Journal of Public Health Policy (2024) 45:179–182
https://doi.org/10.1057/s41271-023-00459-w

LETTER TO THE EDITORS

The transgender phenomenon: needs for research

Anthony R. Mawson[1]

Accepted: 4 December 2023 / Published online: 29 January 2024

Dear Editors,

It is widely assumed that transgender (TG), defined as identifying oneself as someone whose gender differs from the one assigned at birth, is a transient psychological state or condition, and most children undergoing gender-affirming medical procedures are likely to regret them. These beliefs are leading growing numbers of U.S. states and other countries to ban and even criminalize medical intervention for TG children.

Supporting these views, an unnamed whistleblower from a U.S. transgender clinic asserts that social contagion is a likely cause of gender uncertainty, particularly in girls, and schools as well as peers and social media are actively persuading children to think they are TG. Many of these children, deciding that they are nonbinary, are being sent by their doctor to a TG clinic, and from there, they are set on a path for getting surgery or other gender-affirming medical care [1].

A federal judge recently struck down the Arkansas law-forbidding gender-affirming care for children and teenagers, ruling that the law discriminated against TG people and violated constitutional rights for doctors; the state of Arkansas had also failed to prove its claims that the care was experimental or carelessly prescribed [2]. State laws banning gender-affirming care have also been blocked by U.S. District Court judges in Florida, Indiana, and Oklahoma [3].

Evidence against the view that TG is a transient mental state, resulting from social pressure or contagion, comes from a U.S. survey of 120,617 TG adolescents [4]. Nearly 14% had made a previous suicide attempt. However, the rate was 51% among TG female-to-male adolescents and 42% among those identifying as neither exclusively male nor female. A nationwide Danish study also found that TG people had significantly higher rates of attempted or actual suicide compared to non-TG individuals: people aged 15 years and older who self-identified as TG at age 22 reported suicide attempt rates that were nearly eight times higher than those of non-TG individuals, and suicide mortality rates were 3.5 times higher [5]. These alarming statistics indicate that distress among TG individuals is extremely common and

✉ Anthony R. Mawson
amawsn@gmail.com

[1] Chalfont Research Institute, c/o 5359 Briarfield Road, Jackson, MS 39211, USA

intense and legislation designed to prevent medical intervention may be contributing to it.

Laws banning gender-affirming healthcare also reflect misconceptions about the nature and circumstances of the care. Before any medical or surgical intervention is carried out, prepubescent children must first be diagnosed with gender dysphoria; they must also have experienced significant distress for at least six months. This includes the intense desire to be the other gender as well as strong dislike for one's own sexual identity. Provision of such care during adolescence rather than as an adult may have more favorable mental health outcomes as well as lower odds of self-harm and thoughts of suicide [6].

The desire for gender-affirming medical care is persistent and strong. This was confirmed by data pooled from 27 studies that included 7928 TG patients who had undergone any type of gender-affirming surgery. The overall prevalence of regret after gender-affirming surgery was very low: 1% (95% CI < 1%–2%), indicating a high level of satisfaction with the decision [7].

The concept of LGBTQ + also obscures major differences between these conditions.TG is unique in being a rapidly growing phenomenon with surging desires for gender-affirming treatment. In a recent survey, as many as 5.1% of U.S. adults under age 30 identified as TG or nonbinary; in contrast, only 1.6% of adults ages 30–49 and 0.3% of those 50 years and older identified at TG, and 1% identified as lesbian or gay [8]. Gender-affirming surgery has also increased significantly, nearly tripling between 2016 and 2019 [9]. It is significant that whereas lesbian and gay refer to sexual orientation towards the same sex, TG is profoundly different: a state in which gender identity itself is disturbed and altered from an early age and is unrelated to sexual orientation.

It is important to note that TG children are over 6 times as likely as binary individuals to report having been diagnosed as autistic. TG and gender-diverse individuals also report significantly higher rates of autistic traits, of having other neurodevelopmental disorders and psychiatric conditions, and the suspicion that they have undiagnosed autism [10].

This evidence of surging rates of TG in younger people, coupled with links to autism and other neurodevelopmental disorders, suggests that far from being a creation of the social media or a transient psychological state, TG is a physical condition strongly associated with individual and family distress, often with tragic consequences.

What are the implications for public health and medicine? First, personalized support and improved access to gender-affirming healthcare are critical needs for TG and gender-diverse individuals. Second, research is urgently needed: to discover as yet unidentified prenatal or postnatal factors associated with TG and its origins; to understand its links to autism and other NDDs; and to elucidate the mechanisms underlying both sets of conditions.

Certain complications of pregnancy, such as preeclampsia and low birth weight, are linked to autism [11, 12] as are estrogens, progestins, and androgens; these are the sex steroid hormones that shape brain development and contribute to gender role behavior [13, 14]. Polycystic ovarian syndrome, associated with androgenic excess, is also linked to autism [15].

In conclusion, TG is a rapidly growing phenomenon in the United States, associated with great distress and potentially lethal consequences for those directly affected. Exposure to unidentified prenatal or early postnatal factors may be contributing both to TG and to autism, but these factors and the causes of both conditions are largely unknown. Epidemiologic studies are urgently needed to identify and understand them. Armed with such knowledge, it may be possible to minimize exposure to the factors. This could at once serve to reduce the occurrence of TG and of autism as well as obviate the desire and need for surgery and other forms of gender-affirming healthcare.

References

1. Whistleblower: https://nypost.com/2023/02/09/whistleblower-lifts-lid-on-st-louis-kids-gender-clinic/. Accessed 22 Dec 2023.
2. Arkansas case. https://www.npr.org/2023/06/20/1183344228/arkansas-2021-gender-affirming-care-ban-transgender-blocked. Accessed 22 Dec 2023.
3. US District Court judgement. https://www.reuters.com/legal/us-court-strikes-down-florida-transgender-health-rule-2023-06-22/#:~:text=U.S.%20district%20court%20judges%20elsewhere,according%20to%20Human%20Rights%20Campaign. Accessed 22 Dec 2023.
4. Toomey RB, Syvertsen AK, Shramko M. Transgender adolescent suicide behavior. Pediatrics. 2018;142(4):e20174218. https://doi.org/10.1542/peds.2017-4218.
5. Erlangsen A, Jacobsen AL, Ranning A, Delamare AL, Nordentoft M, Frisch M. Transgender identity and suicide attempts and mortality in Denmark. JAMA. 2023;329(24):2145–53. https://doi.org/10.1001/jama.2023.8627.
6. Santoro H. KFF Health News July 2, 2023 Misinformation Obscures Standards Guiding Gender-Affirming Care for Trans Youth—Misconceptions and misinformation conflate treatments, stripping youth of essential care https://www.medpagetoday.com/special-reports/features/105296?xid=nl_mpt_DHE_2023-07-02&eun=g1760252d0r&utm_source=Sailthru&utm_medium=email&utm_campaign=Daily%20Headlines%20Evening%202023-07-02&utm_term=NL_Daily_DHE_dual-gmail-definition. Accessed 22 Dec 2023.
7. Bustos VP, Bustos SS, Mascaro A, Del Corral G, Forte AJ, et al. Regret after gender-affirmation surgery: a systematic review and meta-analysis of prevalence. Plastic Reconstre SurgGlobal Open. 2021;9(3):e3477. https://doi.org/10.1097/GOX.0000000000003477.
8. Wright JD, Chen L, Suzuki Y, Matsuo K, Hershman DL. National estimates of gender-affirming surgery in the US. JAMA Netw Open. 2023;6(8): e2330348. https://doi.org/10.1001/jamanetworkopen.2023.30348.
9. Pew Research Center. https://www.pewresearch.org/short-reads/2022/06/07/about-5-of-young-adults-in-the-u-s-say-their-gender-is-different-from-their-sex-assigned-at-birth/. Accessed 22 Dec 2023.
10 Warrier V, Greenberg DM, Weir E, et al. Elevated rates of autism, other neurodevelopmental and psychiatric diagnoses, and autistic traits in transgender and gender-diverse individuals. Nat Commun. 2020;11:3959. https://doi.org/10.1038/s41467-020-17794-1.
11. Tache V, Baer RJ, Currier RJ, Li CS, Towner D, Waetjen LE, et al. Population-based biomarker screening and the development of severe preeclampsia in California. Am J Obstet Gynecol. 2014;211:377.e1-377.e8.
12. Talge NM, Holzman C, Senagore PK, Klebanoff M, Fisher R. Biological indicators of the in-utero environment and their association with birth weight for gestational age. J Dev Orig Health Dis. 2011;2:280–90.
13. Schwarz E, Guest PC, Rahmoune H, Wang L, et al. Sex-specific serum biomarker patterns in adults with Asperger's syndrome. Mol Psychiatry. 2011;16(12):1213–20. https://doi.org/10.1038/mp.2010.102.

14. Baron-Cohen S, Tsompanidis A, Auyeung B, Nørgaard-Pedersen B, Hougaard DM, Abdallah M, Coen A, Pohl A. Foetal oestrogens and autism. Mol Psychiatry. 2020;25(11):2970–8. https://doi.org/10.1038/s41380-019-0454-9.
15. Cherskov A, Pohl A, Allison C, Zhang H, Payne RA, Baron-Cohen S. Polycystic ovary syndrome and autism: a test of the prenatal sex steroid theory. Transl Psychiatry. 2018;8:136.

Anthony R. Mawson DrPH, MA, is the president of Chalfont Research Institute, Jackson, Mississippi. He was formerly a professor of epidemiology in the School of Public Health, Jackson State University (retired), a professor of pediatrics and medicine, University of Mississippi Medical Center, and principal investigator of the National Children's Study for Mississippi.