



Commentary

Scientific Misinformation and Gender Affirming Care: Tools for Providers on the Front Lines



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In the United States, over 20 bills that criminalize the standard of care for gender-diverse youth have been recently introduced in the state legislatures and three have passed [1]. In these states, practitioners may face loss of licensure or imprisonment, while parents or legal guardians (henceforth referred to as “guardians”) may face child abuse investigations and family destruction [1,2]. The courts have enjoined the enforcement of these laws, but litigation is ongoing, and may negatively shape public opinion.

State legislatures have proved fertile ground for the intentional misrepresentation of gender-affirming care (GAC) [2]. Elected officials rarely offer scientific, peer-reviewed sources in anti-GAC bills. In fact, legislators now cite anti-LGBTQ political organizations as medical authorities, including the American College of Pediatricians [2,3]. To the lay public, this group is easily confused with the international authority on pediatric care, the American Academy of Pediatrics [4]. This is one tactic among many used to distort the truth about GAC.

Up to 10% of youth express some degree of gender expansivity and about 1.8% identify as transgender [5]. All providers working with children and adolescents care for transgender or gender expansive (TGE) youth, but knowledge gaps and low comfort levels with GAC are common [6,7]. Legally codified misinformation presents an additional challenge to those on the front lines of clinical care. In this commentary, we identify and correct misconceptions that providers may encounter in this new sociopolitical climate.

What is Gender-Affirming Care?

GAC is a biopsychosocial model of care for those who experience gender dysphoria. For youth, the course of treatment is an individualized process guided by the patient’s

needs and guardian consent. Interdisciplinary providers use clinical practice guidelines developed by the World Professional Association of Transgender Health (WPATH) and the Endocrine Society [8,9]. Social transition, an aspect of GAC, affords TGE individuals the same gender affirmation that cis-gender persons enjoy. It includes the use of pronouns and a chosen name, as well as adoption of hairstyle and clothing that reflect one’s gender identity. Medical GAC may include any combination of treating comorbid mental health conditions, suppressing menses, pausing puberty, administering exogenous sex hormones, and surgery [8,9]. This care depends on one’s age, physical development, and desired gender expression.

Misconception: This is Just a Mental Health Disorder. Shouldn’t Kids Just Go to Therapy?

Recent legislation falsely claims that gender dysphoria is a psychiatric problem that psychotherapy alone can treat

The World Health Organization and the American Psychiatric Association no longer classify gender dysphoria as a mental health disorder [10,11]. Rather, it is described as the distress of living with physical characteristics that do not align with one’s gender identity, worsened by nonaffirming social factors [10]. Supportive mental health services can foster resilience in a hostile and transphobic climate, but are often inadequate alone. Body dissatisfaction, which intensifies as puberty progresses, is the root cause of gender dysphoria [11].

Thus, puberty blockers and gender-affirming hormones have an independent and positive impact on mental health [12–14]. Over one year, TGE youth who received medical GAC experienced 60% lower odds of depression and 73% lower odds of suicidality [12]. A multifaceted approach that includes social support, mental health care, and medical GAC optimizes the wellness of TGE youth [15].

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Misconception: Gender Dysphoria is a Phase and Most Youth Change Their Minds

Recent legislation falsely asserts that most cases of gender dysphoria spontaneously resolve without treatment, otherwise termed “desistance.”

Well-regarded research describes diverse experiences that do not support this claim [16,17]. The vast majority of TGE youths who transitioned socially remain stable in their gender identity during adolescence [16]. Likewise, most adolescents who receive hormone therapy for gender dysphoria continue to use these medications in adulthood [8]. Post-GAC regret is rare, occurring in approximately 0.3% of individuals [18].

Misconception: Children are Started on These Medications when They are Too Young

Legislation has falsely asserted that pubertal blockade and exogenous sex hormones are administered in pre-pubertal children

Pubertal blockade is not indicated before puberty [2]. No authoritative protocol recommends use of gonadotropin hormone-releasing hormone agonists until an individual has reached a sexual maturity rating of two or three [8,9]. Exogenous sex hormones are not used until an adolescent has undergone an extensive informed consent process with a guardian [8,9].

Misconception: Children and Teens are Undergoing Gender Re-assignment Surgery

Recent legislation has misrepresented the timing of surgical practices

Current standards of care do not recommend genital surgery until the individual has reached the age of legal majority [8,9]. Per WPATH guidelines, mastectomy, i.e., “top surgery”, can be pursued beginning at age 16 if the individual’s degree of dysphoria warrants this procedure. Similarly, the Endocrine Society recommends gender-affirming mastectomy only when a health care provider deems it developmentally appropriate [9].

Misconception: GAC is Experimental and Unsafe

Recent legislation has falsely claimed that GnRH agonists and exogenous sex hormones are associated with adverse health outcomes, such as reduced bone density, venous thromboembolism, cardiovascular disease, and cancers

WPATH and Endocrine Society guidelines have been in use for over three decades and are updated regularly by expert committees [8,9]. These documents have evolved over time to minimize risk and incorporate new research. Providers may consult an in-depth analysis of rebutting claims regarding specific health risks [2].

All medical treatments carry risks. The decision to pursue such treatment rests on informed consent and shared decision-making between the provider, patient, and, in the case of minors, their guardian. TGE individuals, who are historically marginalized and avoid stigmatizing health care settings, may enjoy the health benefits of preventive services when they receive GAC [19,20].

Misconception: Puberty Blockers and Hormones Cause Infertility

Recent legislation falsely asserts that medical aspects of GAC constitute sterilization of children and teens

Puberty blockers stall development of secondary sex characteristics and limit reproductive capacity while in use. When stopped, the effects are fully reversible and sexual development catches up to chronological age quickly [21–24]. Fertility in the setting of exogenous estradiol and testosterone is an area of emerging research. These medications do impact fertility while in use, but ovulation and spermatogenesis persist to some degree [25]. Contraception and counseling about the risk of unintended pregnancy should be offered to all TGE youth who do not desire pregnancy [8,9]. Youths with ovaries and uteri are capable of pregnancy, especially in the early stages of GAC, and must receive appropriate contraception counseling. Exogenous sex hormones may affect fertility and thus, providers can assess long-term reproductive desires and offer sperm or oocyte cryopreservation [26,27].

Misconception: the Risks of Adolescent Suicide and Other Mental Health Issues are Overstated. In Fact, Transition Likely Increases Suicide in Adults

Recent legislation either omits or minimizes the risk of suicide and other adverse mental health outcomes, such as eating disorders. Misrepresentation of a single older study has led to false claims that gender affirming care causes suicide

In the current social climate, TGE youth face high rates of adverse mental health outcomes, the most concerning of which is suicide. Of those who do not receive timely GAC, 40%–60% may attempt suicide, and the completion rate is not well known [5,28]. Body dissatisfaction related to gender is correlated with disordered eating, whereby food restriction and low body weight may forestall distressing physical change [29–32]. Comorbid eating disorders and gender dysphoria are associated with up to a 75% risk of suicidality [29]. Medical aspects of gender-affirming care have a distinct impact on reducing suicidal ideation and remission of eating disorders [13,22,33].

A causal relationship between gender-affirming care and suicide has been falsely inferred from a single Swedish study from 2003, which reported higher suicide rates in TGE versus cisgender adults [34]. Authors of this study carefully stated that their research offered no explanation for this observation [34]. Experts contend that pervasive transphobia threatens the mental and physical well-being of TGE persons [4]. Hostile legislation and misconceptions about GAC perpetuate this harm [35,36].

Misconception: Youth are Too Young to Engage in Medical Decision-making

Legislation falsely asserts that minors provide consent for GAC

Current guidelines describe a rigorous informed consent process, whereby the guardians of TGE youth below the legal age of majority are involved in all aspects of medical decision-making [8,9]. Minors provide assent and guardians provide consent. A strong therapeutic alliance must be cultivated between health care providers, TGE youth, and their guardians to

explore all therapeutic options, including no intervention, and their respective benefits and risks.

Misconception: Guardians, Providers, and Social Media Pressure Young People into Transition

This misconception appears throughout the language of recent legislation, which falsely asserts that TGE youth have been coerced into expressing an alternative gender identity

In fact, children and teens lead the process of social transition with adequate social support [37]. TGE adolescents report diverse experiences on social media. Social media may provide a sense of community to gender-diverse youth and information about how to access GAC, but has not been found to influence a young person's gender identity [38,39].

Conclusion

The American Medical Association, the American Academy of Pediatrics, the American Psychiatric Association and at least 18 other major medical societies with international memberships endorse the safety and importance of GAC and have joined advocacy actions to protect TGE youth [4,40,41]. Providers on the front lines must be emissaries of these strong supportive stances and amplify the facts about GAC. Legislative endorsement of misinformation harms and invalidates all TGE youth [35,36]. Our patients are watching to see how we protect their right to exist and we cannot let them down.

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