

Abigail Shrier's Responses to
Ranking Member Grassley

1. *What is rapid onset gender dysphoria? In the process of conducting research for your book "Irreversible Damage," what did you find regarding the causes, the pervasiveness and the impacts of this phenomenon?*

"Rapid onset gender dysphoria" refers to the hypothesis published in 2018 by academic public health researcher Dr. Lisa Littman, then of Brown University, that the sudden spike in transgender identification among teen girls was due to a social contagion. Dr. Littman found that the majority of teen girls whose families she surveyed had experienced this atypical gender dysphoria "out of the blue," often after a period of prolonged social-media immersion and with the encouragement of a friend group.

After Dr. Littman's paper was published, many clinicians and researchers in North America and Europe offered further support for her hypothesis. *See, e.g.,* Zucker, Kenneth J., "Adolescents with Gender Dysphoria: Reflections on Some Contemporary Clinical and Research Issues," *Archives of Sexual Behavior*, 27 June 2019); Bonfatto, Marina and Crasnow, Eva, "Gender/ed identities: an overview of our current work as child psychotherapists in the Gender Identity Development Service," *Journal of Child Psychotherapy* (2018); Hutchinson, Anna; Midgen, Melissa, "In Support of Research Into Rapid Onset Gender Dysphoria: Letter to the Editor" *Archives of Sexual Behavior* (July 2019).

While the numbers in the United States are harder to ascertain, in Great Britain, where there is a national gender identity clinic, researchers reported a 4,400% rise in teen girls presenting for treatment. These girls seem to match the cohort Littman described.

Through my own journalistic investigation, I was and remain absolutely compelled that this was not the typical presentation of gender dysphoria. Peer and social media influence were very much in evidence with this cohort of teen girls.

2. *In the process of conducting research for your book "Irreversible Damage," what did you learn about the impacts on children and youth of puberty blockers and cross-sex hormones?*

Puberty blockers are typically administered at the very earliest stages of puberty. They are often presented to families as a neutral intervention, a "pause button," to allow families of gender dysphoric, transgender-identified, or gender non-conforming children to have additional time for gender identity exploration or formation prior to puberty and the growth of distinctive secondary sex characteristics. Through my work, I have come to strongly believe that the claim that puberty blockers are a neutral, benign intervention for childhood gender dysphoria is completely false. Indeed, they are a profound intervention. Risks for females include infertility, sexual dysfunction and osteoporosis. Based on outcomes in clinical trials, puberty blockers seem to nearly guarantee a child will proceed to cross-sex hormones, perhaps because of the psychological impact of having had one's

puberty blocked and being entirely out of step with one's peers. When puberty blockers are followed by cross-sex hormones, infertility is virtually guaranteed.

The side-effects of cross-sex hormones (i.e., testosterone) on biological females include risks of infertility, sexual dysfunction, cardiac event, endometrial cancer, and vaginal and uterine atrophy. Among the effects considered desirable by patients: euphoria, anxiety-suppression, growth of body and facial hair, masculinization of voice and facial features, and redistribution of body fat. Because of the risk of endometrial cancer, doctors who proscribe cross-sex hormones sometimes recommend a prophylactic hysterectomy for those biological females who have been on cross-sex hormones for five or more years.

3. *The Department of Health and Human Services has long recognized that the practice of medicine and biomedical research routinely involves decisions and diagnoses that legitimately make sex-based distinctions. Under the Equality Act's approach, however, it might not be possible to do that. To illustrate: consider what happens if a transgender patient self-identifies as male in the medical intake process, yet an examining doctor has reason to believe the patient is biologically female. In this case, the doctor could reasonably assume that the law prevents changes to the person's chart to reflect female sex, because that would not be treating the person "consistent with" her stated gender identity. What else can you tell us about the importance of sex as a biological difference in health care and medicine?*

Good medical decisions require clinicians to assume that biological sex is accurately documented on medical records. The same blood test may be normal or abnormal, depending on the patient's biological sex. There has been at least one case in which a nurse mistook a transgender man as a natal male and did not realize he was pregnant. This lapse resulted in the loss of the baby. See Marchione, Marilyn, "Nurse mistakes pregnant transgender man as obese. Then, the man births a stillborn baby." *USAToday*, 16 May 2019, available at:

<https://www.usatoday.com/story/news/health/2019/05/16/pregnant-transgender-man-births-stillborn-baby-hospital-missed-labor-signs/3692201002/>.

In a separate case, a natal female was denied a needed kidney transplant because the medical staff mistook the patient for a biological male and erroneously used male reference ranges for kidney function. See Whitley, Carmeron T.; Greene, Dina N., "Transgender Man Being Evaluated for a Kidney Transplant," *Clinical Chemistry* (2017).

4. *Could the Equality Act compel doctors to make decisions that are inconsistent with their best professional judgment in certain cases? Please explain.*

Yes. By outlawing so called "conversion therapy" for all "LGBTQ people," it would make it impossible for a therapist or psychiatrist to do anything other than immediately affirm a patient's stated diagnosis of gender dysphoria—no matter the patient's age or

comorbidities. Put another way, the only appropriate response to gender dysphoria, according to the Equality Act, is affirmation and transition. Anything else might run afoul of its 'conversion therapy' ban.

5. *What can you tell us about the challenges facing State, local, or foreign jurisdictions in which legislation or policies similar to the Equality Act have been adopted? Is it true that such State policies or laws have had virtually no negative impact on women and girls in these jurisdictions? Are those laws and policies truly similar to the Equality Act? Please explain.*

The experience of the United Kingdom is instructive here, as Great Britain places far more restrictions on male prisoners transferring into the women's prison than does the Equality Act (specifically, a gender reassignment procedure, not simply a change in stated identity). In the UK, there have been seven attacks of female inmates by biologically-male transgender convicts in the last year. Brown, David, "Seven sex attacks in women's jails by transgender convicts," *The Times* (of London), May 11, 2020, available at: <https://www.thetimes.co.uk/article/seven-sex-attacks-in-womens-jails-by-transgender-convicts-cx9m8zqpg>.

Abigail Shrier's Responses to
Senator Josh Hawley

1. *What are the most significant differences in athletic performance between individuals who are chromosomally XX and individuals who are chromosomally XY?*

Male puberty confers male athletes with a massive, permanent and unbridgeable advantage, specifically with regard to contests of strength and speed. The permanent, “organizational effects” of testosterone that occur during male puberty include larger hearts, larger lungs, more oxygenated blood, longer bones, vastly greater muscle mass (more upper body strength and lower body strength), greater bone density, and more fast-twitch muscle fiber. *See, e.g.,* Janssen, Ian, et al., “Skeletal muscle mass and distribution in 468 men and women aged 18-88,” *Journal of Applied Physiology*, July 1, 2000, at: <https://journals.physiology.org/doi/full/10.1152/jappl.2000.89.1.81>; World Rugby, “Summary of Transgender Biology and Performance Research,” https://resources.world.rugby/worldrugby/document/2020/10/09/a67e3cc3-7dea-4f1e-b523-2cba1073729d/Transgender-Research_Summary-of-data_ENGLISH-09.10.2020.pdf;

The most significant differences in athletic performance occur after male puberty. Prior to puberty, the differences in athletic ability between males and females are more subtle.

2. *To what extent does administration of hormone therapy, or gender reassignment surgery, offset these performance differences, if any?*

Even if *bio-active* levels of testosterone (circulating in the bloodstream) are lowered as a result of hormone therapy, this will not substantially diminish the permanent, “organizational effects” of testosterone, wrought on the male body during male puberty. *See, e.g.,* Hilton, Emma N. & Lundberg, Tommy R., “Transgender Women in the Female Category of Sport: Perspectives on Testosterone Suppression and Performance Advantage,” *Sports Medicine*, 199-214, 199 (2021) <https://bjsm.bmj.com/content/early/2021/02/28/bjsports-2020-103106> (“Longitudinal studies examining the effects of testosterone suppression on muscle mass and strength in transgender women consistently show very modest changes.”); *see also* Wiik, Anna; Holmberg, Mats, et. al., “Changes in muscle strength and muscle cross-sectional area following cross-sex hormone treatment,” *Karolinska Institutet* (2019) (noting that “trans women maintain their strength levels as well as cross-sectional area and radiological density throughout the treatment period. We conclude that the altered sex hormone pattern induced by gender-affirming treatment differentially affect muscle strength in trans men vs. trans women.”)

3. *Would these performance differences, if any, be meaningfully mitigated if athletic organizations were to impose limits on individual testosterone in order to demarcate*

men's and women's athletics—the approach adopted by the NCAA and the international Court of Arbitration for Sport?

I do not believe they would. Again, limits on hormone levels would only cap the bio-active or “activational” levels of testosterone in the bloodstream. They would do nothing to bridge the massive and permanent performance gap created by the organizational effects of testosterone.

- 4. Why has academic research into the treatment of youth gender dysphoria so frequently met with backlash from media groups and activist organizations?*

To put matters most charitably, it is possible that activist organizations fear losing access to medical transition or fear an overly-grueling gatekeeping process. But it is also true that activists are making a concerted effort to create a “trans” identity group, which enjoys the same privilege of racial minorities under the law. Any inquiring person who attempts to regard or examine gender dysphoria as a condition to be treated—and not primarily an identity to be celebrated—is offensive to those with this ideological goal. The latter group, regrettably, includes many young doctors who treat transgender youth.

- 5. Why has academic research into the possibility of “social contagion” as a contributing factor to rising reports of youth gender dysphoria so frequently met with backlash from media groups and activist organizations?*

Most other “social contagions,” engender broad agreement that we need to arrest them. If you would prefer to celebrate and encourage a trend, then linking it to social contagion and saying it should be arrested is seen as aggression against the group.

- 6. How are children being harmed by the political pressures restricting research into questions such as the desistance rate associated with youth gender dysphoria?*

Unnecessary gender transition does irreversible damage to children. For natal females, unnecessary medical transition puts their fertility, sexual function and bone density at serious risk. It also puts them at significant risk of vaginal and uterine atrophy, of endometrial cancer and of adverse cardiac events.