

Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents

Annelou L.C. de Vries, MD, PhD

Sorbara et al,¹ in their report “Mental Health and Timing of Gender-Affirming Care” in this issue of *Pediatrics*, focus on the interesting matter of age of clinical presentation for gender-affirming medical interventions and its association with mental health in transgender youth. Because experiencing puberty is often stressful for gender-nonconforming youth, puberty suppression as a reversible medical intervention was introduced in clinical care in the early 2000s by Dutch clinicians Cohen-Kettenis et al.² The aim of puberty suppression was to prevent the psychological suffering stemming from undesired physical changes when puberty starts and allowing the adolescent time to make plans regarding further transition or not. Following this rationale, younger age at the time of starting medical-affirming treatment (puberty suppression or hormones) would be expected to correlate with fewer psychological difficulties related to physical changes than older individuals. Sorbara et al¹ confirmed this in their study. Adolescents presenting at younger age (<15 years) reported lower rates of self-reported diagnosed depression, self-harm, suicide thoughts or attempts, and use of psychoactive medication.

One could claim from these findings that gender-affirming medical interventions including puberty suppression should be offered at an early age (age <15 in the Sorbara study). Some caution is warranted,

however, as the authors acknowledge in their report. One reason is that, despite the increased availability of gender-affirming medical interventions for younger ages in recent years, there has not been a proportional decline in older presenting youth with gender incongruence (GI), which is the discrepancy between one’s birth-assigned sex and experienced gender identity.³ It is even the case that most transgender people still present as older adolescents, as in the study by Sorbara et al¹, or as adults.⁴ Interestingly, this older adolescent group did not only have more mental health difficulties but also a later age of onset of GI. As seen by using medical records, the older presenting youth “simply experienced gender history events at older ages” before attending the clinic.¹

According to the original Dutch protocol, one of the criteria to start puberty suppression was “a presence of gender dysphoria from early childhood on.”² Prospective follow-up studies evaluating these Dutch transgender adolescents showed improved psychological functioning.⁵ However, authors of case histories and a parent-report study warrant that gender identity development is diverse, and a new developmental pathway is proposed involving youth with postpuberty adolescent-onset transgender histories.^{6–8} These youth did not yet participate in the early evaluation studies.^{5,9} This raises the question whether the positive

Department of Child and Adolescent Psychiatry, Amsterdam University Medical Centers, Location VUMC, Amsterdam, Netherlands

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Address correspondence to Annelou L.C. de Vries, MD, PhD, Department of Child and Adolescent Psychiatry, Amsterdam University Medical Centers, Location VUmc, Room 1y130, PO Box 7057, 1007 MB, Amsterdam, Netherlands. E-mail alc.devries@amsterdamumc.nl

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outcomes of early medical interventions also apply to adolescents who more recently present in overwhelming large numbers for transgender care, including those that come at an older age, possibly without a childhood history of GI. It also asks for caution because some case histories illustrate the complexities that may be associated with later-presenting transgender adolescents and describe that some eventually detransition.^{9,10}

A study at the Amsterdam transgender clinic, one of the oldest in the world, whose researchers aimed to gain insight in the possible changes of certain key characteristics of earlier compared with recent applicants, revealed no changes in intensity of gender dysphoria, psychological functioning, and age over time between 2000 and 2016.¹¹ The only yet-unexplained observed change was a shift in sex ratio in favor of assigned female individuals. However, researchers of this time-trend study did not focus on differences between younger and older referred youth nor on the age of onset of gender nonconformity. In future, more-detailed studies like the one by Sorbara et al¹ and the time-trend study by Arnoldussen et al,¹¹ researchers should investigate whether older transgender adolescents might include individuals who experience later onset of GI, possibly postpuberty, and with more mental health challenges.

So far, researchers of the limited follow-up studies after puberty suppression show that the rate of adolescents that stop the reversible blockers is low (1.4%, 1.9%, and 3.5%).^{4,12,13} However, systematic studies on the rate of adolescents

who discontinue their transitions after they have started affirming hormones or surgeries with lasting effects are lacking at present. Given these uncertainties, providing early medical treatment to transgender adolescents remains a challenging area to work in. Prospective longer-term follow-up studies of clinical samples like the study of Sorbara et al¹ are needed to inform clinicians so that an individualized approach can be offered that differentiates who will benefit from medical gender affirmation and for whom (additional) mental health support might be more appropriate.

ABBREVIATION

GI: gender incongruence

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