How to Provide the Best Care for Young People with Gender Dysphoria

Patrik Vankrunkelsven [a], Kristina Casteels [b,c], Jens De Vleminck [d,e]

[a] Belgisch Centrum voor Evidence-Based Medicine, Leuven, Belgium
[b] Department of Pediatrics, University Hospitals Leuven, Leuven, Belgium
[c] Department of Development and Regeneration, KU Leuven, Leuven, Belgium
[d] University Psychiatric Centre, Child an adolescent Psychiatry, KU Leuven, Leuven, Belgium
[e] Husserls-Archives: Centre for Phenomenology and Continental Philosophy, KU Leuven, Leuven, Belgium

Patrik.Vankrunkelsven@kuleuven.be

Keywords
Gender dysphoria ; puberty.

Abstract
In a recent report pediatrician Hilary Cass (UK) makes recommendations on high standard care for children and young adolescents experiencing gender dysphoria; care, that meets their needs, is safe, holistic and effective. This report fuels the polarized debate on the moment that throughout the Western world, there has been a very significant increase of children with gender dysphoria. This group is characterized by a predominance of natal girls with late onset gender dysphoria who have frequently additional mental health problems. These children are often treated in gender clinics according to the Dutch Protocol which implies administration of puberty blockers, administration of cross-sex hormones, followed by surgical procedures, including genital reassignment.

In this manuscript we describe concerns about the scientific basis of the Dutch Protocol. The argument that gender-affirming care improves the well-being of transgender and reduces suicide risks is not supported by sufficient empirical support. Two systematic reviews have shown that the evidence for the benefits of hormone interventions on the mental health of minors is very weak while the use of pubertal suppression seems to be a one way ticket towards transition: more than 95% of those who started puberty suppression continue with gender-affirming treatment. Although the effectiveness of puberty blockers is not endorsed by evidence there are significant risks, such as infertility, lifelong drug dependence, reduced bone density, reduced sexual function. The authors of this manuscript plaid for a first-line intervention that is supportive, non-judgmental and based on exploratory psychotherapy by an independent psychotherapist outside a gender clinic.

Introduction

Recently, significant attention has been directed towards improving care for children with gender issues. The final report by dr Hilary Cass (the Cass Interim Report resulted in the closure of the UK's largest gender clinic in 2022) plays a crucial role in these discussions. It is essential to critically examine this report in the Belgian context.

The term 'transgender' refers to a person whose sex assigned at birth (usually based on external genitalia) does not correspond with their gender identity (the gender that a person feels to belong to). People who are transgender may experience gender dysphoria, implying a strong sense of dissatisfaction with one's sex assigned at birth, often corresponding with higher rates of depression, anxiety and suicidal ideation (1).

There are few areas of healthcare where professionals are so afraid to openly discuss their views. Polarization and suppression of debate however do not help the young people facing these problems nor their parents or caregivers. In the long run, this polarization will inhibit the critical research needed to find the best approach for these young people.

Evolution in cohort characteristics

Throughout the Western world, there has been a very significant increase of children with gender dysphoria. In the UK, the number of referrals grew from a few dozen in 2009 to 5000 in 2021 (2). The same phenomenon has been observed in many other countries, including Sweden and Spain, where applications have augmented exponentially since 2014. Whereas previously mainly natal boys reported with gender dysphoria in childhood ('childhood onset' or 'early onset'), today 2 to 3 times more natal girls are reported. These girls report later ('adolescent onset' or 'late onset'), often during puberty and often with additional psychological problems (2). Among referrals there is a greater complexity of presentation with high levels of neurodiversity and/or co-occurring mental health issues and a higher prevalence than in the general population of adverse childhood experiences and looked after children. Also in Belgium, the demand for gender dysphoria treatment is increasing, resulting in longer waiting lists, and there are plans to expand the current pediatric gender clinics (Ghent and Liège)

The Dutch Protocol

In these gender clinics, children and adolescents are frequently treated according to the Dutch Protocol, which was first described in two studies by the VU Amsterdam (3, 4). The Standards of Care of the World Professional Association for Transgender Health (WPATH), serving as the primary guideline in most Western countries, largely adopts this protocol (5).

The *Dutch protocol* includes three phases of medical transition following psychological assessment: (i) administration of puberty blockers, usually from the onset of puberty, (ii) administration of cross-sex hormones, followed by (iii) surgical procedures, including breast removal (from age 16) and genital reassignment (from age 18).

With both the sharp increase in the number of patients undergoing medical transition and its changing population, concerns about the scientific basis of the *Dutch Protocol* have increased. Treatment according to this protocol is based on research involving a very small number of patients. All these patients reported gender dysphoria which developed in childhood, usually without known psychiatric problems (6). The studies were conducted without a control group and with a short follow-up. Methodological objections have already been raised and more and more scientists consider this basis far too narrow to be considered *evidence-based* (7-9).

This is reflected in a changing approach to the problem in many countries: where the *Dutch protocol* was initially emulated, other choices are now being made. The United Kingdom, Finland, Sweden and Denmark are reforming their transgender care with respect to its pharmacological and surgical interventions (2, 10-13). The administration of puberty blockers is highly restricted e.g. to the original target group of the Dutch Protocol, namely children with childhood-onset gender dysphoria persisting into puberty. Additionally, such administration only takes place in study settings. For adolescents, the first-line intervention consists of the treatment of (additional) psychological problems and exploratory psychotherapy. In fact, on average this group is characterized by many more additional mental health problems or personality disorders, such as autism (2, 14, 15). It is possible that their identification as a trans person is partly due to the impact of social media and peer influence, and regret is more common after medical transition (15-20). Studies should first clarify the extent to which gender dysphoria resolves spontaneously in adolescents not displaying gender incongruent behavior in childhood (15).

In countries, such as France, Norway, Australia and New Zealand, professional organizations and health institutes advocate the same caution with an emphasis on psychological care (21-23). Research in the Netherlands and the UK shows that more than 95% of those who start puberty inhibition continue with gender-affirming treatments (24, 25). However, when adolescents with gender dysphoria go through the natural changes of puberty, only a small 15% will continue to experience gender dysphoria. There are 11 known prospective studies in which a total of 385 children with gender dysphoria went through puberty without hormone treatment (26-36). From this group, 329 (85.5%) had come to terms with their birth sex by the end of puberty (they are known as desisters). In contrast, 56 (14.5%) suffered from persistent gender dysphoria *(persisters),* with a variation ranging from 2% to 27% between studies. These figures indicate that both the early life period (from prenatal development to age three) and puberty are crucial for gender development, with puberty playing a pivotal role in its completion. The importance of sex hormones in gender differentiation, with respect to stimulating both sexual interest and activity and the development of other gender-specific traits, is confirmed by other studies (37-40). A qualitative study of Steensma et al. shows that twists during puberty such as physical changes (e.g. breast development), changing interests, friendships, first crushes, emerging sexuality and budding fantasies are determinants in this regard. Steensma additionally found a high percentage of homosexuals among these individuals with gender dysphoria, as shown in older prospective quantitative studies (41). The reprograming of the brain during puberty is hormonally determined rather than age dependent (42-44). The differentiating effect of pubertal hormones on the brain is also confirmed by MRI studies (45-49).

Scientific concerns

In Belgium, there's an ongoing debate, but no steps have yet been taken to adapt the policy. Moreover, triptorelin (Decapeptyl®), a puberty-inhibiting hormone equivalent, has recently become freely available in Belgium, but, although on medical prescription, without any specific prior examination or certification. This situation necessitates a thorough discussion of the arguments both for and against this practice. An important reason for administering puberty blockers to children with gender dysphoria is to prevent the development of secondary sexual characteristics (e.g. voice change, hair growth, breast development), thereby improving the external outcome of a later medical transition. Furthermore, advocates argue that gender-affirming care improves the well-being of transgender and gender-diverse people and reduces suicide risks. However, there is insufficient empirical support for this argument. Hitherto, two systematic reviews have shown that the evidence for the benefits of hormone interventions on the mental health of minors is very weak (2, 50). Neither is there scientific evidence that hormone interventions are an effective way of preventing suicide. Furthermore the claim that puberty inhibition is a pause button that puts puberty 'on hold', allowing time for 'further exploration' is not supported by evidence. Instead, the use of pubertal suppression seems to be a one way ticket towards transition. In the Netherlands, for example, 96.5% of those who started puberty suppression continue with gender-affirming treatment (24). Also in Belgium, most children who start puberty blockers go on to transition. It is possible that young people have stopped exploring other options, viewing pubertal suppression as the initial step in their transition (51-53). The British pediatrician Hillary Cass suggests that there is a real possibility that puberty blockers may be 'locking' adolescents into a medical trajectory by stopping normal psychosocial and psychosexual development at puberty (2).

Apart from the merely hypothetical and empirically unconfirmed advantages, there are significant risks associated with the use of puberty blockers, such as infertility, lifelong drug dependence, reduced bone density, reduced sexual function, more difficult genital surgery due to underdeveloped genitals, and distress due to regret (2, 7, 8, 54).

In summary, the situation is critical: an exponentially increasing number of minors are considering medical transition, despite the lack of compelling evidence that it will improve their lives.

The concern *about this questionable treatment does not imply that healthcare providers should not treat these patients*. Gender dysphoria is accompanied by, or is part of, psychological suffering and emotional distress. For this reason, an increasing number of European countries and international professional organizations recommend care based on several key principles (10-12, 23):

- Care is focused on the individual needs of the patient
- Care is supportive, ethical and non-judgmental
- A comprehensive multidisciplinary assessment is essential, fully exploring the patient's gender identity, together with both the personal and family context and history in which it has developed. In adolescence, specific clarification is needed whether or not a particular gender identity crisis is a

temporary expression of an underlying treatable psychiatric comorbidity that is not uncommon at this developmental age.

- In order to maximize positive mental health outcomes ongoing psychosocial support should be offered to adolescents and their families.
- Especially in case of 'late onset' gender dysphoria, psychotherapeutic treatment with an independent psychotherapist outside a gender clinic is preferable.
- Instead of focusing on whether or not gender should be changed, one should provide room for experimentation within the (temporary) gender-fluid context.
- If after very thorough consideration and in specific situations hormonal intervention is deemed necessary, it should be administered in a research setting.
- In order to move towards an evidence-based care model, sufficient resources for both scientific research and appropriate care are needed.

These principles should encourage governments, medical associations and treatment teams to align their policies, recommendations or actions with the best available evidence.

The authors have no conflicts of interest to declare with regard to the topic discussed in this manuscript.

The authors have published an article on the same topic in the Tijdschrift voor Geneeskunde en Gezondheidszorg (TvGG 2024;80:431-436) and are publishing this more detailed version in the Belg. J. Paediatrics with permission of the editors of the TvGG.

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