of Sexual Behavior, 49*, 2231–2236.
- Blanchard, R. (1985). Typology of male-to-female transsexualism. *Archives of Sexual Behavior, 14*, 247–261.
- Blanchard, R. (1988). Nonhomosexual gender dysphoria. *The Journal of Sex Research, 24*, 188–193.
- Blanchard, R. (1989a). The classification and labeling of nonhomosexual gender dysphorias. *Archives of Sexual Behavior, 18*, 315–334.
- Blanchard, R. (1989b). The concept of autogynephilia and the typology of male gender dysphoria. *Journal of Nervous and Mental Disease, 177*, 616–623.
- Blanchard, R. (1990). Gender identity disorders in adult women. In R. Blanchard & B. W. Steiner (Eds.), *Clinical management of gender identity disorders in children and adults* (pp. 77–91). Washington, DC: American Psychiatric Press.
- Blanchard, R. (1991). Clinical observations and systematic studies of autogynephilia. *Journal of Sex and Marital Therapy, 17*, 235–251.
- Blanchard, R., Steiner, B. W., Clemmensen, L. H., & Dickey, R. (1989). Prediction of regrets in postoperative transsexuals. *Canadian Journal of Psychiatry, 34*, 43–45.
- Boivin, L., Notredame, C.-E., Jardri, R., & Medjkane, F. (2020). Supporting parents of transgender adolescents: Yes, but how? *Archives of Sexual Behavior, 49*, 81–83.
- Borges, G., Nock, M. K., Haro Abad, J. M., Hwang, I., Sampson, N. A., Alonso, J., Helena Andrade, L....Kessler, R. C. (2010) Twelve-month prevalence of and risk factors for suicide attempts in the World Health Organization World Mental Health Surveys. *Journal of Clinical Psychiatry, 71*, 1617–1628.
- Bränström, R., & Pachankis, J. E. (2019). Reduction in mental health treatment utilization among transgender individuals after gender-affirming surgeries: A total population study. *American Journal of Psychiatry, 177*, 727–734.
- Canetto, S. S., Antonelli, P., Ciccotti, A., Dettore, D., & Lamis, D. A. (2021). Suicidal as normal: A lesbian, gay, and bisexual youth script? *Crisis, 42*, 292–300.
- Cantor, J. M. (2020). Transgender and gender diverse children and adolescents:



- Fact-checking of AAP policy. *Journal of Sex & Marital Therapy*, 46, 307–313.
- Carel, J. C., Eugster, E. A., Rogol, A., Ghizzoni, L., Palmert, M. R.; ESPE-LWPES GnRH Analogs Consensus Conference Group, Antoniazzi, F., Berenbaum, S., Bourguignon, J. P., Chrousos, G. P., Coste, J., Deal, S., de Vries, L., Foster, C., Heger, S., Holland, J., Jahnukainen, K., Juul, A., Kaplowitz, P., Lahlou, N., Lee, M. M., Lee, P., Merke, D. P., Neely, E. K., Oostdijk, W., Phillip, M., Rosenfield, R. L., Shulman, D., Styne, D., Tauber, M., Wit, J. M. (2009). Consensus statement on the use of gonadotropin-releasing hormone analogs in children. *Pediatrics*, 123(4), e752–e762.
- Carmichael, P., Butler, G., Masic, U., Cole, T. J., De Stavola, B. L., Davidson, S., Skageberg, E. M., Khadr, S., Viner, R. M. (2021). Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. *PLoS ONE*, 16(2): e0243894.
- Cohen-Kettenis, P. T. (2001). Gender identity disorder in DSM? *Journal of the American Academy of Child & Adolescent Psychiatry*, 40, 391–391.
- Cohen-Kettenis, P. T., Owen, A., Kaijser, V. G., Bradley, S. J., & Zucker, K. J. (2003). Demographic characteristics, social competence, and behavior problems in children with gender identity disorder: A cross-national, cross-clinic comparative analysis. *Journal of Abnormal Child Psychology*, 31, 41–53.
- Cohen, J., Cohen, P., West, S. G. Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences (3<sup>rd</sup> ed.)*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J., Fraser, L., Green, J., Knudson, G., Meyer, W. J., Monstrey, S., Adler, R. K., Brown, G. R., Devor, A. H., Ehrbar, R., Ettner, R., Eyler, E., Garofalo, R., Karasic, D. H., Lev, A. I., Mayer, G., Meyer-Bahlburg, H., Hall, B. P., Pfaefflin, F., Rachlin, K., Robinson, B., Schechter, L. S., Tangpricha, V., van Trotsenburg, M., Vitale, A., Winter, S., Whittle, S., Wylie, K. R., & Zucker, K. (2012). Standards of care for the health of transsexual, transgender, and gender-nonconforming people, version 7. *International Journal of Transgenderism*, 13, 165–232.
- Costa, R., Dunsford, M., Skagerberg, E., Holt V., Carmichael, P., & Colizzi, M. (2015). Psychological support, puberty suppression, and psychosocial functioning in adolescents with gender dysphoria. *Journal of Sexual Medicine*, 12, 2206–2214.
- Council for Choices in Health Care in Finland (COHERE). (2020, June 16). Medical treatment methods for dysphoria associated with variations in gender identity in minors—Recommendation. [Translated] Retrieved from [https://palveluvalikoima.fi/documents/1237350/22895008/Summary\\_minors\\_en+\(1\).pdf/fa2054c5-8c35-8492-59d6-b3de1c00de49/Summary\\_minors\\_en+\(1\).pdf?t=1631773838474](https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en+(1).pdf/fa2054c5-8c35-8492-59d6-b3de1c00de49/Summary_minors_en+(1).pdf?t=1631773838474)
- Dahlen, S., Connolly, D., Arif, I., Hyder Junejo, M., Bewley, S., & Meads, C. (2021). *International clinical practice guidelines for gender minority/trans people: Systematic review and quality assessment. BMJ Open*, 11, e048943.



- D'Angelo, R., Syrulnik, E., Ayad, S., Marchiano, L., Kenny, D. T., & Clarke, P. (2021). One size does not fit all: In support of psychotherapy for gender dysphoria. *Archives of Sexual Behavior*, 50, 7–16.
- Daniel, H., & Butkus, R. (2015a). Lesbian, gay, bisexual, and transgender health disparities: Executive summary of a policy position paper from the American College of Physicians. *Annals of Internal Medicine*, 163, 135–137.
- Daniel, H., & Butkus, R. (2015b). Appendix: Lesbian, gay, bisexual, and transgender health disparities: A policy position paper from the American College of Physicians. *Annals of Internal Medicine*, 163(2), [unpaginated].
- 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.
- de Vries, A. L. C., McGuire, J. K., Steensma, T. D., Wagenaar, E. C. F., Doreleijers, T. A. H., & Cohen-Kettenis, P. T. (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, 134, 1–9.
- de Vries, A. L. C., Steensma, T. D., Doreleijers, T. A. H., & Cohen-Kettenis, P. T. (2011). Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *Journal of Sexual Medicine*, 8, 2276–2283.
- de Vries, A. L., Doreleijers, T. A., Steensma, T. D., & Cohen-Kettenis, P. T. (2011). Psychiatric comorbidity in gender dysphoric adolescents. *Journal of Child Psychology and Psychiatry*, 52, 1195–1202.
- de Vries, A. L., Noens, I. L., Cohen-Kettenis, P. T., van Berckelaer-Onnes, I. A., & Doreleijers, T. A. (2010). Autism spectrum disorders in gender dysphoric children and adolescents. *Journal of Autism and Developmental Disorders*, 40, 930–936.
- Delemarre-van de Waal, H. A., & Cohen-Kettenis, P. T. (2006). Clinical management of gender identity disorder in adolescents: A protocol on psychological and paediatric endocrinology aspects. *European Journal of Endocrinology*, 155 (suppl 1), S131–S137.
- Dhejne, C., Van Vlerken, R., Geylens, G., & Arcelus, J. (2016). Mental health and gender dysphoria: A review of the literature. *International Review of Psychiatry*, 28, 44–57.
- Dhejneberg, C., Öberg, K., Arver, S., & Landén, M. (2014). An analysis of all applications for sex reassignment surgery in Sweden, 1960–2010: Prevalence, incidence, and regrets. *Archives of Sexual Behavior*, 43, 1535–1545.
- Donnelly, L. (2019, Dec. 12). Children's transgender clinic hit by 35 resignations in three years as psychologists warn of gender dysphoria 'over-diagnoses'. *The Telegraph*. Retrieved from [https://www.telegraph.co.uk/news/2019/12/12/childrens-transgender-clinic-hit-35-resignations-three-years/?WT.mc\\_id=tmg\\_share\\_em](https://www.telegraph.co.uk/news/2019/12/12/childrens-transgender-clinic-hit-35-resignations-three-years/?WT.mc_id=tmg_share_em)
- Drummond, K. D., Bradley, S. J., Peterson-Badali, M., & Zucker, K. J. (2008). A follow up study of girls with gender identity disorder. *Developmental Psychology*, 44, 34–



45.

- Durwood, L., McLaughlin, K. A., & Olson, K. R. (2017). Mental health and self-worth in socially transitioned transgender youth. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56, 116–123.
- Finland Ministry of Social Affairs and Health, Council for Choices in Health Care. (2020, June 11). *Medical treatment methods for dysphoria associated with variations in gender identity in minors—Recommendation*. Retrieved from [https://palveluvalikoima.fi/documents/1237350/22895008/Summary\\_minors\\_en+\(1\).pdf/fa2054c5-8c35-8492-59d6-b3de1c00de49/Summary\\_minors\\_en+\(1\).pdf?t=1631773838474](https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en+(1).pdf/fa2054c5-8c35-8492-59d6-b3de1c00de49/Summary_minors_en+(1).pdf?t=1631773838474)
- Finland Ministry of Social Affairs and Health, Council for Choices in Health Care. (2020, June 16). *Medical treatments for gender dysphoria that reduces functional capacity in transgender people—Recommendation*. Retrieved from <https://palveluvalikoima.fi/documents/1237350/22895838/Summary+transgender.pdf/2cc3f053-2e34-39ce-4e21-becd685b3044/Summary+transgender.pdf?t=1592318543000>
- Freeman, A., Mergl, R., Kohls, E., Székely, A., Gusmao, R., Arensman, E., Koburger, N., Hegerl, U., & Rummel-Kluge, C. (2017). A cross-national study on gender differences in suicide intent. *BMC Psychiatry*, 17, 234.
- Gould, M. S., & Lake, A. M. (2013, Feb. 6). II.4 *The contagion of suicidal behavior*. Forum on Global Violence Prevention, Board on Global Health; Institute of Medicine; National Research Council. Contagion of Violence: Workshop Summary. National Academies Press: Washington, DC. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK207262/>
- Green, R. (1987). *The “sissy boy syndrome” and the development of homosexuality*. New Haven, CT: Yale University Press.
- Haas, A. P., Eliason, M., Mays, V. M., Mathy, R. M., Cochran, S. D., D’Augelli, A. R., Silverman, M. M., Fisher, P. W., Hughes, T., Rosario, M., Russell, S. T., Malley, E., Reed, J., Litts, D. A., Haller, E., Sell, R. L., Remafedi, G., Bradford, J., Beautrais, A. L., Brown, G. K., ... Clayton, P. J. (2011). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. *Journal of homosexuality*, 58, 10–51.
- Hembree, W. C., Cohen-Kettenis, P. T., Gooren, L., Hannema, S. E., Meyer, W. J., Murad, M. H., Rosenthal, S. M., Safer, T. D., Tangpricha, V., & T’Sjoen, G. G. (2017). Endocrine treatment of gender-dysphoric/ gender-incongruent persons: An Endocrine Society clinical practice guideline. *Journal of Clinical Endocrinology & Metabolism*, 102, 3869–3903.
- Hepp, U., Kraemer, B., Schnyder, U., Miller, N., & Delsignore, A. (2005). Psychiatric comorbidity in gender identity disorder. *Journal of Psychosomatic Research*, 58, 259–261.
- Hisle-Gorman, E., Schvey, N. A., Adirim, T. A., Rayne, A. K., Susi, A., Roberts, T. A., & Klein, D. A. (2021). Mental healthcare utilization of transgender youth before and after affirming treatment. *The Journal of Sexual Medicine*, 18, 1444–1454.



- Holt, V., Skagerberg, E., & Dunsford, M. (2016). Young people with features of gender dysphoria: Demographics and associated difficulties. *Clinical Child Psychology and Psychiatry, 21*, 108–118.
- Jacobs, L. A., Rachlin, K., Erickson-Schroth, L., & Janssen, A. (2014). Gender dysphoria and co-occurring autism spectrum disorders: Review, case examples, and treatment considerations. *LGBT Health, 1*, 277–282.
- Janssen, A., Busa, S., Wernick, J. (2019). The complexities of treatment planning for transgender youth with co-occurring severe mental illness: A literature review and case study. *Archives of Sexual Behavior, 48*, 2003–2009.
- Janssen, A., Huang, H., & Duncan, C. (2016). Gender variance among youth with autism spectrum disorders: A retrospective chart review. *Transgender Health, 1*, 63–68.
- Kalin, N. H. (2020). Reassessing mental health treatment utilization reduction in transgender individuals after gender-affirming surgeries: A comment by the Editor on the process. *American Journal of Psychiatry, 177*, 765.
- Kaltiala-Heino, R., Sumia, M., Työlajärvi, M., & Lindberg, N. (2015). 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, 9*, 9.
- Kaltiala, R., Heino, E., Työlajärvi, & Suomalainen, L. (2020). Adolescent development and psychosocial functioning after starting cross-sex hormones for gender dysphoria. *Nordic Journal of Psychiatry, 74*, 213–219.
- Kaltiala, R., Heino, E., Työlajärvi, & Suomalainen, L. (2020). Adolescent development and psychosocial functioning after starting cross-sex hormones for gender dysphoria. *Nordic Journal of Psychiatry, 74*, 213–219.
- Klonsky, E. D., May, A. M., Saffer, B. Y. (2016). Suicide, suicide attempts, and suicidal ideation. *Annual Review of Clinical Psychology, 12*, 307–330.
- Kuper, L. E., Stewart, S., Preston, S., Lau, M., & Lopez, X. (2020). Body dissatisfaction and mental health outcomes of youth on gender-affirming hormone therapy. *Pediatrics, 145*, e20193006.
- Littman, L. (2018). Parent reports of adolescents and young adults perceived to show signs of a rapid onset of gender dysphoria. *PLoS ONE, 13*(8), e0202330.
- Marsh, S. (2020, Sept. 20). NHS to hold review into gender identity services for children and young people. *The Guardian*. Retrieved from <https://www.theguardian.com/society/2020/sep/22/nhs-to-hold-review-into-gender-identity-services-for-children-and-young-people>
- Marshall, E., Claes, L. L., Bouman, W. P., Witcomb, G. L., & Arcelus, J. (2016). Non-suicidal self-injury and suicidality in trans people: A systematic review of the literature. *International Review of Psychiatry, 28*, 58–69.
- May, T., Pang, K., & Williams, K. J. (2016). Gender variance in children and adolescents with autism spectrum disorder from the National Database for



- Autism Research. *International Journal of Transgenderism*, 18, 7–15.
- McCall, B. (2021, October 7). Psychiatrists shift stance on gender dysphoria, recommend therapy. *Medscape Psychiatry*. Retrieved from [www.medscape.com/viewarticle/960390?src=soc\\_tw\\_share](http://www.medscape.com/viewarticle/960390?src=soc_tw_share)
- McNeil, J., Ellis, S. J., & Eccles, F. J. R. (2017). Suicide in trans populations: A systematic review of prevalence and correlates. *Psychology of Sexual Orientation and Gender Diversity*, 4, 341–353.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674–697.
- Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role in childhood: Longitudinal follow-up. *Journal of Pediatric Psychology*, 4, 29–41.
- MSNBC. (2015, Jan. 5). *Trans youth and suicide: An epidemic*. Retrieved from <https://www.msnbc.com/ronan-farrow/watch/trans-youth-and-suicide-an-epidemic-380294211712>
- Mustanski, B. S., Garofalo, R., & Emerson, E. M. (2010). Mental health disorders, psychological distress, and suicidality in a diverse sample of lesbian, gay, bisexual, and transgender youths. *American Journal of Public Health*, 100, 2426–2432.
- Nainggolan, L. (2021, May 12). Hormonal Tx of youth with gender dysphoria stops in Sweden. *Medscape Psychiatry*. Retrieved from [www.medscape.com/viewarticle/950964?src=soc\\_tw\\_share](http://www.medscape.com/viewarticle/950964?src=soc_tw_share)
- National Health Service (NHS). (2020, Sept. 22). NHS announces independent review into gender identity services for children and young people. United Kingdom. Retrieved from <https://www.england.nhs.uk/2020/09/nhs-announces-independent-review-into-gender-identity-services-for-children-and-young-people/>
- National Institute for Health and Care Excellence (NICE). (2020, Oct. 14). Evidence review: Gonadotrophin releasing hormone analogues for children and adolescents with gender dysphoria. Retrieved from <https://arms.nice.org.uk/resources/hub/1070905/attachment>
- Nock, M. K., Borges, G., Bromet, E. J., Alonso, J., Angermeyer, M., Beautrais, A....Williams, D. (2008). Cross-national prevalence and risk factors for suicidal ideation, plans and attempts. *British Journal of Psychiatry*, 192, 98–105.
- Olson, K. R., Durwood, L., DeMeules, M., & McLaughlin, K. A. (2016). Mental health of transgender children who are supported in their identities. *Pediatrics*, 137, e20153223.
- Orange, R. (2020, Feb 22). Teenage transgender row splits Sweden as dysphoria diagnoses soar by 1,500%: New health report and TV debates highlight backlash against gender reassignment. *The Guardian*. Retrieved from <https://www.theguardian.com/society/2020/feb/22/ssweden-teenage-transgender-row-dysphoria-diagnoses-soar>



- Pediatric Endocrine Society & Endocrine Society. (2020, December 15). *Transgender health*. Retrieved from [www.endocrine.org/advocacy/position-statements/transgender-health](http://www.endocrine.org/advocacy/position-statements/transgender-health).
- Pediatric Endocrine Society. (Online). About PES. Retrieved from <https://pedsendo.org/about-pes/>
- Rae, J. R., Gülgoz, S., Durwood, L., DeMeules, M., Lowe, R., Lindquist, G., & Olson, K. R. (2019). Predicting early-childhood gender transitions. *Psychological Science, 30*, 669–681.
- Rafferty, J., AAP Committee on psychosocial aspects of child and family health, AAP Committee on adolescence, AAP Section on lesbian, gay, bisexual, and transgender health and wellness. (2018). Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents. *Pediatrics, 142*(4), e20182162
- Rayner, G. (2018, Sept. 16). Minister orders inquiry into 4000 percent rise in children wanting to change sex. *The Telegraph*. Retrieved from <https://www.telegraph.co.uk/politics/2018/09/16/minister-orders-inquiry-4000-per-cent-rise-children-wanting/>
- Reisner, S. L., Veters, R., Leclerc, M., Zaslow, S., Wolfrum, S., Shumer, D., & Mimiaga, M. J. (2015). Mental health of transgender youth in care at an adolescent urban community health center: A matched retrospective cohort study. *Journal of Adolescent Health, 56*(3), 274–279.
- Reuter, T. R., Sharp, C., Kalpakci, A. H., Choi, H. J., & Temple, J. R. (2016). Sexual orientation and Borderline Personality Disorder features in a community sample of adolescents. *Journal of Personality Disorders, 30*, 694–707.
- Rodriguez-Seiljas, C., Morgan, T. A., & Zimmerman, M. (2021). A population-based examination of criterion-level disparities in the diagnosis of Borderline Personality Disorder among sexual minority adults. *Assessment, 28*, 1097–1109.
- Safer, J. D., Tangpricha, V. (2019). In the clinic: Care of the transgender patient. *Annals of Internal Medicine, 171*(1), ITC1–ITC6.
- Samaritans. (2020). *Media guidelines for reporting suicide*. Ewell, Surrey, UK. Retrieved from [https://media.samaritans.org/documents/Media\\_Guidelines\\_FINAL\\_v2\\_TABa8C6.pdf](https://media.samaritans.org/documents/Media_Guidelines_FINAL_v2_TABa8C6.pdf)
- Schumm, W. R., & Crawford, D. W. (2020). 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*, 9–24.
- Schumm, W. R., Crawford, D. W., Fawver, M. M., Gray, N. K., Niess, Z. M., & Wagner, A. D. (2019). Statistical errors in major journals: Two case studies used in a basic statistics class to assess understanding of applied statistics. *Psychology and Education—An Interdisciplinary Journal, 56*, 35–42.
- Singh, D., Bradley, S. J., & Zucker, K. J. (2021). A follow-up study of boys with gender identity disorder. *Frontiers in Psychiatry, 12*, 632784.



- Skagerberg, E., Parkinson, R., & Carmichael, P. (2013). Self-harming thoughts and behaviors in a group of children and adolescents with gender dysphoria. *International Journal of Transgenderism, 14*, 86–92.
- Skelly, A. C., Dettori, J. R., & Brodt, E. D. (2012). Assessing bias: The importance of considering confounding. *Evidence-based Spine-Care Journal, 3*, 9–12.
- Steensma, T. D., Cohen-Kettenis, P. T., & Zucker, K. J. (2018). Evidence for a change in the sex ratio of children referred for gender dysphoria: Data from the Center of Expertise on Gender Dysphoria in Amsterdam (1988–2016). *Journal of Sex & Marital Therapy, 44*, 713–715.
- Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., 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 and Adolescent Psychiatry, 52*, 582–590.
- Strang, J. F., Kenworthy, L., Dominska, A., Sokoloff, J., Kenealy, L. E., Berl, M., ... Wallace, G. L. (2014). Increased gender variance in autism spectrum disorders and attention deficit hyperactivity disorder. *Archives of Sexual Behavior, 43*, 1525–1533.
- Strang, J. F., Meagher, H., Kenworthy, L., de Vries, A. L., Menvielle, E., Leibowitz, S., ... Anthony, L. G. (2016). Initial clinical guidelines for co-occurring autism spectrum disorder and gender dysphoria or incongruence in adolescents. *Journal of Clinical Child and Adolescent Psychology, 47*, 105–115.
- Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU). (2019, Sept. 6). Gender dysphoria in children and adolescents: An inventory of the literature. A systematic scoping review. Retrieved from <https://www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/>
- Swedish Agency of Health Technology Assessment and Assessment of Social Services. (2019). *Gender dysphoria in children and adolescents: An inventory of the literature*. Retrieved from: [www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/](http://www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/)
- Swedish National Board of Health and Welfare (NBHW). (2020, Feb. 22). Uppdaterade rekommendationer för hormonbehandling vid könsdysfori hos unga. [Updated recommendations for hormone therapy for gender dysphoria in young people.] Author: Socialstyrelsen. Retrieved from <https://www.socialstyrelsen.se/om-socialstyrelsen/pressrum/press/uppdaterade-rekommendationer-for-hormonbehandling-vid-konsdysfori-hos-unga/>
- Tetelepta, B. (2021, Feb 27). More research is urgently needed into transgender care for young people: 'Where does the large flow of children come from?' [translated]. *Algemeen Dagblad*. Retrieved from [www.ad.nl/nijmegen/dringend-meer-onderzoek-nodig-naar-transgenderzorg-aan-jongeren-waar-komt-de-grotestroom-kinderen-vandaan~aec79d00/?referrer=https%3A%2F%2Ft.co%2F](http://www.ad.nl/nijmegen/dringend-meer-onderzoek-nodig-naar-transgenderzorg-aan-jongeren-waar-komt-de-grotestroom-kinderen-vandaan~aec79d00/?referrer=https%3A%2F%2Ft.co%2F)
- Thrower, E., Bretherton, I., Pang, K. C., Zajac, J. D., & Cheung, A. S. (2020). Prevalence of Autism Spectrum Disorder and Attention-Deficit Hyperactivity Disorder amongst individuals with Gender Dysphoria: A systematic review.



*Journal of Autism and Developmental Disorders*, 50, 695–706.

Turban, J. (2021, March 16). Trans girls belong on girls' sports teams. *Scientific American*. [www.scientificamerican.com/article/trans-girls-belong-on-girls-sports-teams/](http://www.scientificamerican.com/article/trans-girls-belong-on-girls-sports-teams/)

Turecki, G., & Brent, D. A. (2016). Suicide and suicidal behavior. *Lancet*, 387, 1227–1239.

United Kingdom National Health Service (NHS), National Institute for Health and Care Excellence, (2021, March 11). *Evidence review: Gonadotrophin releasing hormone analogues for children and adolescents with gender dysphoria*. Retrieved from [www.evidence.nhs.uk/document?id=2334888&returnUrl=search%3ffrom%3d2020-01-01%26q%3dgender%2bdysphoria%26sp%3don%26to%3d2021-03-31](http://www.evidence.nhs.uk/document?id=2334888&returnUrl=search%3ffrom%3d2020-01-01%26q%3dgender%2bdysphoria%26sp%3don%26to%3d2021-03-31)

van der Miesen, A. I. R., Steensma, T. D., de Vries, A. L. C., Bos, H., Popma, A. (2020). Psychological functioning in transgender adolescence before and after gender-affirmative care compared with cisgender general population peers. *Journal of Adolescent Health*, 66, 699–704.

Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 47, 1413–1423.

Wallien, M. S., Swaab, H., & Cohen-Kettenis, P. T. (2007). Psychiatric comorbidity among children with gender identity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 46, 1307–1314.

Warrier, V., Greenberg, D. M., Weir, E., Buckingham, C., Smith, P., Lai, M.-C., Allison, C., & Baron-Cohen, S. (2020). Elevated rates of autism, other neurodevelopmental and psychiatric diagnoses, and autistic traits in transgender and gender-diverse individuals. *Nature Communications*, 11, 3959.

Wiepjes, C. M., den Heijer, M., Bremmer, M. A., Nota, N. M., de Block, C. J. M., Coumou, B. J. G., & Steensma, T. D. (2020). Trends in suicide death risk in transgender people: Results from the Amsterdam Cohort of Gender Dysphoria study (1972–2017). *Acta Psychiatrica Scandinavica*, 141, 486–491.

Wiepjes, C. M., Nota, N. M., de Bok, C. J. M., Klaver, M., de Vries, A. L. C., Wensing-Kruger, S. A., de Jongh, R. T., Bouman, M.-B., Steensma, T. D., Cohen-Kettenis, P., Gooren, L. J. G., Kreukels B. P. C., & den Heijer, M. (2018). The Amsterdam Cohort of Gender Dysphoria Study (1972–2015): Trends in prevalence, treatment, and regrets. *Journal of Sexual Medicine*, 15, 582–590.

World Health Organization (2022). *Age standardized suicide rates (per 100 000 population)*. Retrieved from <https://www.who.int/data/gho/data/themes/mental-health/suicide-rates>

Wood, H., Sasaki, S., Bradley, S. J., Singh, D., Fantus, S., Own-Anderson, A., Di Giacomo, A., Bain, J., & Zucker, K. J. (2013). Patterns of referral to a gender identity service for children and adolescents (1976–2011): Age, sex ratio, and sexual orientation. *Journal of Sex & Marital Therapy*, 39, 1–6.



- Zanarini, M. C., Magni, L. R., Temes, C. M., Hein, K. E., Aguirre, B. A., & Goodman, M. (2021). Sexual orientation and gender of intimate relationship partners among adolescents with BPD and psychiatrically healthy adolescents. *Journal of Personality Disorders, 35* (Suppl. B), 1–7.
- Zucker, K. J. (2019). Adolescents with gender dysphoria: Reflections on some contemporary clinical and research issues. *Archives of Sexual Behavior, 48*, 1983–1992.
- Zucker, K. J., & Bradley, S. J. (1995). *Gender identity disorder and psychosexual problems in children and adolescents*. New York: Guilford Press.
- Zucker, K. J., Bradley, S. J., Owen-Anderson, A., Kibblewhite, S. J., Wood, H., Singh, D., & Choi, K. (2012). Demographics, behavior problems, and psychosexual characteristics of adolescents with gender identity disorder or transvestic fetishism. *Journal of Sex & Marital Therapy, 38*, 151–189.
- Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease, 172*, 90–97.



## APPENDICES

### Appendix 1

The Outcomes Studies of Childhood-Onset Gender Dysphoria

### Appendix 2

Peer-reviewed article:

Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. *Journal of Sex & Marital Therapy, 46*, 307–313. doi: 10.1080/0092623X.2019.1698481



### Prospective Outcomes Studies of Gender Dysphoric Children

2/16	gay	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. <i>American Journal of Psychiatry</i> , 128, 1283–1289.
4/16	trans-/crossdress	
10/16	straight/uncertain	
2/16	trans-	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow-up. <i>Comprehensive Psychiatry</i> , 19, 363–369.
2/16	uncertain	
12/16	gay	
0/9	trans-	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow-up. <i>Journal of Pediatric Psychology</i> , 4, 29–41.
9/9	gay	
2/45	trans-/crossdress	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. <i>Journal of Nervous and Mental Disease</i> , 172, 90–97.
10/45	uncertain	
33/45	gay	
1/10	trans-	Davenport, C. W. (1986). A follow-up study of 10 feminine boys. <i>Archives of Sexual Behavior</i> , 15, 511–517.
2/10	gay	
3/10	uncertain	
4/10	straight	
1/44	trans-	Green, R. (1987). <i>The "sissy boy syndrome" and the development of homosexuality</i> . New Haven, CT: Yale University Press.
43/44	cis-	
0/8	trans-	Kosky, R. J. (1987). Gender-disordered children: Does inpatient treatment help? <i>Medical Journal of Australia</i> , 146, 565–569.
8/8	cis-	
21/54	trans-	Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 47, 1413–1423.
33/54	cis-	
3/25	trans-	Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. <i>Developmental Psychology</i> , 44, 34–45.
6/25	lesbian/bi-	
16/25	straight	
47/127	trans-	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 52, 582–590.
80/127	cis-	
17/139	trans-	Singh, D., Bradley, S. J., and Zucker, K. J. (2021) A follow-up study of boys with gender identity disorder. <i>Frontiers in Psychiatry</i> , 12, 632784. doi: 10.3389/fpsy.2021.632784
122/139	cis-	





# Journal of Sex & Marital Therapy

ISSN: 0092-623X (Print) 1521-0715 (Online) Journal homepage: <https://www.tandfonline.com/loi/usmt20>

## Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy

James M. Cantor

To cite this article: James M. Cantor (2020) Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy, *Journal of Sex & Marital Therapy*, 46:4, 307-313, DOI: 10.1080/0092623X.2019.1698481

To link to this article: <https://doi.org/10.1080/0092623X.2019.1698481>



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JOURNAL OF SEX & MARITAL THERAPY  
2020, VOL. 46, NO. 4, 307–313  
<https://doi.org/10.1080/0092623X.2019.1698481>

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## Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy

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### ABSTRACT

The American Academy of Pediatrics (AAP) recently published a policy statement: *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents*. Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping gender diverse (GD) children, the AAP statement instead rejected that consensus, endorsing *gender affirmation* as the only acceptable approach. Remarkably, not only did the AAP statement fail to include any of the actual outcomes literature on such cases, but it also misrepresented the contents of its citations, which repeatedly said the very opposite of what AAP attributed to them.

The American Academy of Pediatrics (AAP) recently published a policy statement entitled, *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents* (Rafferty, AAP Committee on Psychosocial Aspects of Child and Family Health, AAP Committee on Adolescence, AAP Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness, 2018). These are children who manifest discontent with the sex they were born as and desire to live as the other sex (or as some alternative gender role). The policy was quite a remarkable document: Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping transgender and gender diverse (GD) children, the AAP statement rejected that consensus, endorsing only *gender affirmation*. That is, where the consensus is to delay any transitions after the onset of puberty, AAP instead rejected waiting before transition. With AAP taking such a dramatic departure from other professional associations, I was immediately curious about what evidence led them to that conclusion. As I read the works on which they based their policy, however, I was pretty surprised—rather alarmed, actually: These documents simply did not say what AAP claimed they did. 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 actual outcomes research on GD children. In total, there have been 11 follow-up studies of GD children, of which AAP cited one (Wallien & Cohen-Kettenis, 2008), doing so without actually mentioning the outcome data it contained. The literature on outcomes was neither reviewed, summarized, nor subjected to meta-analysis to be considered in the aggregate—It was merely disappeared. (The list of all existing studies appears in the appendix.) As they make clear, *every* follow-up study of GD children, without exception, found the same thing: Over puberty, the majority of GD children cease to want to transition. AAP is, of course, free to establish whatever policy it likes on

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whatever basis it likes. But any assertion that their policy is based on evidence is demonstrably false, as detailed below.

AAP divided clinical approaches into three types—conversion therapy, watchful waiting, and gender affirmation. It rejected the first two and endorsed *gender affirmation* as the only acceptable alternative. Most readers will likely be familiar already with attempts to use conversion therapy to change sexual orientation. With regard to gender identity, AAP wrote:

“[C]onversion” or “reparative” treatment models are used to prevent children and adolescents from identifying as transgender or to dissuade them from exhibiting gender-diverse expressions.... Reparative approaches have been proven to be not only unsuccessful<sup>38</sup> but also deleterious and are considered outside the mainstream of traditional medical practice.<sup>29,39–42</sup>

The citations were:

38. Haldeman DC. The practice and ethics of sexual orientation conversion therapy. *J Consult Clin Psychol*. 1994;62(2):221–227.
29. Adelson SL; American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). Practice parameter on gay, lesbian, or bisexual sexual orientation, gender nonconformity, and gender discordance in children and adolescents. *J Am Acad Child Adolesc Psychiatry*. 2012;51(9):957–974.
39. Byne W. Regulations restrict practice of conversion therapy. *LGBT Health*. 2016;3(2):97–99.
40. Cohen-Kettenis PT, Delemarrevan de Waal HA, Gooren LJ. The treatment of adolescent transsexuals: changing insights. *J Sex Med*. 2008;5(8):1892–1897.
41. Bryant K. Making gender identity disorder of childhood: historical lessons for contemporary debates. *Sex Res Soc Policy*. 2006;3(3):23–39.
42. World Professional Association for Transgender Health. *WPATH De-Psychopathologisation Statement*. Minneapolis, MN: World Professional Association for Transgender Health; 2010.

AAP’s claims struck me as odd because *there are no studies of conversion therapy for gender identity*. Studies of conversion therapy have been limited to *sexual orientation*, and, moreover, to the sexual orientation of *adults*, not to gender identity and not of children in any case. The article AAP cited to support their claim (reference number 38) is indeed a classic and well-known review, but it is a review of sexual orientation research *only*. Neither gender identity, nor even children, received a single mention in it. Indeed, the narrower scope of that article should be clear to anyone reading even just its title: “The practice and ethics of *sexual orientation* conversion therapy” [italics added].

AAP continued, saying that conversion approaches for GD children have already been rejected by medical consensus, citing five sources. This claim struck me as just as odd, however—I recalled associations banning conversion therapy for sexual orientation, but not for gender identity, exactly because there is no evidence for generalizing from adult sexual orientation to childhood gender identity. So, I started checking AAP’s citations for that, and these sources too pertained only to sexual orientation, not gender identity (specifics below). What AAP’s sources *did* repeatedly emphasize was that:

- A. Sexual orientation of adults is unaffected by conversion therapy and any other [known] intervention;
- B. Gender dysphoria in childhood before puberty desists in the majority of cases, becoming (cis-gendered) homosexuality in adulthood, again regardless of any [known] intervention; and
- C. Gender dysphoria in childhood persisting after puberty tends to persist entirely.

That is, in the context of GD children, it simply makes no sense to refer to externally induced “conversion”: The majority of children “convert” to cisgender or “desist” from transgender



regardless of any attempt to change them. “Conversion” only makes sense with regard to adult sexual orientation because (unlike childhood gender identity), adult homosexuality never or nearly never spontaneously changes to heterosexuality. Although gender identity and sexual orientation may often be analogous and discussed together with regard to social or political values and to civil rights, they are nonetheless distinct—with distinct origins, needs, and responses to medical and mental health care choices. Although AAP emphasized to the reader that “gender identity is not synonymous with ‘sexual orientation’” (Rafferty et al., 2018, p. 3), they went ahead to treat them as such nonetheless.


To return to checking AAP’s fidelity to its sources: Reference 29 was a practice guideline from the Committee on Quality Issues of the American Academy of Child and Adolescent Psychiatry (AACAP). Despite AAP applying this source to *gender identity*, AACAP was quite unambiguous regarding their intent to speak to sexual orientation and *only* to sexual orientation: “Principle 6. Clinicians should be aware that there is no evidence that *sexual orientation* can be altered through therapy, and that attempts to do so may be harmful. There is no established evidence that change in a predominant, enduring *homosexual* pattern of development is possible. Although sexual fantasies can, to some degree, be suppressed or repressed by those who are ashamed of or in conflict about them, sexual desire is not a choice. However, behavior, social role, and—to a degree—identity and self-acceptance are. Although operant conditioning modifies sexual fetishes, it does not alter *homosexuality*. Psychiatric efforts to alter *sexual orientation* through ‘reparative therapy’ in adults have found little or no change in *sexual orientation*, while causing significant risk of harm to self-esteem” (AACAP, 2012, p. 967, italics added).

Whereas AAP cites AACAP to support gender affirmation as the only alternative for treating GD children, AACAP’s actual view was decidedly neutral, noting the lack of evidence: “Given the lack of empirical evidence from randomized, controlled trials of the efficacy of treatment aimed at eliminating gender discordance, the potential risks of treatment, and longitudinal evidence that gender discordance persists in only a small minority of untreated cases arising in childhood, further research is needed on predictors of persistence and desistence of childhood gender discordance as well as the long-term risks and benefits of intervention before any treatment to eliminate gender discordance can be endorsed” (AACAP, 2012, p. 969). Moreover, whereas AAP rejected watchful waiting, what AACAP recommended was: “In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood” (AACAP, 2012, p. 969). So, not only did AAP attribute to AACAP something AACAP never said, but also AAP withheld from readers AACAP’s actual view.

Next, in reference 39, Byne (2016) also addressed only sexual orientation, doing so very clearly: “Reparative therapy is a subset of conversion therapies based on the premise that *same-sex attraction* are reparations for childhood trauma. Thus, practitioners of reparative therapy believe that exploring, isolating, and repairing these childhood emotional wounds will often result in reducing *same-sex attractions*” (Byne, 2016, p. 97). Byne does not say this of gender identity, as the AAP statement misrepresents.

In AAP reference 40, Cohen-Kettenis et al. (2008) did finally pertain to gender identity; however, this article never mentions conversion therapy. (!) Rather, in this study, the authors presented that clinic’s lowering of their minimum age for cross-sex hormone treatment from age 18 to 16, which they did on the basis of a series of studies showing the high rates of success with this age group. Although it did strike me as odd that AAP picked as support against conversion therapy an article that did not mention conversion therapy, I could imagine AAP cited the article as an example of what the “mainstream of traditional medical practice” consists of (the logic being that conversion therapy falls outside what an ‘ideal’ clinic like this one provides). However, what this clinic provides is the very *watchful waiting* approach that AAP rejected. The approach



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espoused by Cohen-Kettenis (and the other clinics mentioned in the source—Gent, Boston, Oslo, and now formerly, Toronto) is to make puberty-halting interventions available at age 12 because: “[P]ubertal suppression may give adolescents, together with the attending health professional, more time to explore their gender identity, without the distress of the developing secondary sex characteristics. The precision of the diagnosis may thus be improved” (Cohen-Kettenis et al., 2008, p. 1894).

Reference 41 presented a very interesting history spanning the 1960s–1990s about how feminine boys and tomboyish girls came to be recognized as mostly pre-homosexual, and how that status came to be entered into the DSM at the same time as homosexuality was being *removed* from the DSM. Conversion therapy is never mentioned. Indeed, to the extent that Bryant mentions treatment at all, it is to say that treatment is entirely irrelevant to his analysis: “An important omission from the *DSM* is a discussion of the kinds of treatment that GIDC children should receive. (This omission is a general orientation of the *DSM* and not unique to GIDC)” (Bryant, 2006, p. 35). How this article supports AAP’s claim is a mystery. Moreover, how AAP could cite a 2006 history discussing events of the 1990s and earlier to support a claim about the *current* consensus in this quickly evolving discussion remains all the more unfathomable.

Cited last in this section was a one-paragraph press release from the World Professional Association for Transgender Health. Written during the early stages of the American Psychiatric Association’s (APA’s) update of the *DSM*, the statement asserted simply that “The WPATH Board of Directors strongly urges the de-psychopathologisation of gender variance worldwide.” Very reasonable debate can (and should) be had regarding whether gender dysphoria should be removed from the *DSM* as homosexuality was, and WPATH was well within its purview to assert that it should. Now that the *DSM* revision process is years completed however, history has seen that APA ultimately retained the diagnostic categories, rejecting WPATH’s urging. 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.” (!)

AAP based this entire line of reasoning on their belief that conversion therapy is being used “to prevent children and adolescents from identifying as transgender” (Rafferty et al., 2018, p. 4). That claim is left without citation or support. In contrast, what is said by AAP’s sources is “delaying affirmation should *not* be construed as conversion therapy or an attempt to change gender identity” in the first place (Byne, 2016, p. 2). Nonetheless, AAP seems to be doing exactly that: simply relabeling any alternative approach as equivalent to conversion therapy.

Although AAP (and anyone else) may reject (what they label to be) conversion therapy purely on the basis of political or personal values, there is no evidence to back the AAP’s stated claim about the existing science on gender identity at all, never mind gender identity of children.

AAP also dismissed the watchful waiting approach out of hand, not citing any evidence, but repeatedly calling it “outdated.” The criticisms AAP provided, however, again defied the existing evidence, with even its own sources repeatedly calling watchful waiting the current standard. According to AAP:

[G]ender affirmation is in contrast to the outdated approach in which a child’s gender-diverse assertions are held as “possibly true” until an arbitrary age (often after pubertal onset) when they can be considered valid, an approach that authors of the literature have termed “watchful waiting.” This outdated approach does not serve the child because critical support is withheld. Watchful waiting is based on binary notions of gender in which gender diversity and fluidity is pathologized; in watchful waiting, it is also assumed that notions of gender identity become fixed at a certain age. The approach is also influenced by a group of early studies with validity concerns, methodologic flaws, and limited follow-up on children who identified as TGD and, by adolescence, did not seek further treatment (“desisters”).<sup>45,47</sup>

The citations from AAP’s reference list are:



45. Ehrensaft D, Giammattei SV, Storck K, Tishelman AC, Keo-Meier C. Prepubertal social gender transitions: what we know; what we can learn—a view from a gender affirmative lens. *Int J Transgend.* 2018;19(2):251–268
47. Olson KR. Prepubescent transgender children: what we do and do not know. *J Am Acad Child Adolesc Psychiatry.* 2016;55(3):155–156.e3

I was surprised first by the AAP's claim that watchful waiting's delay to puberty was somehow "arbitrary." The literature, including AAP's sources, repeatedly indicated the pivotal importance of puberty, noting that outcomes strongly diverge at that point. According to AAP reference 29, in "*prepubertal* boys with gender discordance—including many without any mental health treatment—the cross gender wishes usually fade over time and do not persist into adulthood, with only 2.2% to 11.9% continuing to experience gender discordance" (Adelson & AACAP, 2012, p. 963, italics added), whereas "when gender variance with the desire to be the other sex is present *in adolescence*, this desire usually does persist through adulthood" (Adelson & AACAP, 2012, p. 964, italics added). Similarly, according to AAP reference 40, "Symptoms of GID *at prepubertal ages* decrease or even disappear in a considerable percentage of children (estimates range from 80–95%). Therefore, any intervention in childhood would seem premature and inappropriate. However, GID persisting *into early puberty* appears to be highly persistent" (Cohen-Kettenis et al., 2008, p. 1895, italics added). That follow-up studies of prepubertal transition differ from postpubertal transition is the very meaning of non-arbitrary. AAP gave readers exactly the reverse of what was contained in its own sources. If AAP were correct in saying that puberty is an arbitrarily selected age, then AAP will be able to offer another point to wait for with as much empirical backing as puberty has.

Next, it was not clear on what basis AAP could say that watchful waiting withholds support—AAP cited no support for its claim. The people in such programs often receive substantial support during this period. Also unclear is on what basis AAP could already know exactly which treatments are "critical" and which are not—Answering that question is the very purpose of this entire endeavor. Indeed, the logic of AAP's claim appears entirely circular: It is only if one were already pre-convinced that gender affirmation is the only acceptable alternative that would make watchful waiting seem to withhold critical support—What it delays is gender affirmation, the method one has already decided to be critical.

Although AAP's next claim did not have a citation appearing at the end of its sentence, binary notions of gender were mentioned both in references 45 and 47. Specifically, both pointed out that existing outcome studies have been about people transitioning from one sex to the other, rather than from one sex to an in-between status or a combination of masculine/feminine features. Neither reference presented this as a reason to reject the results from the existing studies of complete transition however (which is how AAP cast it). Although it is indeed true that the outcome data have been about complete transition, some future study showing that partial transition shows a different outcome would not invalidate what is known about complete transition. Indeed, data showing that partial transition gives better outcomes than complete transition would, once again, support the watchful waiting approach which AAP rejected.

Next was a vague reference alleging concerns and criticisms about early studies. Had AAP indicated what those alleged concerns and flaws were (or which studies they were), then it would be possible to evaluate or address them. Nonetheless, the argument is a red herring: Because all of the later studies showed the same result as did the early studies, any such allegation is necessarily moot.

Reference 47 was a one-and-a-half page commentary in which the author off-handedly mentions criticisms previously made of three of the eleven outcome studies of GD children, but does not provide any analysis or discussion. The only specific claim was that studies (whether early or late) had limited follow-up periods—the logic being that had outcome researchers lengthened the follow-up period, then people who seemed to have desisted might have returned to the clinic as



cases of “persistence-after-interruption.” Although one could debate the merits of that prediction, AAP instead simply withheld from the reader the result from the original researchers having tested that very prediction directly: Steensma and Cohen-Kettenis (2015) conducted another analysis of their cohort, by then ages 19–28 (mean age 25.9 years), and found that 3.3% (5 people of the sample of 150) later returned. That is, in long-term follow-up, the childhood sample showed 66.7% desistance instead of 70.0% desistance.

Reference 45 did not support the claim that watchful-waiting is “outdated” either. Indeed, that source said the very opposite, explicitly referring to watchful waiting as the *current* approach: “Put another way, if clinicians are straying from SOC 7 guidelines for social transitions, not abiding by the watchful waiting model *favoured by the standards*, we will have adolescents who have been consistently living in their affirmed gender since age 3, 4, or 5” (Ehrensaft et al., 2018, p. 255). Moreover, Ehrensaft et al. said there are cases in which they too would still use watchful waiting: “When a child’s gender identity is unclear, the watchful waiting approach can give the child and their family time to develop a clearer understanding and is not necessarily in contrast to the needs of the child” (p. 259). Ehrensaft et al. are indeed critical of the watchful waiting model (which they feel is applied too conservatively), but they do not come close to the position the AAP policy espouses. Where Ehrensaft summarizes the potential benefits and potential risks both to transitioning and not transitioning, the AAP presents an ironically binary narrative.

In its policy statement, AAP told neither the truth nor the whole truth, committing sins both of commission and of omission, asserting claims easily falsified by anyone caring to do any fact-checking at all. AAP claimed, “This policy statement is focused specifically on children and youth that identify as TGD rather than the larger LGBTQ population”; however, much of that evidence was about sexual orientation, not gender identity. AAP claimed, “Current available research and expert opinion from clinical and research leaders... will serve as the basis for recommendations” (pp. 1–2); however, they provided recommendations entirely unsupported and even in direct opposition to that research and opinion.

AAP is advocating for something far in excess of mainstream practice and medical consensus. In the presence of compelling evidence, that is just what is called for. The problems with Rafferty, however, do not constitute merely a misquote, a misinterpretation of an ambiguous statement, or a missing reference or two. Rather, AAP’s statement is a systematic exclusion and misrepresentation of entire literatures. Not only did AAP fail to provide compelling evidence, it failed to provide the evidence at all. Indeed, AAP’s recommendations are *despite* the existing evidence.

### Disclosure statement

No potential conflict of interest was reported by the author.

### References

- Rafferty, J., AAP Committee on Psychosocial Aspects of Child and Family Health, AAP Committee on Adolescence, AAP Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness. (2018). Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents. *Pediatrics*, 142(4), e20182162 doi:10.1542/peds.2018-2162
- Steensma, T. D., & Cohen-Kettenis, P. T. (2015). More than two developmental pathways in children with gender dysphoria? *Journal of the American Academy of Child and Adolescent Psychiatry*, 52, 147–148. doi:10.1016/j.jaac.2014.10.016
- Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47, 1413–1423. doi:10.1097/CHI.0b013e31818956b9



**Appendix**

Count	Group	Study
2/16	gay*	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. <i>American Journal of Psychiatry</i> , 128, 1283–1289.
4/16	trans-/crossdress	
10/16	straight*/uncertain	
2/16	trans-	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow-up. <i>Comprehensive Psychiatry</i> , 19, 363–369.
2/16	uncertain	
12/16	gay	
0/9	trans-	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow-up. <i>Journal of Pediatric Psychology</i> , 4, 29–41.
9/9	gay	
2/45	trans-/crossdress	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. <i>Journal of Nervous and Mental Disease</i> , 172, 90–97.
10/45	uncertain	
33/45	gay	
1/10	trans-	Davenport, C. W. (1986). A follow-up study of 10 feminine boys. <i>Archives of Sexual Behavior</i> , 15, 511–517.
2/10	gay	
3/10	uncertain	
4/10	straight	
1/44	trans-	Green, R. (1987). <i>The "sissy boy syndrome" and the development of homosexuality</i> . New Haven, CT: Yale University Press.
43/44	cis-	
0/8	trans-	Kosky, R. J. (1987). Gender-disordered children: Does inpatient treatment help? <i>Medical Journal of Australia</i> , 146, 565–569.
8/8	cis-	
21/54	trans-	Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 47, 1413–1423.
33/54	cis-	
3/25	trans-	Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. <i>Developmental Psychology</i> , 44, 34–45.
6/25	lesbian/bi-	
16/25	straight	
17/139	trans-	Singh, D. (2012). <i>A follow-up study of boys with gender identity disorder</i> . Unpublished doctoral dissertation, University of Toronto.
122/139	cis-	
47/127	trans-	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 52, 582–590.
80/127	cis-	

\*For brevity, the list uses "gay" for "gay and cis-", "straight" for "straight and cis-", etc.



## Appendix Attachment

1e



# ATTACHMENT E



## **Concerns about Affirmation of an Incongruent Gender in a Child or Adolescent**

Quentin L. Van Meter, M.D.

May 17, 2022

### **Qualifications**

I received my B.A. in Science at the College of William and Mary and my M.D. from the Medical College of Virginia, Virginia Commonwealth University. I am currently a pediatric endocrinologist in private practice in Atlanta, Georgia. I am the President of Van Meter Pediatric Endocrinology, P.C. I am on the clinical faculties of Emory University School of Medicine and Morehouse College of Medicine, in the role of adjunct Associate Professor of Pediatrics. I am board certified in Pediatrics and Pediatric Endocrinology. I have been licensed to practice medicine in Georgia since 1991. I have been previously licensed to practice medicine in California, Louisiana, and Maryland.

I did my Pediatric Endocrine fellowship at Johns Hopkins Hospital from 1978-1980. The faculty present at that time had carried on the tradition of excellence established by Lawson Wilkins, M.D. Because of the reputation of the endocrine program as a center for exceptional care for children with disorders of sexual differentiation, I had well-above average exposure to such patients. As a Pediatric Fellow, I was also exposed to adults with Gender Identity Disorder, then called Trans-Sexuality, and received training from John Money, Ph.D., in his Psycho-hormonal Division. Over the past 44 years, I have closely followed the topic of incongruent gender in children adolescents and adults, but I am focusing in this document on working with children and adolescents. To get a more solid understanding of how male and female human beings develop in utero, it is important to start at the point when a sperm meets an egg.

### **Differentiation in the Fetus**

From the moment of conception, a fetus is determined to be either a male (XY), female (XX), or in rare cases, to have a combination of sex-determining chromosomes, many of which are not compatible with life, and some of which are the cause of identifiable clinical syndromes. The presence of a Y chromosome in the developing fetus directs the developing gonadal tissue to develop as a testicle. The absence of a functional Y chromosome allows the gonadal tissue to develop as an ovary. Under the influence of the mother's placental hormones, the testicle will produce testosterone which directs the genital tissue to form a penis and a scrotum. Simultaneously, the testicle produces anti-Müllerian Hormone (AMH) which regresses development of the tissue that would otherwise develop into the uterus, fallopian tubes, and upper third of the vagina. This combination of actions in early fetal development is responsible for what we subsequently see on fetal sonograms, and what we observe at birth as male or female genitalia. It is only when the genital structures are ambiguous in appearance that sex determination is withheld until a thorough expert team evaluation has occurred.



For reasons most often occurring as random events, there are malfunctions of the normal differentiation. These aberrations of normal development are responsible for what we classify as Disorders of Sexual Differentiation (DSD), and they represent a very small fraction of the human population. The incidence of such circumstances occurs in 1:4500 to 1:5500 births.<sup>1</sup> Sex is binary, male or female, and is determined by chromosomal complement and corresponding reproductive role. The exceedingly rare DSDs are all medically identifiable deviations from this sexual binary norm. The 2006 consensus statement of the Intersex Society of North America and the 2015 revision of the Statement do not endorse DSD as a third sex.<sup>2</sup> DSD outcomes range from appearance of female external genitalia in an XY male (complete androgen insensitivity syndrome) to appearance of male external genitalia in an XX female (severe congenital adrenal hyperplasia).

As one would expect, there are variations of the degree of hormonally driven changes that create ambiguous genital development that prevent assigning of a specific classification as either male or female at birth. DSD patients are not “transgender”; they have an objective, physical, medically verifiable, physiologic condition. Transgender people generally do not have intersex conditions or any other verifiable physical anomaly. People who identify as “feeling like the opposite sex” or “somewhere in between” do not comprise a third sex. They remain biological men or biological women.

In some DSDs there exist more than one set of chromosomes. When there is a divergence of the appearance of the external genitalia from the chromosomally determined sex due to the presence of both an ovarian and testicular cell lines in a patient simultaneously, the patient is classified as having ovo-testicular DSD (formerly termed a true hermaphrodite). When there is a disruption in the development of genital structures but there is solely testicular tissue present in the chromosomal male or solely ovarian tissue in the chromosomal female, the term 46 XY DSD or 46 XX DSD is used instead respectively (formerly termed male pseudohermaphrodite or female pseudohermaphrodite).

The decision to assign a sex of rearing is complex and is specific to the diagnosis. Patients with complete androgen insensitivity (CAIS) are XY DSD but are never reared as a male. Because testosterone never influences development, they become happy, functional female adults with infertility. Females with severe congenital adrenal hyperplasia (CAH) are XX DSD but are not reared as males despite the male appearance of the genitalia at birth. Although these girls may show a tendency for male play behaviors as children, they generally assume a female sexual identity. Therapeutic interventions in the DSD individuals from infancy onward are aimed at what function can be expected from their disordered sexual anatomy in terms of function and fertility. Most often, the chromosomal sex aligns with the sex of rearing.

## **Gender Identity**



“Gender” is a term that refers to the psychological and cultural characteristics associated with biological sex. It is a psychological concept and sociological term, not a biological one. The term gender possessed solely a linguistic meaning prior to the 1950s. This changed when sexologists of the 1950s and 1960s co-opted the term to conceptualize cross-dressing and transsexualism in their psychological practice. “Gender identity” is a term coined by my former endocrine faculty member John Money in the 1970s and has come to refer to an individual’s mental and emotional sense of being male or female. The norm is for individuals to have a gender identity that aligns with one’s biological sex.

Gender discordance (formerly Gender Identity Disorder) is used to describe a psychological condition in which a person experiences marked incongruence between his experienced gender and the gender associated with his biological sex. He will often express the belief that he is the opposite sex. Up until 2010, gender discordance occurred in 0.001% of biological females and in 0.0033% of biological males.<sup>3</sup> Exact numbers are hard to document since reporting is often anecdotal. Gender discordance is not considered a normal developmental variation.

“Gender Dysphoria” is a diagnostic term to describe the emotional distress caused by gender incongruity.<sup>4</sup> John Money played a prominent role in the early development of gender theory and transgenderism. He understood gender to be “the social performance indicative of an internal sexed identity.”<sup>5</sup> He joined the Johns Hopkins faculty in 1951 specifically to have access to children diagnosed with DSD, hoping to prove his theory that gender was arbitrary and fluid. Money experimented with DSD infants by assigning them to the opposite biological sex through surgical revision, counseling, and hormonal manipulation during puberty. His mode of operation was to have a theory and then experiment with patients to see how his theory worked.

### **Ethics in Clinical Research on Human Subjects**

It is important to discuss the need for ethics to play a role in the design of clinical studies involving human patients. To have a hypothesis, as did John Money, is not at issue. However, to clearly elucidate the potential for harm and balance that knowledge with the potential benefits is key and essential. After the travesties of open-ended experimentation in the Nazi concentration camps, international guidelines were established to protect human subjects from just such experimentation.<sup>6</sup> John Money ignored these guidelines as he assigned genders to infants and toddlers with ambiguous genitalia. There was no informed consent of the patients, who were infants and toddlers, and their parents were just told to follow the advice of Dr. Money and to trust that he had the correct information. There was no standardized protocol to follow, and no known outcome that could be guaranteed. This kind of endeavor did not anticipate or prevent adverse outcomes and was the antithesis of ethical science. Money never submitted his research proposals for review by an independent external review board. This left the patients unprotected and vulnerable to harm, and, indeed, in the case of the Reimer twins, to death due to drug addiction/overdose in one brother to and suicide in the other.<sup>7</sup>



Near the end of my fellowship training at Johns Hopkins, a male infant was sent to our clinic to assess the cause of his very small penis and testicles. My attending physician and I laid out a diagnostic work-up based on the known science which would help us understand whether the problem was due to a pituitary deficiency or an inability of tissue response to hormones. We purposely left John Money off the care "team," having some serious concerns about his tendency to dismiss science and to experiment. We sent the family home with their son and were quite surprised when the mother returned six weeks later with a baby wearing a pink dress and an eyelet bonnet. Without our knowledge, Dr. Money had intervened and told the family that our protocol was nonsense and the baby needed to be reared as female. On physical exam, there was clear evidence that not only was the baby able to produce testosterone, but his penis responded well, as expected, to the hormone production by his own body. The family was relieved but had not been spared suffering under the experimentation by Dr. Money. They had suffered deeply when they divulged to their extended family that their baby boy was actually a baby girl, and then they suffered even more when they recanted and resumed calling him a boy.

Because of his experience with infants, Money initially garnered support from endocrine colleagues and surgical colleagues, and Johns Hopkins became a renowned center for care of patients with DSD in the 1970s, receiving referrals from around the world. Follow-up studies on these infants later showed, however, that altering their natal sexual identity via social intervention could lead to severe psychological harm. Clinical case reports of children with DSD have revealed that gender identity is indeed not immune to environmental input.<sup>8</sup>

Meanwhile, Money had expanded into the field of adult patients with persistent gender identity disorder. This very small group of patients chose voluntarily, as adults, to enter a very precise protocol which began with living socially as the opposite sex for a year, eventually receiving hormonal therapy to change their physical appearance to some extent. The final step was surgical revision of the body structures that would otherwise be at odds with their desired gender identity. This small group of patients was followed for a number of years past their final surgical procedures and required continuous counseling. These patients expressed some degree of subjective satisfaction but showed no objective improvement in overall wellbeing.<sup>9</sup> The legacy of John Money fell into disrepute and the transsexual treatment program at Johns Hopkin was closed in the 1980s based on the lack of evidence that this protocol produced an effective cure.

### **Etiology of Gender Disorders**

Transgender affirming professionals claim transgender individuals have a "feminized brain" trapped in a male body at birth and vice versa based upon various brain studies. Diffusion-weighted MRI scans have demonstrated that the pubertal testosterone surge in boys increases white matter volume. A study by Rametti and colleagues found that the white matter microstructure of the brains of female-to-male (FtM) transsexual adults, who had not begun testosterone treatment, more closely resembled that of men than that of women.<sup>10</sup> Other



diffusion-weighted MRI studies have concluded that the white matter microstructure in both FtM and male-to-female (MtF) transsexuals falls halfway between that of genetic females and males.<sup>11</sup> These studies, however, are of limited clinical significance due to the small number of subjects and failure to account for neuroplasticity.

Neuroplasticity is the well-established phenomenon in which long-term behavior alters brain microstructure. For example, the MRI scans of experienced cab drivers in London are distinctly different from those of non-cab drivers, and the changes noted are dependent on the years of experience.<sup>12</sup> There is no evidence that people are born with brain microstructures that are forever unalterable, but there is significant evidence that experience changes brain microstructure.<sup>13,14</sup> Therefore, any transgender brain differences would more likely be the result of transgender behavior than its cause.

Furthermore, infants' brains are imprinted prenatally by their own endogenous sex hormones, which are secreted from their gonads beginning at approximately eight weeks' gestation.<sup>15,16,17</sup> There are no published studies documenting MRI-verified differences in the brains of gender-disordered children or adolescents. The DSD guidelines also specifically state that current MRI technology cannot be used to identify those patients who should be raised as males or raised as females.<sup>18</sup> Behavior geneticists have known for decades that while genes and hormones influence behavior, they do not hard-wire a person to think, feel, or behave in a particular way. The science of epigenetics has established that genes are not analogous to rigid "blueprints" for behavior. Rather, humans "develop traits through the dynamic process of gene-environment interaction. ... [genes alone] don't determine who we are."<sup>19</sup>

Regarding transgenderism, twin studies of adults prove definitively that prenatal genetic and hormone influence is minimal. The largest twin study of transgender adults found that only 20 percent of identical twins were both transgender-identified.<sup>20</sup> Since identical twins contain 100 percent of the same DNA from conception and develop in exactly the same prenatal environment exposed to the same prenatal hormones, if genes and/or prenatal hormones contributed to a significant degree to transgenderism, the concordance rates would be close to 100 percent. Instead, 80 percent of identical twin pairs were discordant. This difference would indicate that at least 80 percent of what contributes to transgenderism as an adult in one co-twin consists of one or more non-shared post-natal experiences including but not limited to non-shared family experiences. These findings also mean that persistent GD is due predominately to the impact of nonshared environmental influences. These studies provide compelling evidence that discordant gender is not hard-wired genetically.

### **Gender Dysphoria vs. Gender Identity Disorder**

Up until the recent revision of the DSM-IV criteria, the American Psychological Association (APA) held that Gender Identity Disorder (GID) was the mental disorder described as a discordance between the natal sex and the gender identity of the patient. Dr. Kenneth Zucker, who is a highly respected clinician and researcher from Toronto, carried on evaluation and



treatment of GID patients for forty years. His works, widely published, found that the vast majority of boys and girls with GID identify with their biological sex by the time they emerge from puberty to adulthood, through either watchful waiting or family and individual counseling.<sup>21</sup> His results were mirrored in studies from Europe.<sup>22,23</sup>

When the DSM-V revision of the diagnosis of GID was proposed by the APA committee responsible for revision, Dr. Zucker strongly opposed the change to the term Gender Dysphoria, which purposefully removed gender discordance as a mental disorder apart from the presence of significant emotional distress. With this revision, Gender Dysphoria describes the mental anguish which is experienced by the gender discordant patient. The theory that societal rejection is the root cause of Gender Dysphoria was validly questioned by a study from Sweden which showed that the dysphoria was not eliminated by hormones and sex reassignment surgery even with widespread societal acceptance.<sup>24</sup>

### **Treatment of Gender Dysphoria**

The treatment of children and adolescents with gender discordance and accompanying gender dysphoria should include an in-depth evaluation of the child and family dynamics. This evaluation provides a basis on which to proceed with psychologic therapy. The entire biologic and social family should be involved in psychological therapy designed to assist the patient, if at all possible, to align gender identity with natal sex. Psychological support by competent counselors with an intent of resolving the gender conflict should be provided as long as the patient continues to suffer emotionally. Given the high degree of eventual desistance of gender discordance/dysphoria by the end of puberty, it would be ethical and logical to counsel the patient and family to rear the child in conformity with natal sex.

There should be no interruption of natural puberty. Natural pubertal maturation in accordance with one's natal sex is not a disease. It is designed to carry malleable, immature children forward to be healthy adults capable of conceiving their own progeny by providing either a sperm or an egg. Puberty affects physical changes, some of them painful, unique to the natal sex to reflect the laws of nature. Interruption of puberty has been reserved for children who begin puberty at an age much younger than normal in an effort to preserve final height potential and avoid the social consequences of precocious maturation.<sup>25</sup>

There are a number of physical changes that are a consequence of normally timed puberty that could be classified as disadvantageous: changes in body proportions can alter success with dance and gymnastics; acne can be severe and disfiguring; a boy soprano can suddenly hardly carry a tune. It has not been the ethical standard of care to stop puberty so that these changes can be circumvented. Erikson described the stage of adolescence as "Identity versus Role Confusion" during which the teen works at developing a sense of self by testing roles then integrating them into a single identity.<sup>26</sup> This process is often unpleasant regardless of the presence or absence of gender identity conflicts. The major benefit of enduring puberty in a GD patient is that it provides a strong likelihood of alignment of his gender identity with his



natal sex. There is no doubt that these patients need compassionate care to get them through their innate pubertal changes.

The light at the end of the tunnel is the proven scientific evidence that 80%- 95% of pre-pubertal children with GD will come to identify with their biological sex by late adolescence. Some will require lifelong supportive counseling while others will not.<sup>27</sup> Intervention at a young age with gonadotropin releasing hormone analogs (often referred to as puberty blockers) to either stop puberty early on or prevent it from starting before it naturally occurs is suggested by guidelines developed by WPATH without scientific basis. These guidelines are essentially nothing more than an open-ended experiment in the manner of John Money. They represent the ideas of their authors with clear admission that there is no long-term evidence that harm will exceed benefits as these patients grow to old age. There is evidence that bone mineral density is irreversibly decreased if puberty blockers are used during the years of adolescence.<sup>28</sup> To treat puberty as a pathologic state of health that should be avoided by using puberty blockers (GnRH analogs) is to interrupt a major necessary physiologic transformation at a critical age when such changes can effectively happen. We have definite evidence of the need for estrogen in females to store calcium in their skeleton in their teen years. That physiologic event can't be put off successfully to a later date. It is very difficult to imagine ethical controlled clinical trials that could elucidate the effects of delaying puberty until the age of consent.

The use of cross-sex hormones during this same time frame has no basis of safety and efficacy. The use of such treatment in adults raises scientifically valid concerns that were amply expressed in the 2009 Endocrine Society Guidelines on Transgender treatment. The next step in WPATH-recommended intervention is to use cross-sex hormone therapy during the time when the patient would naturally be experiencing endogenous pubertal changes. This too is not based on scientifically proven theories. The use of cross-sex hormones can cause permanent infertility.<sup>29</sup>

The final recommended step is so-called "sex reassignment surgery," which can include surgical removal of the breasts in natal females, or removal of the penis and scrotum in natal males. Each of these steps has adverse outcomes, some reversible and others not. Mastectomies leave scars, and there is great difficulty in creating a functional vaginal-like orifice, and certainly no success in creating an innervated erectile penis where none existed previously. Sex reassignment surgery is, by nature, permanent.

### **Recurrent Themes that Are Repeatedly Published**

Puberty blockers are stated to be completely reversible in their effects on the adolescent who has entered puberty based on clinical studies in young children with precocious puberty who have been treated with these drugs. This is comparing apples to oranges. Precocious puberty, by definition, is defined as puberty which starts before the 8<sup>th</sup> birthday for a female child or the before the 9<sup>th</sup> birthday in a male child. The end of treatment is carefully timed so that resumption of puberty occurs at the average age for females (10.5 years) and males (11.5



years). This allows the necessary functions of puberty to prepare the body for reproduction and affects the bones, gonads, and brain, among other body systems. On the other hand, blocking puberty at the age of normal puberty prevents the needed accretion of calcium into the skeleton and prevents the maturation of the gonads. There is no long-term data that compares bone, gonad, and brain health in pubertal-aged patients who have had puberty interrupted and those who have not, as was noted as a concern in the Endocrine Society Guidelines. There are no such ongoing studies completed that guarantee the full reversibility of blocking puberty in this age group, but there is evidence that normal bone density can't be fully reestablished. Without any verifiable safety data, using the puberty blockers for interrupting normal puberty is not a sanctionable off-label use of these drugs and is therefore to be considered uncontrolled, non-consentable experimentation on children.

Advocates for the social, medical and surgical affirmation of gender incongruent children insist that they are only following established standards of care. There are no standards of care for transgender health. Standards of care established by broad consensus are reached by inclusion of the whole spectrum of opinions, clinical experience and published science in the formation thereof. The guidelines published by WPATH<sup>30</sup>, the Endocrine Society,<sup>29,31</sup> the American Academy of Pediatrics<sup>32</sup>, and the Pediatric Endocrine Society<sup>33</sup> are solely the opinions of like-minded practitioners who excluded any contrary opinion. The Endocrine Society Guidelines, as mentioned before, clearly stated that they are not to be considered standards of care. Before true consensus-driven standards of care are established for the treatment of transgender patients of all ages, following the current guidelines is risky experimentation in a manner reminiscent of John Money's tactics.

### **What We Do Know and Do Not Know**

We do know that social affirmation of an incongruent gender tears the fabric of the patient's life into pieces- pitting family members against each other, ruining child friendships and it introduces the child to a fantasy world, much of it on the internet. Kenneth Zucker aptly documented the detrimental effects of such affirmation and the immense amount of work it takes to undo these effects when the child does come to realize they can't change their sex and wants to go back to identifying with their sex<sup>34</sup>. We do not know that social affirmation does anything other than push the child away from the proven, 80-90% effective, so-called watch-and wait treatment option. Embarrassingly unscientific short term convenience sample studies purport to show that all gender incongruent children who are socially affirmed have improved mental health and are therefore better off than those children who are not allowed to socially transition.<sup>35</sup>

We do know that blocking puberty during the age when puberty naturally happens lessens accretion of calcium into the skeleton and that this can't be regained by allowing puberty to resume or by using cross sex hormones. We do know that the ovary and testicle cease to mature with treatment. What we do not know is whether allowing puberty to resume will allow the ovary and testicle to fully mature and have full function in terms of fertility. We do



not know if brain development that is halted with puberty blockers can return to full function once puberty is allowed to resume.

We do know that elevated levels of testosterone in females and of estrogen in males create significant medical morbidity. This knowledge comes from the evaluation and treatment of naturally occurring disease states in children and adults. Treatment of these conditions is aimed at returning hormone levels to normal, thereby avoiding cancers, heart disease, and stroke. We do not know that elevating testosterone in females and estrogen in males to levels ten-fold higher than these known disease states is safe, but common sense would say it can't possibly be safe.

### **The Myth of Increased Suicide**

The affirmation advocates repeatedly refer to the established increased risk of suicide if any of the affirmation strategies are not followed to completion. They point to their own published studies touting dramatic improvement in mental health status of patients who are affirmed in all three ways, but they cite data from convenience sampling, which never should be used to prove anything other than association, at best. Such studies can never prove causation. There are only two total population studies in the peer-reviewed medical literature.<sup>24,36,37</sup> They show that when every recorded case in the population of Sweden was analyzed, neither medical affirmation nor medical affirmation followed by surgical affirmation improved the mental health of the patients in the long run.

### **What of the Nearly Logarithmic Increase in Incidence of Gender Incongruence?**

Data collection in this regard is subject to estimates based on surveys, which can easily alter the numbers upward or downward, depending on who designed the survey and to whom it was presented. Fear, self-loathing or suicide will necessarily lower the numbers of survey participants whose lives are made miserable by the choice to affirm an incongruent gender. Instant gratification, payback to strict parents, and current celebrity will draw survey participants to express euphoric satisfaction with their decision to affirm their incongruent gender, especially when the surveys are circulated by trans-activist organizations, such as the Trevor Project. What had been in 2010 a nearly invisible fraction of adults who admitted to living with an incongruent gender has exponentially increased in frequency to as many as one out of five students in a suburban Pittsburgh school district in 2021. After I completed my fellowship at Johns Hopkins in 1980, it was not until 1993 that a biologic male presented to my private practice office with a desire to be treated with estrogen to feminize his body so that he could appear to be a female and identify as such. There was nothing in published medical literature that I could find to guide my treatment options. I canvassed my broad contact pediatric endocrinology network across the United States, and nobody had heard of such a clinical case, and none had any suggestions about what I should do. In the ensuing 19 years, the number of transgender treatment centers have burgeoned from zero to several hundred between university-based centers and Planned Parenthood. Minority stress theory is frequently used to cover this explosion in numbers, but that is utterly impossible. What does



explain this increase is online recruiting and grooming of vulnerable children and adolescents by a generously funded political movement aimed at dissolving the reality and birthright of biologic sex. This will not end well. By the time a plethora of legal action against those who promoted and engineered the social, medical, and surgical affirmation of incongruent gender knocks down this house of cards, millions of children and adolescents will have been medically, surgically, and mentally maimed as well sterilized.



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### Endnotes

<sup>1</sup> Lee PA et al, Global Disorders of Sex Development Update since 2006: Perceptions, Approach and Care, 2016 *Horm Res Paediatr*.

<sup>2</sup> Lee PA et al, Consensus Statement on Management of Intersex Disorders, *Pediatrics* 2006; 118 e488-e500.

<sup>3</sup> Seaborg E, About Face, *Endocrine News* 2014 (May) 16-19.

<sup>4</sup> American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed; 2013:451-459.

<sup>5</sup> Jeffreys, S. *Gender Hurts: A feminist analysis of the politics of transgenderism*. Routledge. 2014 (p. 27).

<sup>6</sup> Annas GJ and Grodin MA, Reflections on the 70<sup>th</sup> Anniversary of the Nuremberg Doctor's Trial, *AM J Pub Health* 2018;108:10-12

<sup>7</sup> <https://www.baltimoresun.com/news/bs-xpm-2000-02-10-0002100278-story.html>

<sup>8</sup> Whitehead, N. *My Genes Made Me Do It*. Chapter 5.

<sup>9</sup> Meyer J.K. and Reter D. Sex Reassignment Follow-up. *Arch. Gen. Psychiatry* 36:1010-1015, 1979.

<sup>10</sup> Rametti G, Carrillo B, Gomez-Gil E, et al. White matter microstructure in female to male transsexuals before cross-sex hormonal treatment. A diffusion tensor imaging study. *J Psychiatr Res* 2011; 45:199-204.

<sup>11</sup> Kranz GS, Hahn A, Kaufmann U, et al. White matter microstructure in transsexuals and controls.

<sup>12</sup> Maguire EA et al, Navigation-related structural change in the hippocampi of taxi drivers, *PNAS* 2000; 97:4398- 4403.

<sup>13</sup> Gu J, Kanai R. What contributes to individual differences in brain structure? *Front Hum Neurosci* 2014; 8:262.

<sup>14</sup> Sale A, Berardi N, Maffei L, Environment and Brain Plasticity: Towards an Endogenous Pharmacotherapy, *Physiol Rev* 2014; 94: 189 –234.

<sup>15</sup> Reyes FI, Winter JS, Faiman C. Studies on human sexual development fetal gonadal and adrenal sex steroids. *J Clin Endocrinol Metab* 1973; 37(1):74-78.

<sup>16</sup> Lombardo M. Fetal testosterone influences sexually dimorphic gray matter in the human brain. *J Neurosci* 2012; 32:674-680.

<sup>17</sup> Campano A. [ed]. Geneva Foundation for Medical Education and Research. *Human Sexual Differentiation*; 2016. Available at [ww.gfmer.ch/Books/Reproductive\\_health/Human\\_sexual\\_differentiation.html](http://ww.gfmer.ch/Books/Reproductive_health/Human_sexual_differentiation.html). Accessed May 11, 2016.



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- <sup>18</sup> Lee PA et al, Consensus Statement on Management of Intersex Disorders, *Pediatrics* 2006; 118 e488-e500.
- <sup>19</sup> Shenk, D. *The Genius in All of Us: Why everything you've been told about genetics, talent, and IQ is wrong.* (2010) New York, NY: Doubleday; p. 18.
- <sup>20</sup> Diamond, M. "Transsexuality Among Twins: identity concordance, transition, rearing, and orientation." *International Journal of Transgenderism*, 14(1), 24-38.
- <sup>21</sup> Zucker KJ, Gender Identity Disorder, in Rutter M, Taylor EA, editors. *Child and Adolescent psychiatry*, 4th ed, Malden Mass: Blackwell, 2006: 737-753.
- <sup>22</sup> Wallien MS, Cohen-Kettenis PT. Psychosexual outcome of gender-dysphoric children. *J AM Academy Child Adolescent Psychiatry* 2008; 47:1413-1423.
- <sup>23</sup> Schechner T. Gender Identity Disorder: A Literature Review from a Developmental Perspective. *Isr J Psychiatry Related Sci* 2010; 47:42-48.
- <sup>24</sup> Dhejne C, et al. Long-term Follow-up of transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden *PLoS One* February 2011 Vol 6 Issue 2, e16885.
- <sup>25</sup> Carel JC, Eugster EA, Rogol A, et al. Consensus statement on the use of gonadotropin-releasing hormone analogs in children. *Pediatrics*. 2009 Apr. 123(4):e752-62.
- <sup>26</sup> Erikson EH (1993). *Childhood and society*. WW Norton & Company.
- <sup>27</sup> Zucker KJ, Gender Identity Disorder, in Rutter M, Taylor EA, editors. *Child and Adolescent psychiatry*, 4th ed, Malden Mass: Blackwell, 2006: 737-753.
- <sup>28</sup> *J Clin Endo Metab* 2008; 93:190-195.
- <sup>29</sup> Hembree WC et al. Endocrine Treatment of Transsexual Persons: and Endocrine Society Clinical Practice Guideline, *J Clin Endo Metab* 2009; 94:3132-3154.
- <sup>30</sup> Coleman E, Bockting W, Botzer M et al. Standards of Care for the Health of Transsexual, Transgender, and Gender-Non-conforming People, version 7, *International Journal of Transgenderism* 2012;13(4): 165-232
- <sup>31</sup> Wylie W et al. "Endocrine Treatment of Gender-dysphoric/Gender-incongruent Persons: An Endocrine Society Clinical Practice Guideline, *JCEM* 2017; 102:3869-3903
- <sup>32</sup> Rafferty J, Ensuring Comprehensive Care and Support for Transgender and Gender-Diverse Children and Adolescents, *Pediatrics*, 2018;142:e20182162
- <sup>33</sup> Lopez X et al. Pediatric Endocrine Society Transgender Health Special Interest Group statement on gender-affirmative approach to care the Pediatric Endocrine Society, 2017 *Curr Opin Pediatr*;29:475-480.
- <sup>34</sup> 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)
- <sup>35</sup> Olson KR et al, Mental Health of Transgender Children Who are Supported in Their Identities, *Pediatrics* 2016;137 e20153223



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<sup>36</sup> Branstrom 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

<sup>37</sup> Bränström R and Pachankis JE. 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.



## Appendix Attachment

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# ATTACHMENT F



## **Florida Medicaid Project: Surgical Procedures and Gender Dysphoria**

Patrick Lappert, M.D.

May 17, 2022



## Florida Medicaid Project: Surgical Procedures and Gender Dysphoria

Patrick Lappert, M.D.

### Overview

The “Gender Affirmation” care model for children who suffer from gender identity issues is experimental in nature because it is based in low to very low-quality scientific evidence. There is no body of quality scientific evidence to support the hypothesis that gender dysphoria with its associated problems of self-harm and suicide, is improved long-term by gender affirmation surgical procedures.

The best evidence available today demonstrates that transgender is not a single condition that can be explained by any single factor. There are vast differences in age of presentation, predominant sex, persistence into adulthood, and resolution during adolescent development. Moreover, there are numerous and common co-morbid conditions such as autism-spectrum disorder, major anxiety disorders, and clinical depression that severely affect any sense of certainty about the true cause of the child’s dysphoria, as well as their capacity to understand and give assent to irreversible medical and surgical procedures that lead to permanent sterility, sexual impotence, and a lifetime of medical problems associated with affirmation care.

The process of obtaining medical informed consent as part of gender affirming surgery is morally indefensible, and likely legally indefensible as well. Parents of suffering children are led by medical professionals to believe that there is only one valid option of care (affirmation medicine and surgery), utterly concealing the historic reality that greater than 92% of children desist in their cross-sex self-identification when treated using the “watchful waiting” therapeutic strategy. Parents are told that if they do not consent to affirmation care, there is a high likelihood that their child will die from suicide. This is not informed consent, but rather consent under duress.

Gender identity is being presented as a fixed and unchanging, biologically determined, personal characteristic. It is not. The medical literature has consistently shown over many years that the vast majority of children with cross-sex gender identity resolve the issue during adolescence and adopt a gender identity that is congruent with their biological sex.

Because surgeons who perform gender affirmation surgeries have no diagnostic test to predict who among the self-identified transgender minors would have persisted in their cross-sex self-identification into adulthood, and who among those children would have desisted, they have no way to know, in any particular case if the irreversible surgery is being performed on a person who would have continued to self-identify in the cross-sex persona into adulthood. Given the historically well-known desistance rate, it is possible that as many as 90% of children are undergoing surgery based upon an incorrect diagnosis.



“Gender Affirming” breast surgery for self-identifying transgender minors is not medically and ethically equivalent to similar procedures performed for objectively identifiable medical conditions. Transgender breast surgery is always cosmetic (aesthetic) in nature because the indication is a hoped-for improvement in the interior emotional life of the patient. Transgender surgery is not based in any medical diagnosis and does not seek to restore any form or function that may have been lost due to trauma, disease, or developmental accident. It begins with normal structures and changes their appearance in order to achieve a subjective improvement and is therefore cosmetic surgery.

Because gender affirming surgery is cosmetic (aesthetic) in nature, such surgeries must never be offered if they are known to predictably produce an irreversible loss of function. To knowingly sacrifice a human capacity (breast feeding, capacity for sexual intimacy, fertility) in the pursuit of a cosmetic result in a minor who is incapable of giving informed consent, is morally indefensible. The hoped-for subjective improvement that is sought in transgender surgery is a short-lived improvement and is only supported by low to very low-quality scientific evidence. Long term longitudinal cohort studies that are based in level III evidence show that affirmation surgical care is of no benefit in reducing self-harm including suicide.

## Problems with Informed Consent

The protection of children in situations requiring informed consent is a crucial problem that the state has a historic and abiding interest in. In the particular situation of self-identified transgender children, it becomes a most significant problem, given that they are being submitted for permanently life-altering interventions. In my opinion as a plastic and reconstructive surgeon, the life-altering nature of hormonal and surgical interventions needs to be addressed from the moment of the child’s entry into the gender-transition system, given the fact that the overwhelming majority of children who first begin puberty blockade, go onto the physically altering and permanent changes produced by cross sex hormones, and many ultimately also pursue surgery, as is attested to by multiple papers, the content of which is examined below. Informed consent has several requirements that need to be met if such consent is to be deemed valid. These requirements include a thorough discussion of the details of the proposed procedure including risks, known complications, and some measure of the likelihood of a favorable outcome. The discussion must include alternative treatments, and their risks, known complications and their likelihood of a favorable outcome. In the case of the interventions associated with gender-transition medicine and surgery, the favorable outcomes should be evident over the lifetime of the patient, given that they are permanently sacrificing structures and capacities (breasts and breast-feeding, or genitals and fertility).

Because the commonly cited medical literature used in support of these surgeries is of low to very low quality, it must be recognized that such surgeries must be considered experimental in nature given the unknown long-term effects of treatment, and the vast uncertainty in the patient selection and diagnostic processes. Yet the experts who provide opinion in support of these surgeries speak with absolute certainty of their efficacy, and the absence of any alternative treatment. Considering these factors severally and together it becomes difficult to imagine a



more flawed consent process. It also becomes understandable how parents can be drawn into uninformed participation given the simultaneous presentation of dire consequences if gender dysphoria is left untreated, and the insistence that affirmation care including surgery is the only way to bring lasting happiness to the child.

## **Chest Masculinization” in Natal Females is Not Ethically Equivalent to Mastectomies for Breast Cancer**

When mastectomy is performed for the management of breast cancer, or to mitigate the proven risk of developing breast cancer in women, it is done on the basis of objective diagnoses either by pathological examination of biopsy tissue, or as in the case of prophylactic mastectomy, on the basis of genetic analysis that shows known markers of increased risk of developing breast cancer. These tests (microscopic examination of tissue specimens, detection of cell surface markers with proven association with malignancy, and genetic screening of at-risk patients) have known positive predictive value for the diagnosis of breast cancer, and these tests have known error rates that can be used when obtaining informed consent for mastectomy. The validity of these tests has been proven using scientific methodologies that produce high quality evidence in longitudinal population studies with control populations, and very long follow up. As the result, when a woman gives consent for mastectomy to control or prevent the potentially lethal disease, it is with a clear and proven evaluation of the risks and benefits that consent is obtained. Mastectomy is being performed based upon an objective diagnosis of a potentially lethal condition, and the surgical procedure has proven benefit in management of that condition.

In stark contrast, this is not the case when mastectomy is performed to “masculinize” the chest of girls and women who self-identify as transgender or who self-report symptoms of dysphoria. In the self-identified transgender adolescent, breasts are being removed on the basis of a diagnosis that is made by the patient since there are no tests with known error rates that can be used to predict who will benefit from this disfiguring and irreversible surgery. The claim is made that chest masculinization has proven benefit in reducing dysphoria and the associated risk of suicide. But published studies that make this claim of benefit offer evidence that is low to very low quality, typically small case collections with self-selection bias, very short follow up, and no case controls.

The best data presently available on the long-term effects of medical and surgical transitioning are long-term, longitudinal, population-based studies. For example, Dehjne, et al., examined the putative long-term benefit of full transitioning (including hormonal and surgical treatments) found in the Swedish medical database. (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOSOne February 22, 2011 <https://doi.org/10.1371/journal.pone.0016885>). That database includes all persons in the Swedish medical system, from pre-natal to death. It reports all episodes of care and all demographic information in a uniform vocabulary. Furthermore, Sweden has been on the forefront of “gender affirmation” long before the American medical



system seriously considered its claims. Because of the nature of Sweden's database, it is possible to study a cohort of patients that very closely matches the inquiry group with regards to age, sex, economic status, etc. It is possible to ask with great precision such questions as, "What is the likelihood that a fully transitioned transgender male will be hospitalized for psychiatric illness when compared to the age/sex matched control group?" Even more, one could urgently ask, "What is the relative risk of suicide in transgender persons, when compared to age/sex matched controls?"

Why are such longitudinal, population-based studies superior to the case-collection/case series methodology? Because confounding variables such as age, sex, and self-selection biases are removed. In the flawed case-collection methodology, the reported cases are typically only those who return for follow up. You have no way of knowing if the patient had a good outcome or didn't return for follow up because they were in a psychiatric hospital, were incarcerated, or committed suicide. In the Swedish longitudinal study, the suicide is in the same database, as are the other issues of hospitalization, incarceration, and addiction treatment, among other rates of comorbidity. Thus the longitudinal population study can give us what is called a "hazard ratio" for a particular study population (patients who have completed transgender transition in this case).

What this Swedish study shows us that the risk of completed suicide in all transgender persons is 19.1 times higher than in the control cohort. If you look only at patients who have transitioned — patients after "treatment" — from female to "male presentation," the risk of completed suicide is 40 times higher than in the general population. (Note: this finding is consistent with the historic Bränström 10-year follow up study, which found no benefits to "transitioning treatments" but did note an increased risk of serious suicide attempts and anxiety disorders AFTER "treatment.") (Correction to Bränström and Pachankis, *Am J Psychiatry* 177:8, August 2020; see detailed citations in the "Notes" section of this report below).

Another cautionary note was added to the literature by the reputed Cochrane Review, a UK based international association of researchers who examine the quality of scientific evidence used in medical decision making. The Cochrane Review recently published findings concerning the medical evidence used to support the decision to give young women cross sex hormones as part of the transition process. The authors summarize the world literature review thus: "We found insufficient evidence to determine the efficacy or safety of hormonal treatment approaches for transgender women in transition. This lack of studies shows a gap between current clinical practice and clinical research." (Does hormone therapy help transgender women undergoing gender reassignment to transition? See, Haupt C, Henke M, Kutschmar A, Hauser B, Baldinger S, Saenz SR, Schreiber G., *Cochrane Review*, 28 Nov 2020).

Similar issues of very poor, low quality scientific support for chest masculinization surgery can be seen in a recent article by Tolstrup et al. published in the journal *Aesthetic Plastic Surgery* (See Anders Tolstrup, Dennis Zetner, Jacob Rosenberg, *Outcome Measures in Gender-Confirming Chest Surgery: A Systematic Scoping Review*, *Aesthetic Plast Surg* 2020 Feb;44(1):219-228. doi: 10.1007/s00266-019-01523-1. Epub 2019 Oct 29). The article reports a



comprehensive review of the world literature concerning the efficacy of “gender confirming” chest surgery in transgender patients. The authors found 849 articles on the subject, published in peer reviewed medical journals. Of these 849 articles, only 47 could be included in the review. This means that only 5.5% of all the published, peer-reviewed transgender surgery articles demonstrated even rudimentary scientific rigor. Of those 47 articles, the authors report that only 29 of the articles addressed mental health outcomes (3.4% of all the articles). What is startling is that the mental health outcomes were judged only on the basis of uncorroborated, untested, and unassessed patient subjective reporting with descriptors that varied so widely from article to article that results could not even be compared. The authors summarize by saying, “Evaluation of outcomes in gender-confirming chest surgery showed large variations in reporting, and further streamlining of reporting is therefore required to be able to compare surgical outcomes between studies.” None of these negligent articles even bothered to examine rates of psychiatric hospitalization, substance abuse, self-harm behaviors, and suicide. This tells us that the main reason for performing these surgeries (psychological distress and suicide risk) isn’t even evaluated with regard to efficacy.

An example of an article with very low-quality data, reckless (now banned practices), and methodology, published in a “leading journal,” and promoted as evidence for the efficacy of “chest masculinization” surgery makes this fact very clear. The lead author (Olson-Kennedy, a leading national advocate for the transgender treatment enterprise) is a board-certified pediatrician who leads the gender clinic for the Los Angeles Children’s Hospital. The article appeared in 2018 (See J. Olson-Kennedy, J. Warus, MD1, et al., 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. In their summary of findings, the authors reported that “chest dysphoria” is common among “trans males” (natal females seeking to present as males) and claimed that dysphoria is “decreased by surgery.” They claim that regret for surgery is “rare.” The article reports breast removal surgery on at least one girl aged 13 years. (Note that this reckless, experimental practice has now apparently been abandoned as unethical/experimentation on children by England, Sweden, and Finland. The average age of patients in the study was 19. Children were entered into the study through recruitment from among patients visiting the clinic and by telephone over a six-month period. The authors found that, of the patients recruited from among visitors to the clinic (convenience sampling), there was an over-representation of non-operated patients, so the authors were forced to reach out to all the post-surgical patients by phone. Twenty-six percent of the clinic’s post-surgical patients could not be reached for various reasons including no working phone, or failure to respond to multiple messages. The 26% drop-out rate is never even questioned by these authors. Were surgical patients lost to follow up because of dissatisfaction, psychiatric hospitalization, or suicide? This problem is called “self-selection bias,” and it is evidence of careless study design. Of the remaining 74% of patients, only 72% completed the survey. This is a second example of self-selection bias. Why would some post-surgical patients who had been successfully contacted, not complete the survey? The authors — demonstrating multiple levels of confirmation bias — do not even ask such essential questions. (See detailed citations in the “Notes” section of this report below).



In the study, dysphoria was evaluated using what the author called “a novel measure,” which amounted to a series of subjective questions about happiness that was in part designed by the adolescent test subjects themselves. Essentially, the methodology used an entirely unvalidated (“junk science”) test instrument, with no known error rates and no proven predictive power. Furthermore, the post-surgical patients were administered the survey at widely varying time intervals post-surgery. The longest interval between surgery and the satisfaction survey was 5 years, but children less than a year post-surgery were included in this obviously flawed sample, and yet the authors claim evidence of “negligible regret.” This is a remarkable, misleading, and deceptive claim given that long-term, longitudinal population studies show that there is a dramatic rise in post-surgical problems such as depression, hospitalization, substance abuse, and suicide beginning at around seven years post-surgery (Ibid). Surely the authors are familiar with the world literature on transgender outcomes?

Having deceptively or negligently promised in the introduction to their paper that “chest dysphoria” is reduced by surgery, at the conclusion the authors confessed to the fact that the study design and execution produced very low-quality data that is not useful for patient selection, or prediction of outcomes. They even confessed that the study does not address the efficacy of surgery in improving outcomes regarding the single most compelling reason for performing the operation: mitigation of depression and suicide. The authors write, “An additional limitation of the study was the small sample size. The nonsurgical cohort was a convenience sample, recruited from those with appointments during the data collection period. There could be unknown imbalances between the nonsurgical and postsurgical cohorts that could have confounded the study findings.”

Finally, the authors did not even bother to validate their “Chest Dysphoria Scale.” Such a “made-up” scale is unlikely to accurately represent distress or correlate with properly validated measures of quality of life, depression, anxiety, or functioning. Their own analysis at the conclusion of the paper directly contradicts the deceptive claim made in their introduction.

This is the kind of “junk science” that is used to support transgender medicine and surgery. The paper is only a few years old. It was written by board certified physicians who practice in one of the nation’s largest pediatric gender clinics and was published in a peer-reviewed medical journal. It is essentially useless in making any clinical decisions regarding who should be offered surgery, what is the likelihood they will benefit from it, and what is the likelihood they will regret their decision. Most importantly, it does not even measure the effect of therapy on suicide risk. The very morbidity (the risk of suicide) that they claim is improved by surgery is not even measured in their low-quality study.

Because of the very low-quality scientific support for mastectomy in the management of gender dysphoria, valid consent would demand that these procedures be described as experimental, would need the approval of ethics panels to monitor human experimentation, and would require the use of valid controls found in long-term, longitudinal population-based study models. These are the kinds of patient protections now endorsed in England, Sweden and Finland but still



ignored in the US environment where proper scientific critiques of such studies can get faculty “cancelled.”

Even though the transgender treatment industry has been performing these surgeries for over 50 years, gender treatment centers continue to publish the same low quality, methodologically defective studies based upon collected cases that are degraded in value by self-selection bias, confirmation bias, and short-term follow-up, while continuing to deceptively claim that such defective research provides a sufficient scientific basis for performing irreversible, disfiguring, and ultimately sterilizing hormonal treatments and surgeries on children.

## “Chest Masculinization” in Natal Females is Not Ethically Equivalent to Gynecomastectomy

Gynecomastectomy is the surgical treatment of gynecomastia, a fairly common condition in which males develop female-type breast gland tissue. Proponents of “masculinization” mastectomy in natal females erroneously equate the ethics of removing healthy breast tissue from gender dysphoric children with the removal of abnormal breast tissue in men (gynecomastia). In the case of gynecomastectomy in male patients, the operation is performed to remove the objectively diagnosed presence of female type glandular breast tissue present in a male patient. Physical examination demonstrates the presence of a dense retro-areolar mass which is tender and sometimes disfiguring. Pathological examination of the removed tissue will demonstrate the presence of female-type fibroglandular tissue in a male patient. This is an objectively abnormal condition. It should further be noted that the absence of such abnormal, female-type fibroglandular tissue in the submitted surgical specimen places the chest recontouring in the category of cosmetic surgery and is therefore not typically paid for by third-party payors.

A comprehensive literature review on the subject of gynecomastectomy and suicidal behavior conducted by Sollie in 2018 ( Management of gynecomastia—changes in psychological aspects after surgery—a systematic review: *Gland Surg.* 2018 Aug; 7(Suppl 1): S70–76.doi: 10.21037/g.s.2018.03.09) did not produce a single paper claiming improvement in suicide rate in patients who underwent this surgery. There were many reports concerning improvement in the pain that men with this objective condition suffer with. The remainder of the reported data was in the category of subjective “satisfaction survey”. This tells us that the author did not distinguish between medically indicated and aesthetic surgeries. Nonetheless, no claim is made of decreased suicide rates in a suicidal population of male patients. This is because any male patient seeking removal of abnormal, female-type, breast tissue who reported suicidal ideation would be considered incompetent to give consent and would require a psychiatric evaluation and treatment to manage suicidal thinking before being considered for surgery. This kind of decision in favor of psychiatric support does not appear to be at work in the transgender affirmation world. There, and there alone, is suicidal thinking considered a qualification for a surgery.



## “Chest Masculinization” in Natal Females is Not Ethically Equivalent to Breast Reduction

It should be obvious that “Chest Masculinization” surgery in natal females is not ethically equivalent to breast reduction surgery in non-transgender females. In the case of breast reduction for females with excessively large breasts (macromastia, or gigantomastia), the operation is performed to relieve a debilitating orthopedic complaint of neck, back, and shoulder pain associated with the postural/mechanical effects of the weight of the breasts. These patients experience significant activity restriction and chronic pain that is not relieved by medical management or physical therapy. Furthermore, there is voluminous actuarial data, based upon many years of longitudinal population-based study by medical insurance agencies that is used to predict who will benefit from surgery, and who will not. These physical, objective tests, based upon the actual measurement of the breasts, and the patient’s overall body habitus, have known error rates that can be used to predict the likelihood that a breast reduction will relieve the orthopedic complaints of neck, back, and shoulder pain ( Accuracy of Predicted Resection Weights in Breast Reduction Surgery, Theodore A. Kung, MD, Raouf Ahmed, MBBS<sup>1</sup> Christine O. Kang, MPH,<sup>1</sup> Paul S. Cederna, MD, and Jeffrey H. Kozlow, MD; *Plast Reconstr Surg Glob Open*. 2018 Jun; 6(6): e1830.

Based upon that, adequate pre-operative consent can be obtained. The supporting data is based in very high-quality methodology. There is no quality research data, no pre-operative test or study, and no known error rates that can be used to predict the likelihood that any child suffering from gender dysphoria will benefit from the experimental procedures of mastectomy and chest “masculinization.” As noted above, because of the very low quality data, transgender chest masculinization is at best experimental and at worst, should be viewed as a form of medical child abuse — it is important to note that Finland, Sweden, and the UK apparently now all agree with this analysis, as they have all retreated from such reckless surgical procedures for (See detailed citations in the “Notes” section of this report below).

It is crucial to remember that “chest masculinization-affirmation surgery” of healthy breast tissue results in a complete loss of function, that this loss is two-fold (breast feeding and erotic sensibility), and the cause of the loss is two-fold (gland removal and severing of the intercostal nerve). (See *Breast Reduction with Use of the Free Nipple Graft Technique*; Stephen R. Colen, MD; *Aesthetic Surgery Journal*, (Breast Reduction with Use of the Free Nipple Graft Technique; Stephen R. Colen, MD; *Aesthetic Surgery Journal*, Volume 21, Issue 3, May 2001, Pages 261–271, <https://doi.org/10.1067/maj.2001.116439>).

If a patient who undergoes “chest masculinization” should regret the surgery, they do have the option of breast reconstruction. However, all that will be produced is a counterfeit of a breast. The patient will have lost the function of breast feeding. Additionally, the most commonly performed “masculinization” surgery involves the removal of the nipples, and subsequent re-



attachment in the form of a nipple graft. Those nipples will have lost their native nerve connections that provoke erotic sensibility. All that can be hoped for is the eventual random ingrowth of local skin sensation, but there will never be erotic sensation because the particular branch of the fourth intercostal nerve which communicates with particular centers in the brain responsible for oxytocin release and erotic provocation will have been permanently severed. This means that breast function has been completely and irreversibly sacrificed for the sake of producing a cosmetic result (a masculine appearing chest). This is the exact opposite of the goals of any reconstructive surgery. It must therefore be understood that “chest masculinization” is a cosmetic procedure that has violated the most essential principle of cosmetic surgery: never sacrifice function for the sake of a cosmetic result.

## Erroneous use of the word “Reconstructive” to describe Gender Affirmation Surgeries

The transgender treatment enterprise uses the word “reconstructive” to characterize a group of surgical treatments that seek to alter the sexed appearance of the person. It is important to understand that these procedures, because of the indications for surgery, the motivations for surgery, and the outcomes of surgery, are not reconstructive, but are to be properly understood to be cosmetic in nature.

Reconstructive surgeries are procedures that seek to establish or restore structures and their functioning that have been lost due to trauma, disease, in-utero developmental abnormalities, or surgical treatment for disease. Such reconstructive surgeries must begin with the objective characterization of the defect, including abnormalities of form, and associated loss of function. This process of defining the defect begins with a thorough understanding of normal human form and function and seeks to select, develop, and execute procedures that will restore both. In some cases function may be emphasized more than form, as when the mangled hand of a man is reconstructed. In other cases, reconstruction of form is all that is possible because as yet there are no techniques to restore function. An example of this is seen in the reconstruction of a woman’s breast following cancer care. All that can be offered is the appearance of a breast; she will never be able to feed an infant through the reconstructed part.

This is to be contrasted with cosmetic, or aesthetic surgery in which the appearance of a structure is modified in order to produce a subjective (aesthetic) result for the patient. No functional restoration is addressed because no functional or structural loss exists. The object of the surgery is aesthetic. There is no lost form or function that needs to be reconstructed. It is aesthetic surgery because the motivation is aesthetic (subjective feelings about appearance). Further evidence for this is the fact that nearly the entirety of the outcome studies cited in support of these surgeries use subjective questionnaires which the patient fills out. The questions used are typical of those used to evaluate any aesthetic surgery. They are called “satisfaction surveys”. Such surveys are prone to suffer from self-selection bias, confirmation bias, and high drop-out rates.



One of the key problems that the transgender treatment enterprise faces on a daily basis is the issue of third-party payment for services. No health insurance provider, including federal and state agencies will pay for cosmetic surgery. For this reason, it is necessary, in order for the business model to succeed, that providers characterize their services as reconstructive. This is doubly difficult given the intense political pressure that has been exerted upon the medical community to “de-pathologize” the condition of transgender. This is seen in the abandoning of the diagnostic nomenclature of “body dysmorphic disorder”, and “gender identity disorder” in favor of the more recent DSM manual using the term “gender dysphoria”. This leads transgender treatment providers into the difficult situation of claiming that transgender is not a pathology, while at the same time insisting that the services are medically necessary and describing the procedures as reconstructive without characterizing any physical/ functional defect.

As we consider the specific “gender affirming” surgical procedures we will see that comparison to medically indicated surgeries on both men and women actually serves to reinforce the evidence that these surgeries are essentially and fundamentally cosmetic.

## Masculinizing and Feminizing Chest Surgeries are Not “Medically Necessary”

Supporters of “transitioning” treatments justify surgical treatment based upon “medical necessity.” They claim that gender dysphoria can lead to debilitating anxiety and depression, as well as serious incidents of self-harm, including self-mutilation, suicide attempts, and suicide. Yet with only a single exception, in the studies they cite no measures are made of the effects of surgery on what is claimed to constitute the “medical necessity” for these procedures. In contrast, the Branstrom study<sup>1</sup> documented no reliable benefits for transgender surgery/hormonal treatments and no reduction in suicide and even an increase in serious suicide attempts requiring hospitalization in patients receiving surgery. These recent, long-term, published, peer reviewed, credible research findings are quite contrary to the claims of supporters of “transitioning treatments” — as are the National Science Reviews in this area from England-NICE, Sweden, and Finland. (See detailed citations in the Notes section in this declaration).

Scientific rigor would demand an examination of objective outcomes such as: rates of substance abuse, psychiatric hospitalization, self-harm, or suicide, and how they were changed by surgery. One paper does ask these crucial questions concerning efficacy in a very comprehensive, long term, longitudinal population cohort study which actually shows the opposite of what experts claim for these patient outcomes. When followed beyond eight years post operatively, this paper shows that patients receiving these treatments have the same alarmingly high rates of hospitalization, substance abuse, self-harm, and completed suicide as persons who have had no medical or surgical intervention.

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<sup>1</sup>*Correction of a key study: No evidence of "gender-affirming" surgeries improving mental health.* Home. (2020, August 30). Retrieved May 17, 2022, from [https://segm.org/ajp\\_correction\\_2020](https://segm.org/ajp_correction_2020)



In summary, on the issue of the efficacy of these surgeries, the scientific support is very weak, while the scientific evidence rejecting the hypothesis of efficacy is remarkably strong (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOS One February 22, 2011 <https://doi.org/10.1371/journal.pone.0016885>).

The surgical removal of the breasts, and the re-contouring of the chest through liposuction is a common procedure for women who seek to present as men. These operations are performed in both men and women, for a variety of reasons. They are generally very safe, and typically performed in the outpatient setting. It is important to understand that the only way of distinguishing cosmetic breast surgery from “medically necessary” surgery is based upon the diagnosis of underlying pathology. For example, breast reduction may be cosmetic, or it may be medically indicated. In both cases, the patient presents with a complaint that her breasts are too big. The distinction between cosmetic breast reduction and medically indicated breast reduction is based upon the presenting symptoms of orthopedic problems when working, such as chronic neck back and shoulder pain caused by the weight of the breasts. But even then, the weight of the removed tissue is factored into the objective verification that the surgery was “medically necessary.” There is a vast body of medical and actuarial data that demonstrates the relationship between the weight of the breast tissue removed and the probability that back pain will be cured by performing a breast reduction.

The same issues are at stake in breast enhancement for men seeking to present as women. Cross-sex hormones will have caused varying degrees of gynecomastia (breast enlargement in men). Surgical enhancement procedures are exactly the same in both men and women.

Medically necessary surgery in women is based upon the diagnosis of an objective medical condition, such as Poland’s syndrome (congenital absence of a breast), surgical absence of the breast following cancer care. In men, the objective diagnosis of gynecomastia might warrant surgery based upon medical necessity, but it would be the removal of tissue that has objective pathological features (breast gland proliferation in a man). A rare diagnosis of breast cancer in a man might warrant chest wall reconstruction after cancer care. On the other hand, cosmetic surgery of the breast is entirely about the subjective feelings of the patient, and that is all that we find in the case of the self-identified transgender patient.

In the case of transgender chest surgery, the diagnosis is based on the patient’s subjective report of dysphoria, but the medical necessity is based on the expectation that surgery will relieve the patient of the risk of, among other things, major depression, self-harm behaviors, and suicide. None among the many papers typically cited by supporters of “transitioning treatments” address themselves to the question of medical necessity for either masculinizing surgery, or feminizing surgery. They only address technical issues, management of complications, and subjective outcomes that employ precisely the same language that is used to assess every



other cosmetic surgery of the breast. Such papers often begin with standard language about the suffering of self-identified transgender adolescents, and their risk of self-harm. They will claim that the reported surgeries somehow reduce the risk of suicide, or the frequency or severity of self-harm, but they never report actual results of improvement in the risk of suicide, or substance abuse, or cutting, or sexual risk taking. The claim of benefit is unsupported in the scientific literature.

In summary, the medical necessity of transgender chest surgery is not supported by scientific evidence and appears to be firmly in the category of cosmetic surgery. What is more, the surgeries when performed on natal females causes a life-long loss of function, placing those surgeries in the category of malpractice. No other cosmetic procedure is expected to produce major functional loss. Such a result would only be the result of a complication, or other surgical misadventure. To actually have a 100% certainty of loss when surgical consent is being obtained constitutes a complete neglect of one of the foundational principles in plastic surgery: Never sacrifice function for the sake of a cosmetic result.



## About the Author

Education and Training: I received my Bachelor of Arts in Biological Sciences at the University of California, Santa Barbara, 1979. There I was engaged in research in cell membrane physiology with Dr. Philip C. Laris, studying stoichiometry of the sodium: potassium ATPase pump. I received my M.D., Doctor of Medicine degree at the Uniformed Services University of the Health Sciences, 1983 at Bethesda, Md. I served my General Surgery Residency at the Naval Hospital Oakland/UC Davis East Bay Consortium, 1987-1991 and served as Chief Resident, Department of Surgery, Naval Hospital Oakland, 1990-1991. I also served a Plastic Surgery Residency at the University of Tennessee-Memphis, 1992-1994. My professional background, experience, and publications are described in more detail in my curriculum vitae, which is attached as Exhibit A to this declaration.

Board Certifications in Medicine: I have been Board Certified in Surgery (American Board of Surgery, 1992), in Plastic Surgery (American Board of Plastic Surgery, 1997; American Board of Plastic Surgery, 2008).

Medical Staff Appointments: I served as the Staff General Surgeon at the Naval Hospital Oakland, CA 1991-1992 and as Associate Professor of Surgery, UC Davis-East Bay, 1991-1992. I also served as a Plastic and Reconstructive Surgeon, Naval Medical Center, Portsmouth, Virginia, 1994-2002 and as Chairman, Department of Plastic and Reconstructive Surgery, Naval Hospital Portsmouth, Virginia, 1996-2002. I later served as Clinical Assistant Professor, Department of Surgery, Uniformed Services University of the Health Sciences, 1995-2002 and as Founding Director, Pediatric Cleft Palate and Craniofacial Deformities Clinic, Naval Hospital Portsmouth, Virginia, 1996-2002 also as the Founding Director, Wound Care Center, Naval Hospital Portsmouth, Virginia, 1995-2002. I have also served as a Staff Plastic Surgeon in Nebraska and Alabama.

U.S. Surgeon General Service: I served as a Specialty Leader, Plastic and Reconstructive Surgery, Office of the Surgeon General-USN, 1997-2002.

Faculty Appointments: I served as Teaching Faculty at Eastern Virginia Medical School, Division of Plastic Surgery, 1995-2002. I also served on the teaching faculty of the Via College of Osteopathic Medicine, 2017-2020.

Military Service: I served as an Aviation Officer Candidate, Naval Aviation Schools Command, NAS Pensacola, 1978 and was Commissioned an Ensign, MC, USNR 1979 and Commissioned as a Lieutenant, MC, USN 1983. I served as a Designated Naval Flight Surgeon, Naval Aerospace Medical Institute, 1985, and I was Assigned Marine Fighter/Attack Squadron-451, serving as Flight Surgeon, and serving as Radar Intercept Officer in the Marine F4S Phantom, accumulating 235 flight hours, and trained for qualification as an Air Combat Tactics Instructor. I was deployed to the Western Pacific as UDP forward deployed fighter squadron in Korea, Japan, and the Philippines. I served in the US Navy for 24 years, and I served in the USMC for 3 years. I retired with the rank of Captain, USN in 2002.



Publications - Peer Reviewed Medical Journals: Lappert PW. Peritoneal Fluid in Human Acute Pancreatitis. Surgery. 1987 Sep; 102(3):553-4; Toth B, Lappert P. Modified Skin Incisions for Mastectomy: The Need for Plastic Surgical Input in Preoperative Planning. J Plastic and Reconstructive Surgery. 1991; 87 (6): 1048-53; Lappert P. Patch Esophagoplasty. J Plastic and Reconstructive Surgery. 1993; 91 (5): 967-8; Smoot E C III, Bowen D G, Lappert P, Ruiz J A. Delayed development of an ectopic frontal sinus mucocele after pediatric cranial trauma. J Craniofacial Surg. 1995;6(4):327–331; Lappert PW. Scarless Fetal Skin Repair: “Unborn Patients” and “Fetal Material”. J Plastic and Reconstructive Surgery. 1996 Nov; 98(6): 1125; Lappert PW, Lee JW. Treatment of an isolated outer table frontal sinus fracture using endoscopic reduction and fixation. Plastic and Reconstructive Surgery 1998; 102(5): 1642-5.

Publications - Medical Textbooks: Wound Management in the Military. Lappert PW, Weiss DD, Eriksson E. Plastic Surgery: Indications, Operations, and Outcomes, Vol. 1; 53-63. Mosby. St. Louis, MO 2000.

Operations and Clinical Experience: Consultations and Discussions: As a physician and surgeon, I have treated many thousands of patients in 7 states and 4 foreign nations. My practice has included Primary Care, Family Medicine, Aerospace Medicine, General Surgery, Reconstructive Surgery for combat injured, cancer reconstructive surgeries including extensive experience with microvascular surgery, Pediatric Congenital Deformity, and the care of chronic wounds. I have practiced in rural medicine, urban trauma centers, military field hospitals, university teaching hospitals, and as a solo private practitioner. In my private practice I have had occasion to treat many self-identified transgender patients for skin pathologies related to their use of high dose sex steroids, laser therapies for management of facial hair both in transitioners and detransitioners. I have performed breast reversal surgeries for detransitioning patients. My practice is rated as “LGBTQ friendly” on social media. I have consulted with families with children who are experiencing gender discordance. I have given many presentations to professional meetings of educators and counselors on the subject of transgender, and the present state of the science and treatment. I have discussed the scientific issues relevant to the case with many physicians and experts over a number of years and also discussed related issues with parents and others.



## Appendix Attachment

1g



# ATTACHMENT G



**CERTIFICATE OF SERVICE**

I certify that I e-filed this appendix on ECF, which will email everyone requiring notice.

Dated: October 13, 2023

/s/ Mohammad O. Jazil