



Adolescents with Gender Dysphoria: Reflections on Some Contemporary Clinical and Research Issues

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Abstract

This article provides an overview of five contemporary clinical and research issues pertaining to adolescents with a diagnosis of gender dysphoria: (1) increased referrals to specialized gender identity clinics; (2) alteration in the sex ratio; (3) suicidality; (4) “rapid-onset gender dysphoria” (ROGD) as a new developmental pathway; (5) and best practice clinical care for adolescents who may have ROGD.

Keywords Gender dysphoria · Gender identity · Rapid-onset gender dysphoria · Sex ratio · Suicidality · DSM-5

Increased Referrals of Adolescents to Specialized Gender Identity Clinics

Eleven years ago, my colleagues and I published a Letter to the Editor entitled “Is Gender Identity Disorder in Adolescents Coming Out of the Closet?” (Zucker, Bradley, Owen-Anderson, Kibblewhite, & Cantor, 2008). This rhetorical question was based on the observation that, in our clinic, there had been a sharp increase in the number of assessed adolescent patients for the years 2004–2007, compared to prior 4-year intervals going back to 1976–1979. In the Letter, we borrowed a line from the 1967 song “For What It’s Worth” by Buffalo Springfield: “There’s something happening here. What it is ain’t exactly clear.”

The increase in the number of assessed adolescent patients rose sharply for the subsequent 4-year interval (2008–2011) (Wood et al., 2013), suggesting that the prior increase was not a fluke fluctuation. Over the past several years, the increase in the number of adolescents referred to specialized gender identity clinics/programs has become an international phenomenon, observed all across North America, Europe, Scandinavia, and elsewhere (e.g., Beard, 2019; de Graaf, Giovanardi, Zitz, & Carmichael, 2018b; Frisén, Söder, & Rydelius, 2017; Kaltialo-Heino et al., in press). Beard noted that at a specialized gender identity service in Ottawa, Ontario, there were 189 referrals in

2018 compared to “one or two patients” a decade prior. de Graaf et al. reported that at the Gender Identity Development Service in London, England the number of referred adolescents in 2009 was 39 but in 2016 had risen to 1497 (see also Gilligan, 2019)! This increase in adolescent referrals has been characterized by Marchiano (2017) as an “outbreak.”

Several, likely interconnected, explanations have been offered to explain this increase: (1) the visibility given to transgender issues in print media, television, etc.; (2) the Internet, which provides innumerable sites to read about gender dysphoria and transgender care; (3) the gradual depathologization/stigma reduction with regard to gender dysphoria and a transgender identity; and (4) the availability of biomedical treatment, including hormonal delay or suppression of somatic pubertal development (de Vries, Klink, & Cohen-Kettenis, 2016). Taken together, perhaps all of these factors have made it psychologically easier to seek out mental health care by adolescents and their families (reflected in the “affirmative” care model adopted by many gender identity clinics and teams [see, e.g., Edwards-Leeper, Leibowitz, & Sangganjanavich, 2016]).

Alteration in the Sex Ratio of Adolescents with Gender Dysphoria

During the same time period in which the number of adolescents referred for gender dysphoria began to increase, there has been another development: a shift in the sex ratio from one favoring birth-assigned males to one favoring birth-assigned

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females (Aitken et al., 2015). Aitken et al. reported on the sex ratio of adolescents from two gender identity clinics: one in Toronto and the other in Amsterdam. In Toronto, the male-to-female sex ratio for the years 1999–2005 was 2.11:1, whereas for the years 2006–2013 it was 1:1.76. For these same two time periods, the male-to-female sex ratio for adolescents referred for any other reason to the same hospital-based child and youth program favored males: 2.21:1 (1999–2005) and 1.96:1 (2006–2013).¹ In Amsterdam, the male-to-female sex ratio for the years 1989–2005 was 1.41:1, whereas for the years 2006–2013 it was 1:1.72.

A subsequent meta-analysis by Zucker and Aitken (2019) has shown that this altered sex ratio cuts across many other clinic-referred samples, suggesting strong generalizability (cf. Ashley, 2019; Zucker, VanderLaan, & Aitken, 2019). In some clinics, the male-to-female sex ratio is remarkably skewed in favor of females (e.g., Hamburg, Germany: 1:4.29 [Levitan, Barkmann, Richter-Appelt, Schulte-Markwort, & Becker-Hebly, 2019]; Helsinki, Finland: 1:6.83 [Sumia, Lindberg, Työläjärvi, & Kaltiala-Heino, 2017]). The sex ratio favoring females is even stronger when youth who self-identify as transgender, gender queer, or other alternative gender identity labels that depart from the binary are recruited from (non-representative) community samples. For example, in the U.S., the Human Rights Campaign (2018) LGBTQ report sampled adolescents between the ages of 13–17 years. Of those who self-identified as transgender ($N = 1589$), the male-to-female sex ratio was 1:7.58; of those who self-identified as non-binary ($N = 4048$), the male-to-female sex ratio was 1:7.52 (R. J. Watson, personal communication, May 22, 2018). However, the female-biased sex ratio is much less skewed in representative samples of high school students who self-identify as transgender or with some other gender-variant identity label. For example, Eisenberg et al. (2017) found a male-to-female sex ratio of 1:2.13 among Grade 9 and 11 students ($N = 2141$) in Minnesota and Kaltiala-Heino and Lindberg (2019) found a male-to-female sex ratio of 1:2.09 among high school students in Finland ($N = 781$).

How might we understand this shift in the sex ratio? To some extent, the answer to this question depends on what is known about the “true prevalence” of gender dysphoria, taking into account natal sex. Unfortunately, there are really no good epidemiological studies on the prevalence of a DSM-based diagnosis of gender dysphoria among adolescents (or its predecessor diagnostic label, gender identity disorder) (Zucker, 2017). The few new representative samples of high school students who self-identify as transgender or who adopt some other alternative

gender identity label to the binary suggest a higher prevalence in birth-assigned females, but it is very likely that not all of these youth would meet formal diagnostic criteria for gender dysphoria. Thus, one needs to be cautious in assuming that the true prevalence of gender dysphoria favors birth-assigned females or if there are social factors that might account for the disparity. One possibility pertains to stigma. For example, perhaps behavioral masculinity (or behavioral “androgyny”) in birth-assigned females is subject to less social ostracism than behavioral femininity in birth-assigned males. If this conjecture is correct, then perhaps fewer birth-assigned males feel comfortable coming out as transgender and, therefore, are less likely to present at specialized gender identity clinics. It is conceivable, therefore, that, with further destigmatization, it will become easier for birth-assigned males to “come out” as transgender and the sex ratio will move closer to parity. Another possibility is related to the observation that gender-variant/gender nonconforming behavior is more common in birth-assigned females than in birth-assigned males (from childhood onwards). If this is, in fact, the case, then it would imply that there would be a greater percentage of birth-assigned females at the “gender-atypical” side of the bell curve. In the contemporary era of increased destigmatization, perhaps more of these females are self-identifying as transgender or some other gender-variant self-identity and, as a result, more are presenting at specialized gender identity clinics.

Mental Health in Adolescents with Gender Dysphoria: The Suicidality Discourse

Based on a variety of measurement approaches (e.g., standardized parent or self-report questionnaires, structured psychiatric diagnostic interview schedules, etc.), it has been found that adolescents referred for gender dysphoria have, on average, more behavioral and emotional problems than non-referred adolescents, but are more similar than different when compared to adolescents referred for other mental health concerns (e.g., Becerra-Culqui et al., 2018; Chiniara, Bonifacio, & Palmert, 2018; Connolly, Zervos, Barone, Johnson, & Joseph, 2016; de Graaf et al., 2018a; de Vries, Doreleijers, Steensma, & Cohen-Kettenis, 2011; de Vries, Noens, Cohen-Kettenis, van Berckelaer-Onnes, & Doreleijers, 2010; de Vries, Steensma, Cohen-Kettenis, VanderLaan, & Zucker, 2016; Fisher et al., 2017; Kuper, Mathews, & Lau, 2019; Shiffman et al., 2016; Steensma et al., 2014; van der Miesen, de Vries, Steensma, & Hartman, 2018; Zucker et al., 2012; for reviews, see Russell & Fish, 2016; Spivey & Edwards-Leeper, 2019; Zucker, Wood, & VanderLaan, 2014).

There are several ways to conceptualize the elevated rate of co-occurring mental health issues among adolescents with gender dysphoria. In some instances, it may be that the gender dysphoria has emerged as secondary to another, more

¹ Aitken et al. (2015) also reported on the sex ratio of adolescents seen in the Toronto clinic between 1976 and 1998, where the male-to-female sex ratio was 1.51:1 (but corresponding clinical control data were not available).

“primary” mental health diagnosis, such as autism spectrum disorder or borderline personality disorder, or as a result of a severe trauma (e.g., sexual abuse). Another explanation is that gender dysphoria is inherently distressing, i.e., the marked incongruence between one’s felt gender and somatic sex—even within psychosocial milieus that are largely “affirming/supportive”—which leads to clinically significant symptoms such as anxiety or depression. A more common explanation (and one that is often favored by “gender-affirming” clinicians and theorists) is that the co-occurring mental health issues are simply secondary to factors such as family rejection or social ostracism within the peer group vis-à-vis the gender dysphoria (see, e.g., Grossman, Park, & Russell, 2016; Janssen & Leibowitz, 2018; McDermott, Hughes, & Rawlings, 2017).

In this broader context of co-occurring mental health issues, concern about suicide risk has become a topic of intense focus in recent years (see, e.g., Tanis, 2016). On the Internet, for example, one might come across the comment made by some parents “I would rather have a trans kid than a dead kid” (see, e.g., Biggs, 2018; Digitale, 2017; “I’d Rather Have a Living Son Than a Dead Daughter,” 2016) and instances of completed suicide receive intense media scrutiny (e.g., Bever, 2016; Savva & Small, 2019). Indeed, Karasic and Ehrensaft (2015) asserted that completed suicides are “alarmingly high”—a statement which, in my view, has no formal and systematic empirical basis. In fact, I would argue that the statement itself is alarming.

So, what do we know about suicidality among adolescents with gender dysphoria? In addition to the case report literature (e.g., Acosta, Qayyum, Turban, & van Schalkwyk, 2019; Alastanos & Mullen, 2017; Rice et al., 2016), a number of studies from specialty gender identity clinics have reported on the percentage of adolescents with gender dysphoria with a history of suicidal ideation and/or self-harm and suicide attempts. These studies have relied on clinical chart information, parent’s report or self-report. For example, in one clinical chart study ($N=69$), Di Ceglie, Freedman, McPherson, and Richardson (2002) found a history of self-harm and self-injurious behavior in 23% and 22% of the adolescents, respectively. Subsequent studies have also provided descriptive data on the percentage of patients where suicidality (thoughts and behaviors) has been endorsed, with sample sizes ranging from 34 to 203 (Becker, Gjergji-Lama, Romer, & Möller, 2014; Holt, Skagerberg, & Dunsford, 2016; Kaltiala-Heino, Sumia, Työljärvi, & Lindberg, 2015; Khatchadourian, Amed, & Metzger, 2014; Olson, Schrager, Belzer, Simons, & Clark, 2015; Peterson, Matthews, Copps-Smith, & Conrad, 2017; Skagerberg, Parkinson, & Carmichael, 2013; see also Mann, Taylor, Wren, & de Graaf, 2019). Not surprisingly, it is almost always the case that there were higher rates for suicidal ideation than for self-harm and/or suicide attempts. There is also a literature on suicidality among non-clinic-based samples of adolescents with gender dysphoria or who self-identify as transgender (e.g., Butler et al., 2019; Johns et al., 2019; Katz-Wise, Ehrensaft, Vettters, Forcier, &

Austin, 2018; Kidd, Gaetz, & O’Grady, 2017; Perez-Brumer, Day, Russell, & Hatzenbuehler, 2017; Toomey, Syvertsen, & Shramko, 2018; Veale, Watson, Peter, & Saewyc, 2017). These studies also report what would appear to be high rates of suicidal ideation and of self-harm or suicide attempts.

Apart from measurement issues (most of these studies used fairly crude metrics of suicidality), there are at least two other methodological issues that deserve some reflection. First, in general, the clinic-based samples did not employ any type of comparison group, such as a group of adolescents referred for any other type of mental health concern or even a non-referred comparison group. Second, in the non-clinic-based samples, when a comparison group was used, it was limited to “cisgender” adolescents, but without taking into account the mental health status of these youth. For example, Perez-Brumer et al. (2017) reported that the past 12-month rate of self-reported suicidal ideation among transgender adolescents was 33.73% ($N=280$) compared to 18.85% of non-transgender adolescents ($N=25,213$) (see Perez-Brumer et al.’s Table 1 for their weighted subsample data). Toomey et al. (2018) reported a very high rate of self-reported lifetime suicide attempts among transgender birth-assigned females (50.8%) compared, for example, to a 17.6% rate among cisgender birth-assigned females. If one wanted to make the argument that at least some of the transgender students would meet the criteria for a mental health diagnosis of gender dysphoria, then one would want to make a comparison with the cisgender or non-transgender students who also had one mental health diagnosis (say, for example, anxiety or depression). This would allow for a more nuanced comparative analysis to see whether or not suicidality is higher, similar, or lower among adolescents with gender dysphoria when compared to some type of clinical comparison group.

de Graaf et al. (2019) measured suicidal ideation and self-harm/suicide attempts using two items from the Child Behavior Checklist (CBCL) or the Youth Self-Report Form (YSR) (Item 91: “Talks about killing self”; Item 18: “Deliberately harms self or attempts suicide”). Both items were rated on a 0–2-point scale (“Not true,” “Somewhat or sometimes true,” “Very true”), with the time frame “now or within the past 6 months.” The sample consisted of adolescents referred for gender dysphoria from three clinics: Toronto, Amsterdam, and London (total $N=2065$). In addition to between-clinic comparisons, the percentage of adolescents in which these two items were endorsed was compared with the CBCL/YSR referred and non-referred U.S. standardization samples (Achenbach & Rescorla, 2001).

Although there was, at times, significant between-clinic variation in the percentage of adolescents for whom these two items were rated as either a 1 or a 2, the key point that I wish to make here is that the rate of suicidality was, in general, much more similar to that of the referred adolescents than to the non-referred adolescents from the CBCL/YSR standardization samples. For example, on CBCL Item 91 for birth-assigned females

from the three gender identity clinics, the percentages were as follows: Toronto (32.5%), Amsterdam (26.9%), and London (33.3%). The corresponding percentages from the standardization samples were: referred (34.9%) and non-referred (2.7%). Thus, it was very clear that on the CBCL/YSR, adolescents referred for gender dysphoria show higher rates of suicidality when compared to non-referred adolescents, but are much more similar to referred adolescents (presumably, the vast majority were cisgender) in general. In multiple regression analysis, the strongest predictor of a composite sum score of the two suicidality metrics was the number of other behavioral and emotional problems rated as a 1 or a 2 on the CBCL or YSR. Thus, one could argue that the presence of suicidal ideation or behavior among adolescents with gender dysphoria should contextualize an understanding of it in relation to broader mental health issues that these youth may be struggling with.

The risk of suicidality is obviously not unique to adolescents with gender dysphoria but is a risk among referred adolescents in general. Thus, it is likely the case that both groups share certain factors that make them vulnerable to suicidal feelings and behavior. For example, in the Perez-Brumer et al. (2017) study, self-reported depression over the past 12 months and self-reported school-based “victimization” experiences (of various types) increased the odds of suicidal ideation in both the transgender students and the non-transgender students. However, I would not want to make the argument that the pathways that lead to suicidality are fully identical in both groups of students. In this regard, the concept of equifinality should be considered (Cicchetti & Rogosch, 1996), i.e., that there are several pathways leading to the same outcome, and some of these pathways may be unique to adolescents with gender dysphoria.

From a treatment perspective, therefore, one can consider both non-specific and specific factors that might reduce the risk of suicidality. Regarding the latter, for example, it has been argued that (perceived) social support of an adolescent’s transgender identity reduces the risk of suicidality (Bauer, Scheim, Pyne, Travers, & Hammond, 2015). In another community-based study, it was found that the number of social settings in which adolescents felt comfortable in using their preferred name was associated with less suicidal ideation and behavior (Russell, Pollitt, Li, & Grossman, 2018). Lastly, in a clinic-based study, Allen, Watson, Egan, and Moser (2019) reported that commencement of “gender-affirming” hormonal treatment was related to a decrease in self-reported suicidal feelings.

“Rapid-Onset” Gender Dysphoria: A New Developmental Pathway?

It has long been known that there are at least two developmental pathways that lead to gender dysphoria. In early-onset gender dysphoria, the signs and symptoms are apparent from an early

age (e.g., the preschool years, if not even a bit earlier). In late-onset gender dysphoria, the signs and symptoms do not appear until puberty, if not later. Early-onset gender dysphoria occurs in both birth-assigned males and birth-assigned females and is strongly associated with a same-sex sexual orientation (androphilia in birth-assigned males and gynephilia in birth-assigned females). In the older clinical literature, late-onset gender dysphoria was delimited to birth-assigned males, in association with transvestic fetishism and/or autogynephilia (Blanchard, 1991, 1993; Lawrence, 2010, 2017). Since the 1990s, however, there have been more reports of birth-assigned female adults who appear to have the late-onset form of gender dysphoria and, among this subgroup, an androphilic sexual orientation is not uncommon (see Lawrence, 2010); however, to my knowledge, there is little indication that this subgroup shows signs of transvestic fetishism or the mirror image of autogynephilia, namely, autoandrophilia. Moreover, I would argue that, in a comparative perspective, late-onset gender dysphoria continues to be much more common in birth-assigned males than in birth-assigned females. In the older clinical literature on adults, there was more hesitancy in recommending gender-affirming treatments for late-onset patients, particularly gender-affirming surgery, but this is much less the case nowadays although there is still some caution (for a reflective consideration, see, e.g., Seveler & Meyer-Bahlburg, 2019).

Over the past dozen or so years, it is my view (and that of others) that a new subgroup of adolescents with gender dysphoria has appeared on the clinical scene. This subgroup appears to be comprised—at least so far—of a disproportionate percentage of birth-assigned females who do not have a history of gender dysphoria in childhood or even evidence of marked gender-variant or gender nonconforming behavior. As noted by Littman (2018), a push to start thinking about these adolescents has come from online discussion groups formed by parents, such as the U.S.-based listserve 4thwavenow (<https://4thwavenow.com>). Because many of these parents were of the view that their adolescent child’s gender dysphoria appeared “out-of-the-blue,” it has been given the provisional label of “rapid-onset gender dysphoria” (ROGD).

To my knowledge, only the study by Littman (2018) has, to date, attempted to examine this putatively new phenomenon in a systematic manner. Littman’s online study recruited 256 parents (82.8% were parents of birth-assigned females) by advertising on three websites where parents had reported ROGD. Littman identified several factors that were deemed to be associated with ROGD, including “clusters” of gender dysphoria within a group of peers and intense immersion in social media pertaining to what could be called transgender subculture (which Littman characterized as “social and peer contagion”), a high rate of mental health diagnoses and various psychosocial stressors that preceded the onset of gender dysphoria, and a worsening of psychosocial functioning and parent–child relationships after “coming out” as transgender. From Littman’s (2018) Table 2,

it appears that the sexual orientation of these youth is much more variable if one compared the percentage with the sexual orientation of early-onset youth with gender dysphoria.

The response to Littman's (2018) study has been quite intense, including considerable media attention, both within and outside the scientific community (Wadman, 2018). In Google, the search term "rapid onset gender dysphoria" yielded a mere 310,000 "results" (on June 26, 2019). On the one hand, parents of these adolescents have felt "validated" in the sense that their personal observations and experiences have led to an initial empirical study and some clinicians have welcomed the discourse, as Littman's study is consistent with their own clinical observations (e.g., Hutchinson, Midgen, & Spiliadis, 2019). On the other hand, it has elicited methodological critique (e.g., Restar, 2019) and charges of "bad science" (Ashley & Baril, 2018) (for a summary, see https://en.wikipedia.org/wiki/Rapid_onset_gender_dysphoria_controversy). One well-known clinician in the specialty world of gender dysphoria even went so far as to criticize the method of sampling in Littman's study as akin to "...recruiting from Klan or alt-right sites to demonstrate that blacks really are an inferior race" ("Why Are So Many Teenage Girls Appearing in Gender Clinics?", 2018). Complaints to the journal where the paper was published led to a request that Littman modify some of the interpretations of the data, in the form of a "corrected" version (Littman, 2019). Moreover, one Editor of the journal issued an apology "...to the trans and gender variant community for oversights that occurred during the original assessment of the study" (Heber, 2019) and an invited commentary (post-peer review) was published (Brandelli Costa, 2019). One could say, therefore, that the paper has indeed had an impact.

In my view, there are at least three distinct issues that ROGD raise: First, is this really a new clinical phenomenon? Second, if it is, how do we understand it? Third, as a new clinical phenomenon, does it call for revisions to what are considered best practice therapeutics for adolescents with gender dysphoria?

With regard to the first question, it is my view that this is a new clinical phenomenon. I was seeing such adolescents in the mid-2000s in Toronto (I just didn't have a label for them) and, at present, they comprise the majority of my private practice adolescent patients. (Of course, I make no claim that my clients are representative of the adolescent population with gender dysphoria in general.) In moving forward, what I believe needs to be done is to try and replicate Littman's observations by documenting, using multiple informants and multiple methods, the core clinical phenomenology. It is not entirely clear to me why some clinician and "armchair" critics have been so skeptical about the possible veridicality of ROGD. Perhaps because Littman (2018) advanced a set of hypotheses about predisposing psychosocial factors in its genesis, the objection is that this disrupts an essentialist model of gender dysphoria and, therefore, has therapeutic implications.

The second question, in my view, is much more complex since it requires an answer about causal mechanisms, which is a formidable task. At the very least, it should be possible to study correlates of ROGD and see how these correlates are similar to, or different from, what one might find in early-onset gender dysphoria. Littman argued for the influence of peers and social media in inducing gender dysphoria in these adolescents, but it is far from clear why these adolescents are so "susceptible" to such influences. For example, is it possible that these adolescents are struggling with identity formation in general and are searching for a social environment/milieu in which they feel supported and accepted? In other times in the postmodern West, would such adolescents have found a different subcultural space in which they felt such support? Littman also argued for generic mental health vulnerabilities in these adolescents that preceded the development of ROGD, but this strikes me as too non-specific. There would be many young adolescents with the same types of mental health vulnerabilities who do not develop ROGD. With regard to the third question, I discuss this in the next section.

Best Practice: Sites of Debates

Since the mid-1990s, one model of therapeutic care, developed by Dutch clinicians and researchers, has been to initiate the biomedical aspects of sex/gender transition in early to mid-adolescence, rather than waiting for the legal age of adulthood. Adolescents deemed appropriate for such treatment are prescribed hormonal medication (GnRH agonists) to delay or suppress somatic puberty (prior to the age of 16 years). If the gender dysphoria persists, then "gender-affirming" hormonal therapy is offered at the age of 16 years, and, if the adolescent so desires, "gender-affirming" surgical sex change procedures are offered at a lower bound age of 18 years (Cohen-Kettenis, Steensma, & de Vries, 2011; Zucker et al., 2011). One might note, however, that these are only suggested guidelines and it is well known that some (many?) clinicians endorse these procedures at younger ages (e.g., Milrod, 2014; Milrod & Karasic, 2017; Olson-Kennedy, Warus, Okonta, Belzer, & Clark, 2018). Hembree et al. (2017) noted, for example, "that there may be compelling reasons to initiate sex hormone treatment prior to the age of 16 years...even though there are minimal published studies of gender-affirming hormone treatments before age 13.5–14 years" (p. 3871). Similarly, Hembree et al. noted that "There is insufficient evidence to recommend a specific age requirement..." (p. 3872) for breast surgery in birth-assigned females with gender dysphoria.

The rationale for this treatment protocol included the following assumptions: (1) for most adolescents, there is little systematic empirical evidence that psychological interventions can resolve the gender dysphoria, even if the adolescent

desires it; (2) the use of puberty blockers can be helpful to the adolescent because it reduces the incongruence between the development of natal sex secondary physical characteristics and the felt psychological gender; and (3) reduction in the incongruence makes it easier for adolescents to present socially in the cross-gender identity/role. Because the suppression of the patient's biological puberty is said to reduce the preoccupation with it, it has been argued that this affords the adolescent greater opportunity to explore their longer-term gender identity options in psychosocial counseling or psychotherapy in a more reflective and less pressured manner (see, e.g., Costa et al., 2015).

In the Dutch model, several factors were identified in deeming adolescent eligibility for early biomedical treatment. According to Cohen-Kettenis, Delemarre-van de Waal, and Gooren (2008), these included the following: (1) the presence of gender dysphoria from early childhood on; (2) an exacerbation of the gender dysphoria after the first signs of puberty; (3) the absence of psychiatric comorbidity that would interfere with a diagnostic evaluation or treatment; (4) adequate psychological and social support during treatment; and (5) a demonstration of knowledge of the sex/gender reassignment process.

Several studies have reported on the benefits of this therapeutic protocol in reducing gender dysphoria (e.g., de Vries et al., 2014, which is the best study to date). Of course, one should bear in mind some of the limitation to these outcome studies, including the fact that not all assessed adolescents were deemed eligible for the treatment protocol (and thus we know relatively little about the longer-term outcomes of these youth) and that study designs have not included alternative treatment options (such as psychosocial therapy) or even being assigned to a wait-list control condition; however, it is beyond the scope of this article to discuss these methodological issues in their own right. I do, however, want to discuss them in the context of best practice care for adolescents with ROGD.

If these adolescents truly did not have gender dysphoria in childhood, note that, as a result, they would not meet one of the eligibility criteria originally formulated by the Dutch team. An unknown percentage of parents of adolescents with ROGD are skeptical that biomedical treatment is the best way to address their child's gender dysphoria; indeed, many of them oppose it. Hence, this would seem to go against another eligibility criterion, namely, adequate psychological and social support during treatment. (On this point, there is, of course, contemporary discussion about the "need" for parental consent in instituting this type of treatment [see, e.g., Priest, 2019]).

Because ROGD appears to be a new clinical phenomenon, we know very little about its subsequent developmental course, i.e., its "natural history." For example, we know very little about rates of persistence versus desistance, which, in

my view, is a critical issue in thinking about the applicability of the Dutch model with regard to the therapeutic care of these youth. At present, there are some compelling examples of desistance or even "detransition," but right now this is largely in the form of individual testimony and parent's report (see, e.g., "It's not conversion therapy to learn to love your body: A teen desister tells her story," 2017; Pique Resilience Project at <https://www.piqueresproject.com/>; Rae, 2017; Williams, 2019). Thus, we urgently need systematic data on this point in order to inform best practice clinical care.

In the absence of such data, what should the frontline clinician do? On this point, my hunch is that there will be a variety of perspectives. For example, one might argue in favor of gender social transition and hormonal suppression along with a course of psychosocial therapy in which the stability of the patient's gender identity can be explored, just as it is in the case of treatment for early-onset gender dysphoria. If the gender dysphoria remits, the gender social transition and hormonal suppression can simply be stopped, as both are fully reversible. Regarding the latter, I mean this in regard to the re-institution of parameters such as the menstrual cycle in birth-assigned females or in physical virilization in birth-assigned males. It is less clear to what extent hormonal suppression has completely reversible effects with regard to sex-dimorphic neural regions of interest and correlated behavioral parameters (see, e.g., Hoekzema et al., 2015; Schneider et al., 2017; Staphorsius et al., 2015).

Alternatively, one might make the case that since we know so little about ROGD that there should be a period of "watchful waiting" or exploratory psychotherapy, i.e., without biomedical treatment, but, perhaps, with the recommendation that the youth consider living in the felt gender role in order to see whether this confers any reduction in the gender dysphoria and the associated distress. On this point, one could take "advantage" of the very long waiting lists for an initial assessment in some of the major gender identity clinics in North America and Europe. These very long waiting lists essentially nullify the idea that hormonal suppression can be used to give adolescents "time and space" to continue to explore their gender identity. Suppose, for example, an adolescent had to wait for a year, if not longer, to be seen for a baseline assessment. (Thus, they already have had time and space to continue to think about their gender identity, albeit without hormonal suppression and probably without ongoing psychosocial therapeutic support.) If one collected baseline data at the time of referral, and not the time of assessment, one could argue that if the adolescent continued to experience gender dysphoria after sitting on a waiting list for a long time, this would, perhaps, be an argument for the institution of hormonal suppression. For those adolescents who, while on a wait-list, remitted with regard to their gender dysphoria, it is likely that they would not choose to even be seen for an assessment. Thus, one could use long wait-list times as a

type of control as a partial way to evaluate the stability of the gender dysphoria.

Lastly, one could consider recommending exploratory psychosocial treatment without social transition and hormonal suppression, particularly if the case formulation is that the gender dysphoria has emerged in the context of other psychosocial factors or as a result of other mental health issues. Given the substantial uncertainties about best practice care for these youth, the frontline clinician will have to weigh carefully the benefits and risks of various treatment options and proceed with caution.

Compliance with Ethical Standards

Conflict of interest The author declares that he has no conflict of interest. This article for the Special Section was handled by the Guest Editor, Heino F. L. Meyer-Bahlburg.

Ethical Approval This article does not contain any studies with human participants performed by the author.

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