ADOLESCENTS AND BODY MODIFICATION FOR GENDER IDENTITY EXPRESSION

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ABSTRACT

As a matter of ethics and law, adults enjoy wide berth in securing hormonal and surgical interventions to align their bodies with their desired gender appearance. In contrast, the exercise of choice by minors is more constrained, because they can be less well situated to grasp the nature and consequences of interventions having life-long effects. Even so, some minors hope for body modifications prior to adulthood. Starting very young, some minors may assert atypical gender identity: those with female-typical bodies assert a male identity and those with male-typical bodies assert a female identity. This assertion of identity is atypical only in a descriptive sense, because it is uncharacteristic, not because it is normatively unacceptable. Not all minors persist in their atypical gender identities, but some do. For those who do, it is desirable to minimize unwanted secondary sex characteristics and to maximize desired secondary sex characteristics. I outline here a theory of respect for decisions by minors in regard to hormonal and surgical interventions that help align their bodies with their gender identity. Of particular ethical interest here are body modifications for fertility preservation since certain interventions in the body can leave people unable to have genetically related children. In general, I will show that the degree of respect owed to minors in regard to body modifications for gender identity expression should be scaled according to their decision-making capacities, in the context of robust practices of informed consent.

KEYWORDS: adolescents, body modification, ethics, gender dysphoria, transgender

I. INTRODUCTION

Some children and adolescents with anatomically male-typical bodies express a female gender identity, and some children with anatomically female-typical bodies express a male gender identity. This phenomenon has been called various names: gender identity disorder, cross sex identity, transgenderism, and gender atypical identity organization among them. I will use the term ‘atypical gender identity’ in this discussion only.
to indicate that this assertion of gender is statistically atypical since most people with male-typical body traits exhibit a male gender identity and that most people with female-typical body traits exhibit a female gender identity. This is to use the term atypical in a purely descriptive way, not in any normative way of how gender identities should be expressed in relation to bodies. People who assert gender-queer or non-binary identities are also only atypical in this way. In contrast to this kind of atypicality, let me note, it is entirely species-typical that some people with male-typical body traits exhibit female gender identities and some people with female-typical body traits exhibit male gender identities.

The past is rich with examples of parents, clinicians, and educators attempting to conform gender atypical children to expected gender identities and roles, based on judgments about what is expected of people with a particular anatomy. In a sense, efforts to ensure gender conformity are entirely unnecessary if one accepts the view that gender identity does not bifurcate into male and female according to anatomical criteria. That is, we might understand gender identity as inherently variable such that one does not need male-typical anatomy in order to express and participate in male gender identity or male roles; neither does one need female-typical anatomy in order to express and participate in female gender identity or female roles. More searchingly, one can even reject a male–female binary as the appropriate framework for understanding gender.

In the USA, the American Psychiatric Association (APA) has distanced itself from the view that the assertion of a male identity by people with female-typical bodies or the assertion of a female identity by people with male-typical bodies constitutes a disorder worth preventing where possible or treating to undo when it does occur. That professional association now concerns itself with gender discordance (or atypical gender identification, as I will call it) only relative to the discomfort involved, labeling as ‘gender dysphoria’ the felt discomfort at not having a body that aligns with one’s experienced gender identity. According to the APA, the proper object of treatment for gender dysphoria is the experienced distress, not the ‘strong desire to be of the expressed gender’, and a person with gender dysphoria is a ‘patient’ by virtue of that distress (though not all transgender people will exhibit gender dysphoria and—for those who do—not all will do so to the same degree). To be sure, people may experience this discomfort because gendered social, cultural, and moral standards do not ‘qualify’ them for certain behavior and roles. What is morally required of clinicians, according to this professional account, is help in alleviating clinically significant discomfort and distress and—as developmentally appropriate—help for children and adolescents transitioning into desired identities, roles, and body types. This kind of care has come to be known as ‘gender affirming’.

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1 In such a world it is imaginable that there might be less call for body modification, on the assumption that socially relaxed equations between sex and behavior would invite a more expansive view of how males and females may assert gender through their behavior and bodies.

2 American Psychiatric Association, ‘Gender Identity Disorder’ in *Diagnostic and Statistical Manual - 5* (American Psychiatric Association 2013).

3 See for example G Knudson, G De Cuypere and W Bockting, ‘Recommendations for the Revision of DSM. Diagnoses of Gender Identity Disorders: Consensus Statement of the World Professional Association for Transgender Health’ (2010) 12 (12) Int J Transgend 115–18.

4 J Drescher and J Pula, ‘Ethical Issues Raised by the Treatment of Gender-variant Prepubescent Children’ (2014) 44 (4) Hastings Cent Rep Suppl S17–22.
The shift away from interpreting atypical gender identities as disordered has not settled all legal and ethical questions in regard to clinical care for people with gender dysphoria. In the analysis here, I will describe some ethical and legal issues involved in body modifications for adolescents with gender dysphoria. Adolescence is itself defined in various ways; I will use the term to refer to children from the onset of puberty through to physical maturation. For purposes of clarity, I will occasionally refer to gender atypical identities expressed by pre-adolescent children and by adults in order to draw relevant distinctions. I will first offer some background information about the body modifications at issue and go on to analyze the extent to which adolescents ought to be respected as decision-makers in regard to such modifications, prior to reaching the legal threshold of adulthood. In particular, I will describe the grounds of adolescents’ consent to modifications of their body in the name of gender identity expression. In general, the grounds for that consent are the same as they are for adolescents in other areas of decision-making, namely emerging capacities to understand the nature and significance of the choices in question. Setting a specific age as the threshold for decision-making may not reflect the way in which these capacities emerge at different times in different adolescents.

Note on terminology: Although other terms have been used to describe the clinical interventions at issue here, I will use the terminology of body modifications for gender identity expression. Other terms for these kinds of modification include: sex reassignment, gender realignment surgery, gender reconstructive surgery, gender confirming surgery, and genital reconstructive surgery. I use ‘body modifications for gender identity expression’ because it appears to me the most descriptively neutral term. Many people want to conform their bodies to a gendered ideal so far as possible; this is true of gender-typical people as they shape their bodies in aspirational ways, and it is no less true of gender-atypical people as they shape their bodies in aspirational ways. Of course, some people even want changes to their bodies because they reject the view that they must present themselves as either ‘male’ or ‘female’; such people may turn to body modifications that diminish a gendered appearance. Such interests may appear among people who express genderqueer or non-binary identities. This latter kind of interest has little to do with so-called ‘sex-reassignment’ and more to do with dissatisfaction rooted in pervasively gendered expectations of human beings. Even so, the desired interventions involve gender expression, whether assuming a male–female binary or whether intending to deconstruct that binary in one way or the other.

II. INTEREST IN MODIFYING THE BODY
The APA describes gender dysphoria in children, adolescents, and adults. According to that account, gender dysphoria is diagnosable in all cases involving ‘marked incongruence’ between experienced gender and expected gender based on assigned sex, lasting more than 6 months, and that involves clinically significant distress or impairment in social, occupational, or other important functioning. Marked incongruence may manifest itself in a variety of ways, such as the desire to ‘be of the other gender’, significant concern about actual or anticipated secondary sex characteristics, the strong
desire for other secondary sex characteristics, the strong desire to be treated as belonging to ‘the other gender’, or the ‘strong conviction’ that one has feelings and reactions typical of the experienced gender, not the assigned sex (and the socially expected gender identity of that assigned sex). Atypical gender identities and dysphoria can emerge at any age—even at the age at which children first begin to express gender identities and assume gendered roles.

Distress or dissatisfaction with the body may appear in child gender dysphoria but be less pronounced than it is in adolescents as they begin to experience developmental changes in their bodies. In some ways, being accepted by others as having a specific gender identity—and accepted in certain roles and behavior—may be more important to children than the modification of their bodies per se. In contrast, body modifications are usually of stronger interest to adolescents. The APA notes that adolescents with gender dysphoria may express a strong dislike of their anatomies and exhibit a strong desire to be rid of given primary and/or secondary sex characteristics. Not surprisingly, adolescents may manifest a strong desire for the primary and/or secondary sex characteristics of expressed gender. These interests may be all the more salient since many adolescents will begin to have sexual and romantic interests they hope to have reciprocated according to expectations grounded in their experienced gender identity. A body appearance that aligns with their gender identity can, moreover, help reduce any social stigma—real or perceived—attached to their atypical gender expression. For these reasons, minors’ interests in modifications of their bodies may increase as a perceived solution to the dissonance between their experienced gender identity and anatomical obstacles to the social manifestation of that identity.

Whether as adolescents or adults, people with atypical gender identity may be interested in the following modifications. Body modifications chosen in the name of male gender identity expression might be secured through hormone treatment or surgical intervention. Hormone treatment may be used to affect secondary sex characteristics involving muscle mass, fat distribution, hair growth and distribution. Surgical interventions might include breast removal, vaginectomy, hysterectomy, salpingophorectomy, mediodoplasty (enlargement of clitoris), phalloplasty, urethra repositioning, scrotoplasty, testes prosthetics, erectile prosthetics, and nipple reduction. A variety of facial masculinization interventions might be involved (forehead lengthening, cheek augmentation, rhinoplasty, jaw and chin reshaping, jaw augmentation, thyroid cartilage enlargement). Body modifications chosen in the name of female gender identity expression might be secured through hormone treatment or surgical intervention as well. Hormone treatment may be used to affect secondary sex characteristics involving breast development, fat distribution, and hair growth. Surgical interventions might include mammoplasty, penectomy, testes removal, vaginoplasty, clitoroplasty, labiaplasty, thyroid cartilage reduction, as well as a variety of facial feminization interventions (scalp advancement, brow reduction and/or repositioning, modification of the orbital rim, cheek bone modification, rhinoplasty, lip enlargement, and jaw and chin reshaping).
These kinds of modifications are less disputed for adults in both a moral and legal sense than body modifications for minors because ethics and the law typically presume that adults are capable of and entitled to make decisions having far-reaching consequences, unless otherwise shown by reason of some diminished capacity. To the extent that adults are diminished in their capacities to understand biomedical interventions, they are due less respect in regard to their autonomy in certain ways proportionate to the incapacity, as happens for example when adults suffer brain injuries that interfere with decision-making capacities. In general, however, interest in body modification for gender expression does not by itself signify impaired decision-making capacity, to the extent it is not the symptom of any underlying disorder or the effect of some undue influence.

On the theory that adults are best situated as ‘experts’ about the comparative value of choices for their own lives, ethics and the law focus primarily on overseeing the methods and effects of body modification rather than focus on the intrinsic merits of the interventions themselves. The law will require, for example, that adults be informed about the nature of the interventions as well as their possible risks and benefits.\(^8\) Informed consent procedures should as a matter of course disclose all means of managing distress and/or dissatisfaction with one’s body traits, so that other means of managing distress over body traits should be disclosed in addition to hormone or surgical treatment, such as psychological therapy or counseling. The law in most jurisdictions will require, further, that—as with other kinds of health-care—only licensed practitioners carry out body modifications in ways that observe relevant standards of care. Failure to meet these conditions may put practitioners at risk of having their licenses disciplined or may trigger legal liability under relevant tort law.

It is also a live question for both ethics and the law whether and to what extent governments ought to subsidize these kinds of body modifications for adults, either directly through government-provided healthcare or by requiring private health insurers to cover the costs in whole or in part. Private healthcare insurers face this same question in the absence of any specific legal requirements governing the coverage they offer. In practice, some governments do subsidize this kind of body modification, and some private insurers will extend some coverage to this kind of body modification, but not all do, leaving some people with atypical gender identities at a disadvantage relative to the healthcare important to the management of their dysphoria.\(^9\) (For example, in the USA, the military is forbidden by law from paying for surgical body modifications for gender identity expression for active duty, reserve, and retired Armed Services members, although it may pay for psychological and hormonal treatments for gender dysphoria.\(^10\) (This ban notwithstanding, a few clinicians have offered surgical body modifications to patients covered under military policies, securing a waiver from the ban on the grounds of ‘medical necessity’.\(^11\) The question of

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8 A Maclean, Autonomy, Medical Consent, and Law (CUP 2009).
9 TF Murphy, ‘Extending Health Insurance Coverage to Body Modifications in Gender Transitions’ (2018) 18 (12) Am J Bioethics 19–21.
10 WM Kurzon Jr, E Sluiter and KM Gast, ‘Exclusion of Medically Necessary Gender-Affirming Surgery for America’s Armed Services Veterans’ (2018) 20 (4) AMA J Ethics 403–13.
11 C Panzino, ‘Pentagon to Pay for Soldier’s Gender Transition Surgery’ (Army Times, 14 November 2017) <https://www.armytimes.com/news/2017/11/14/report-pentagon-to-pay-for-soldiers-gender-transition-surgery/> accessed 16 February 2019.
finances aside, however, the laissez-faire attitude toward body modifications by adults in the name of their gender expression might be summed up in the wry comment of one US psychiatrist: 'This is America. Be my guest.'\textsuperscript{12} The circumstances of adolescents require, by contrast, a rather more fine-grained ethical analysis.

III. WPATH CATEGORIES AND CONSENT

The World Professional Association for Transgender Health (WPATH) characterizes body modifications in the name of gender identity expression according to their effects as follows: reversible, partially reversible, and irreversible, which I will describe briefly.\textsuperscript{13}

\textit{Reversible interventions} are those that can be stopped with little or no residual effect. For example, puberty-suppressing hormones may be stopped in a way that will allow an adolescent’s body to mature afterward in a sex-typical way. \textit{Partially reversible interventions} are those that can be stopped, but that leave certain effects behind, for example, hormone treatments to masculinize or feminize the adolescent’s body as preferred. This kind of treatment may be given to adolescents who have had a sex-typical puberty or to adolescents whose puberty has been blocked. For these latter adolescents the hormone treatment will functionally induce a puberty in the experienced gender rather than induce a puberty typical of the child’s body. In doing so, the hormone treatment will induce the development of secondary characteristics of the desired sex. If the treatment is stopped, some of these body modifications—including facial development, muscle mass, and fat distribution—may remain. These traits might be modified later on, but only through some effort. \textit{Irreversible interventions} are those that leave behind durable effects, such as genital excision or restructuring as well as mastectomy.

As mentioned, the APA notes that ‘Expressions of anatomic dysphoria are much more common and salient in adolescents and adults than in children.’\textsuperscript{14} This dissatisfaction may manifest in a variety of ways, as the desire to be rid of the testes and penis, for example, and to acquire a vagina and breasts. Adolescents may even wish to modify their bodies in these ways as soon as possible, although not all of them will, and not all will wish to modify their bodies to the same degree. In drawing on all the resources available in medicine, some of these interventions might be reversible to a degree, allowing for example the surgical reconstruction of a penis and/or the reconstruction of breasts.\textsuperscript{15} Even so, healthcare interventions will not generally be able to restore a body to its anatomical status quo ante.

\textsuperscript{12} A Hartacollis, ‘The New Girl in School: Transgender Surgery at 18’ \textit{New York Times} (16 June 2015) \textless www.nytimes.com/2015/06/17/nyregion-minors-gender-reassignment-surgery.html \textgreater accessed 16 February 2019.
\textsuperscript{13} World Professional Association for Transgender Health (WPATH), \textit{Standards of Care for the Health of Transsexual, Transgender, and Gender-nonconforming People, 7th version} (The World Professional Association for Transgender Health, 2007). \textless https://www.wpath.org/publications/soc \textgreater accessed 16 February 2019.
\textsuperscript{14} American Psychiatric Association (n 2).
\textsuperscript{15} See MS Jun and others, ‘Total Phalloplasty with Latissimus Dorsi Musculocutaneous Flap in Female-to-male Transgender Surgery’ [2018] (120) Urology 269–70; ML Djordjevic, ‘Novel Surgical Techniques in Female to Male Gender Confirming Surgery’ [2018] (4) Trans Androl Urol 628–38; and SE Horbach and others, ‘Outcome of Vaginoplasty in Male-to-Temale Transgenders: A Systematic Review of Surgical Techniques’ [2015] (6) J Sex Med 1499–512.
As to the issue of consent for this spectrum of body modifications, WPATH advises that minors may be respected in their interests in puberty-suppressing treatment or in feminizing or masculinizing hormone treatment—and sometimes ‘chest surgery’—based on their own interests and their parents’ consent: ‘Ideally, treatment decisions should be made among the adolescent, the family, and the treatment team.’ With regard to irreversible body modifications, WPATH recommends that ‘Genital surgery should not be carried out until (i) patients reach the legal age of majority in a given country, and (ii) patients have lived continuously for at least 12 months in the gender role that is congruent with their gender identity. That threshold should be seen as a minimum criterion and not an indication in itself for active intervention.’ For its part, the Endocrine Society has recommended age 18, as the threshold for surgical interventions, both in a 2009 report and again in 2017.

IV. DECISION-MAKING CAPACITY AND HEALTHCARE DECISIONS

Existing professional advisories identify an age threshold for surgery on adolescents that may in fact be overridden by parents who consent to the body modification of their minor child’s bodies, as sometimes happens so long as a clinician is willing to waive the guidelines. The larger question at hand here is whether professional associations ought to be relying on an age-based threshold for body modification in the name of gender identity expression. When we look to the other circumstances in which adolescents are given latitude in decision-making, it becomes apparent that there is no fixed age at which adolescents as a class are ‘mature enough’ to make decisions. Rather, as adolescents mature, they may be entrusted with various degrees of decision-making: serving in the military, marrying, making decisions regarding contraceptives and prenatal care, and so on. All these thresholds of decision-making are socially crafted, but they are not crafted in a vacuum. No matter if an individual adolescent has an interest in purchasing alcohol, for example, that interest will be weighed against other morally meaningful interests, such as constraining the harm associated with the effects of alcohol available to adolescents as a class. In a similar way, ethics and the law work to balance adolescents’ interest in body modifications against the social interest in constraining decisions with a potential for harm to self and others.

It should be mentioned here that a key background concern for evaluating the ethics of body modifications for gender identity expression is the fact that not all children persist in gender atypical identities. Estimates of the number of children who persist in gender atypical identification into adulthood vary: by one report 6–23% of

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16 WPATH (n 13) 20.
17 The requirement of living in the desired gender role may be relaxed by some clinicians for adults whose interests in body modifications show the maturity and durability characteristic of that year-long commitment. It is worth pointing out that living for a year in the experienced gender will be difficult for minors without the benefit of supportive family and schools.
18 WC Hembree and others, ‘Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline’ (2009) 94 (9) J Clin Endoc Metab 3132–54; W Hembree and others, ‘Endocrine Treatment of Gender-dysphoria / Gender Incongruent Persons: An Endocrine Society Clinical Practice Guideline’ (2017) 102(11) J Clin Endocr Metab 3869–902.
19 Hartacollis (n 12).
boys and 12–27% of girls will persist. By other reports, 2–27% of all children will persist. Complicating study in this area is the fact that some minors present at clinics only in adolescence for treatment, following exploration of other ways of managing their identities. In general, the persistence of gender dysphoria into adolescence is a much stronger predictor of adult gender identity, with some indication that persistence is more likely in children with gender dysphoria who were assigned as female at birth. Some commentators treat 16% as a fair overall estimate of the percentage of children with gender dysphoria who will persist into adulthood with trans identities, with persistence becoming more likely if the dysphoria persists through into early adolescence.

Accordingly, it would be unwise to offer at-will access to body modifications to minors expressing gender atypical identities, when meaningful numbers of them go on to express gender-typical identities. It is nevertheless the case, however, that adolescents with gender dysphoria are more likely than children to persist into adulthood with an atypical gender identity, but—even so—not all do. Let us keep the issue of non-persistence (sometimes called desistance or detransitioning) in mind as I outline a general account of decision-making in healthcare and its relevance to decision-making in adolescents.

V. DECISION-MAKING CAPACITY

A foundational element of healthcare ethics is the respect owed to people in decisions about their own healthcare. In general, adults are presumed to have decision-making capacity unless otherwise shown to be compromised in some of its elements. Decision-making capacity is defined in various ways, but most accounts emphasize some version of the following elements: Understanding: grasping the nature of the medical intervention. Appreciation: grasping the significance of the intervention, in terms of possible risks and benefits. Choice: expressing a preference for one course of action over another. Reasoning: showing reflective linkage between the intervention in question and desired goals. Value Consistency: expressing choices aligned with a stable set of values.

These elements emerge developmentally in human beings, and in this sense, it seems ethically defensible to evaluate candidates for body modification in terms of their decision-making capacities rather than their age per se. In an indirect way, WPATH acknowledges as much in recommending the age of majority for irreversible body modifications, saying ‘That threshold [of age and lived experience] should be

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20 Drescher and Pula (n 4).
21 CM Wiepjes and others, ‘The Amsterdam Cohort of Gender Dysphoria Study (1972-2015): Trends in Prevalence, Treatment, and Regrets’ (2018) 15 (15) J Sex Med 582–90. See also TD Steensma and others, ‘Desisting and Persisting Gender Dysphoria after Childhood: A Qualitative Follow-up Study’ (2010) 16 (4) Clin Child Psych P 499–516.
22 TD Steensma and others, ‘Factors Associated with Desistence and Persistence of Childhood Gender Dysphoria: A Quantitative Follow-up Study’ (2013) 52 (6) J Am Acad Child Adolesc Psychiatry 582–90.
23 TD Steensma and PT Cohen-Kettenis, ‘More than Two Developmental Pathways in Children with Gender Dysphoria?’ (2015) 54 (2) J Am Acad Child Adolesc Psychiatry 147.
24 I vary here the categories suggested by LC Charland, ‘Decision-Making Capacity’ in EN Zalta (ed), The Stanford Encyclopedia of Philosophy (Stanford University Press 2015). <https://plato.stanford.edu/archives/fall2015/entries/decision-capacity/> accessed 16 February 2019.
seen as a minimum criterion and not an indication in and of itself for active intervention.\textsuperscript{25} WPATH is at least leaving open the possibility that some people who are the age of majority and/or who have also a certain amount of living in the desired gender might be rejected as candidates for irreversible body modifications because their decision-making capacity is compromised in some way, their age notwithstanding. It is also worthy of note, moreover, that WPATH does not itself specify the age of majority in years of age; it indicates only that modifications are within clinical standards of care at the point at which the adolescent reaches the ‘legal age of majority in any given country’, which age can vary across the globe. In one sense, this recommendation might be read as deference to varying national standards, but doing so raises the moral question of why someone’s access to certain medical interventions should depend on civic standards of adulthood rather than healthcare standards of decision-making capacity.

Simona Giordano has argued that in general adolescents should be recognized as able to make medical interventions on their own, no matter that they might involve irreversible interventions. To make this case, Giordano argues among other things that gender dysphoria by itself does not undermine adolescents’ decision-making capacity, even if it is a psychiatrically significant disorder. That is, psychiatric disorders do not always undercut capacity to make decisions about healthcare or decisions about treatment in medical research in a global way, any more than physical disorders do, for adults or adolescent decision-makers.\textsuperscript{26} Adolescents with gender dysphoria might have other conditions—such as depression—that impair their decision-making capacity, but as Giordano notes, gender dysphoria does not by itself undo capacities for making healthcare decisions.

Giordano argues more generally that no evidence supports closing off decision-making to adolescents as a class. Some possible reasons for closing off that decision-making to adolescents would be that the decisions to modify bodies in the name of gender identity expression are coerced or that adolescents are incapable of giving informed consent especially because of the levels of uncertainty involved in body modifications. As for the first possible objection, I agree with Giordano that it is doubtful that parents or others are likely coercing adolescents with gender dysphoria into seeking body modifications. On the contrary, it seems more likely that parents and others would might want to obstruct such body modifications, for example, parents hoping to ensure that their children have gender-typical identities and behavior. The other possible objection—incapacity for informed consent—deserves a closer look.

To ask whether adolescents can give informed consent is another way of asking whether they have decision-making capacity relative to understanding the nature and effects of the interventions. In a sense it is an empirical matter whether a given individual has this kind of decision-making capacity. Some individuals mature faster than others, some gender-atypical children will be raised in households supportive of their atypical gender identity, some will have sought out information about body

\textsuperscript{25} WPATH (n 13) 21.

\textsuperscript{26} For standards of informed consent in psychiatry, see Royal College of Psychiatrists, Good Psychiatric Practice – Code of Ethics (Royal College of Psychiatrists 2014). <https://www.rcpsych.ac.uk/files/pdfversion/CRP186.pdf> accessed 16 February 2019.
modifications on their own, and some will have already begun to work toward a life in which their body aligns so far as possible with their gender identity. This is to say that it is imaginable that some adolescents will—ahead of others—understand the nature of the interventions they’re interested in (preventing breast development, excision of penis and testes), appreciate the consequences (the way in which these interventions foreclose ‘going back’), reasonably connect the interventions to their aspirational goals (seeing them as steps toward a resolution of their gender dysphoria), choose those interventions (by stating their intentions), and value the interventions (by showing their commitment to the body modifications over time). In this sense, an adolescent might come to these body modifications with the decision-making capacity commensurate with the meaning and significance of the interventions.

In some jurisdictions, the law may reflect this approach to healthcare decisions for adolescents. As Giordano points out, UK statutes and case law have recognized decision-making at the age of 16 by minors, without a requirement of parental consent. In particular, the 1986 Gillick decision relies on what is essentially a moral argument in its determination that a minor under 16 years of age can give consent to medical treatment if the minor shows ‘sufficient understanding and intelligence to be capable of making up his own mind in the matter requiring decision’.27

It might be argued, however, that informed consent proves an obstacle to adolescent body modification not by reason of any deficits in the adolescent’s decision-making capacity but by reason of the dearth of information available about the long-term effects of the modifications. It is fair to say that there are gaps in the study of adolescent body modifications pursued as treatment for gender dysphoria, which is not surprising given meaningful gaps in the study of atypical gender identity in general.28 Among other things, the long-term effects of puberty-suppressing treatments are not well studied, as are the long-term effects of cross-sex hormone treatment initiated earlier than age 16. For example, various hormone treatments may have long-term effects on bone density, but their overall significance is not fully established.29 As Liebowitz and de Vries have pointed out, moreover, there are no studies that describe the decision-making processes of adolescents, so that possible aids to decision-making about body modification remain uncertain.30 Not surprisingly, in evaluating the ethics of body modifications for adults, various commentators have called for more research so that the comparative value of hormonal and surgical interventions can be better known in terms of prospective risks and expected benefits, in order to enrich the content of informed consent practices.31

27 Gillick v West Norfolk & Wisbech Area Health Authority [1986] AC 112 House of Lords.
28 J Olson-Kennedy and others, ‘Research Priorities for Gender-nonconforming / Transgender Youth: Gender Identity Development and Biopsychosocial Outcomes’(2016) 23 (2) Curr Opin Endocrinol Diabetes Obes 172–79.
29 See N Sing-Ospina and others, ‘Effects of Sex Steroids on the Bone Health of Transgender Individuals: A Systematic Review and Meta-analysis’ (2017) 102 (11) J Clin Endocrinol Metab 3904–913; LJW Tack and others, ‘Proandrogenic and Antiandrogenic Progestins in Transgender Youth: Differential Effects on Body Composition and Bone Metabolism’ (2018) 103 (6) J Clin Endocrinol Metab 2147–56.
30 S Liebowitz and ALC de Vries, ‘Gender Dysphoria in Adolescents’ (2016) 28 (1) Int Rev Psych 21–35.
31 LL Kimberly and others, ‘Ethical Issues in Gender-affirming Care for Youth’ (2018) 14 Pediatrics 6: doi 10.155542/peds.2018-1537.
To be sure, clinicians will not be able to predict with certainty all health risks that may be involved years ahead for people modifying their bodies with hormones and/or surgery, but for her part, Giordano is unpersuaded that this kind of concern rules out body modifications for adolescents because—as she notes—people securing other kinds of medical interventions face similar uncertainties, without those uncertainties being interpreted as outright impediments to medical treatment. Uncertainty is not treated as an absolute obstruction to medical interventions in general and not either as a moral obstruction to participation in research.32 People frequently make healthcare decisions under some degree of uncertainty, with decision-makers assuming responsibility for the risks of the uncertainty. It is unclear that maturing adolescents might not also be imagined in the same way: as decision-makers assuming the uncertainties involved in the interventions. Not incidentally, Giordano also points out that non-treatment will also carry uncertainty and risks if gender dysphoria is not therapeutically addressed through body modification. (She mentions in this regard delay in release from suffering, greater development of unwanted secondary sex characteristics, and alienation from healthcare providers, among other concerns.) What uncertainties there are about the consequences of clinical interventions can be introduced into the decision-making process through informed consent procedures. In this regard, it is fair to conclude that decision-making capacity does not require absolute foreknowledge of all consequences of any given intervention.

Even so, there might be concern that one particular issue does warrant closing off surgical body modifications entirely until the age of adulthood, namely the non-persistence of atypical gender identity. Non-persistence would involve a minor with a male-typical body first asserting a female gender identity, but later on in adulthood expressing a male gender identity or a minor with a female-typical body first asserting a male gender identity, but later on in adulthood expressing a female gender identity. In order to protect certain adult individuals’ possible interest in sex-typical bodies (those who do not persist in the gender identity of their adolescence), should no minors’ bodies ever be modified in a way having partially irreversible or irreversible effects? The protection of these individuals this way would impose, of course, on the interests of those who seek body modification while minors but who will persist in their atypical gender identity. For that reason, it may be argued that the cost is—morally speaking—too high to justify closing off all surgical body modification until adulthood, especially since the possibility of non-persistence of a given gender identity ought to be a central feature of any informed consent process; knowing that the atypical gender identity may not persist becomes an assumed risk of surgical body modification.33

Perhaps just as importantly, we should not assume either that someone who moves in adulthood from a male-gender identity to a female gender identity—or vice versa—after body modifications while a minor must necessarily ‘suffer’ in a way that

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32 S Giordano, ‘Gender Atypical Organisation in Children and Adolescents: Ethico-legal Issues and a Proposal for New Guidelines’ (2007) 15 (3–4) Int J Children’s Rights 365–90.
33 In the United Kingdom, Montgomery v Lanarkshire Health Board ([2015] UKSC 11) established the responsibility of clinicians to disclose material risks, namely those risks that a reasonable person would attach significance to. Certainly, the risk of non-persistence of one’s gender identity across adulthood would constitute a risk worth disclosure in advance of body modifications of a particular kind.
justifies closing off body modification to all minors. Some of these individuals may un-
derstand their lives and choices in ways that do not require a ‘master narrative’ of a
life-long unified gender. They may not either regret the choices made in the name of
their prior gender expression, even if a single gender identity does not persist across
the entirety of their lives.34 Some trans adolescents who have had cross-sex hormone
treatments have eventually asserted a gender typical identity without seeing those
treatments as entirely a mistake; some have expressed satisfaction that the treatments
were an important element in clarifying their gender identity.35 A similar sort of ac-
commodation of past surgical interventions might also be available to those who mod-
ify their bodies as adolescents. This is not to say that body modifications should be
entertained lightly for adolescents, but it is to say that choices about gender identity
expression need not be confined for all in the name of protecting some against all pos-
sible harm.

Given some doubt about the adequacy of an age-based threshold for certain surgi-
cal interventions, it is perhaps not surprising that some clinicians have not heeded the
18-years-of-age threshold recommended by the Endocrine Society for surgical inter-
ventions. Christine Milrod reports genital modification in adolescents as young as
15½ years old and 16.36 In the US and elsewhere, some clinicians do offer body mod-
ification prior to the age of 18, including vaginoplasty and double mastectomy.37
Justifying these variances from existing recommendations regarding standards of care
remains a work in progress. Toward the formulation of these standards, Milrod articu-
lates certain principles as guidance in evaluating requests for surgical body modifica-
tion. The most important of those principles for this discussion is that consent to
body modification by adolescents be functionally the consent of someone age 18 or
older. In other words, she recommends that adolescents who function with respect to
decision-making capacity as adults be treated as adults for purposes of the relevant
decisions.

It is worth pointing out again that the law does not at present forbid outright irre-
versible body modifications for adolescents for gender identity expression. Neither
does it forbid other far-reaching body modifications for adolescents. For example,
some adolescents undergo bariatric surgery to control obesity, no matter that this sur-
gery has life-long consequences. The law typically confers authority on parents to con-
sent to modifications of this kind for their children, no matter the life-long effects.
While the law generally entrusts parents with this kind of decision-making authority
for body modifications for minors, some jurisdictions may require certain additional
layers of review for modifications for gender identity expression even if parents have
consented. In the near past, for example, Australia required court authorization for
minors to secure hormones to masculinize them or to feminize them as the case may

34 T Meadow, ‘The Loaded Language Shaping the Trans Conversation’ The Atlantic (10 July 2018) <https://
www.theatlantic.com/family/archive/2018/07/desistance/564560/> accessed 16 February 2019.
35 JL Turban and AS Keuroghlian, ‘Dynamic Gender Presentations: Understanding Transition and “De-
Transition” among Transgender Youth’ (2018) 57 (7) J Am Acad Child Adolesc Psychiatry 451–53.
36 C Milrod, ‘How Young Is Too Young: Ethical Concerns in Genital Surgery of the Transgender MTF
Adolescent’ (2014) 11 (2) J Sex Med 338–46.
37 Hartacollis (n 12).
be, until a legal challenge set that requirement aside. On the other side of the spectrum, some jurisdictions explicitly allow adolescents to secure certain healthcare treatments, including certain treatments for gender dysphoria, without parental consent or even parental notification, presuming their capacity to provide consent to such treatment. (In the US, a mother sued the state of Minnesota for offering gender dysphoria treatment to her child without notifying her, even though state law treats certain adolescents living alone as independent healthcare decision makers. As mentioned, the Gillick decision in the UK established that minors under 16 years of age may presumptively consent to medical treatment if they exhibit understanding commensurate with the relevant decision to be made. In practice, however, even under such a doctrine the surgical modification of genitals is not undertaken in the UK prior to age 18, which practice also seems to be the case in the Netherlands where decision-making capacity is otherwise legally conferred on adolescents at age 16.

As a matter of evaluating the ethics of these kinds of body modifications to adolescents as a matter of their effects, one would certainly have grounds to close off at least some of body modifications if they proved systematically harmful (for example, they were characteristically regretted) or perhaps if they were rarely but catastrophically harmful (for example, if they directly led to death in a foreseeable way). In the absence of evidence of harms of these kinds, there seems enough room in law and the ethics for offering interventions to adolescents provided individual decision-making capacities are equal to the specific decision at hand, in terms of understanding the nature and significance of the interventions. That said, it is worth echoing Liebowitz and de Vries’s call for future study to help illuminate the way adolescents make decisions relative to the information available to them.

**VI. THE MATTER OF FERTILITY PRESERVATION**

One matter that deserves some focused attention in the clinical treatment of adolescent gender dysphoria with body modifications is fertility preservation. Some surgical interventions for the purpose gender identity expression will leave people infertile in the sense that they will not be able to produce gametes if their testes or ovaries are removed. Some body modification might also close off the prospect of gestation, if a uterus were to be removed, which would result in ‘absolute uterine infertility’. Should this infertility be interpreted as a serious harm or catastrophic result of the kind that counts as a morally significant reason against the body modification of minors? Not necessarily.

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38 F Kelly, ""The Court Process Is Slow but Biology Is Fast": Assessing the Impact of the Family Court Approval Process on Transgender Children and Their Families" (2016) La Trobe Law School - Law & Justice Research Paper Series: Paper No 16. See also Milrod (n 36) 342.
39 ME O’Hara, ‘Minnesota Mom Sues Her Trans Child Over Gender Reassignment’ NBC News (17 November 2016) <https://www.nbcnews.com/feature/nbc-out/minnesota-mom-sues-her-trans-child-over-gender-reassignment-n685266> accessed 16 February 2019.
40 Milrod (n 36).
41 A Lefkowitz, M Edwards and J Balayla, ‘The Montreal Criteria for the Ethical Feasibility of Uterine Transplantation’ (2012) 25 (4) Transp Int 439–47. See also A Lefkowitz M Edwards and J Balayla, 'Ethical Considerations in the Era of Uterine Transplant: An Update of the Montreal Criteria for the Ethical Feasibility of Uterine Transplantation’ (2013) (4) 100 Fert Ster 924–96.
Historically, many jurisdictions required evidence of sterilization as a condition of changing the recorded sex of people on birth certifications and other legal documents. The requirement of sterilization is no longer in place in Europe, the USA, Canada, and other countries around the world. WPATH asserts the right of transgender people to have children, and it therefore recommends that all parties be counseled about the impact of body modifications on their fertility, and certain interventions will be significant in this regard. Gonadotropin releasing hormone agonists (GnRHA) at early stages of puberty (puberty blockers) and later cross-sex hormone treatments to masculinize or feminize adolescents may leave adolescents unable to produce gametes. Moreover, some body modifications might be wanted by minors that would effectively render them infertile by direct removal of gamete-producing organs and tissue, if not also by removal of the uterus.

Despite the effects of certain body modifications on fertility, we should not assume that trans men and trans women have no interest in having children or interest in having genetically related children. Fortunately, there are certain ways available to preserve fertility, most notably the cryopreservation of gametes prior to the body modifications that will make further gamete production impossible. These techniques are recommended for minors who face infertility following some cancer treatments, for example, and the same techniques can be made available to adolescents. (Trans adolescents who remove their uteruses would not be able, of course, to gestate children on their own; even so, the prospect of uterus transplants for trans people has generated some discussion, acknowledging of course that the prospect is not yet on the clinical horizon. Some degree of lactation might be possible for transwomen, which might be attractive as a way of establishing a maternal relationship with the child.) In general, no matter the age at which people have their capacities to produce gametes altered, it is presumptively desirable to preserve the option of having genetically related children later on, unless that option is specifically waived.

The more relevant point for this discussion is the effect of these techniques: as a matter of principle, they render moot any objection to adolescent body modifications on the grounds that they leave people infertile. (This is not, of course, to say that these techniques will be always available to all people who might be interested in them.) The familial arrangement in which transmen live as fathers and transwomen live as mothers to children to whom they are genetically related as mothers and fathers respectively already occurs, of course, typically with trans people who have children before gender transition, so by itself the arrangement would not be novel except that through techniques of fertility preservation the prospect would be available to people who transition earlier in life.

42 L Stack, ‘European Court Strikes Down Required Sterilization for Transgender People’ (New York Times, New York, 12 April 2017) <www.nytimes.com/2017/04/12/world/europe/european-court-strikes-down-required-sterilization-for-transgender-people.html> accessed 16 February 2019.
43 WPATH (n 13).
44 Liebowitz and de Vries (n 30).
45 K Wierckx and others, ‘Reproductive Wish in Transsexual Men’ (2011) 27 (2) Human Reproduction 483–87.
46 N Mattawanon and others, ‘Fertility Preservation Options in Transgender People: A Review’ (2018) 19 (3) Rev Endocr Metab Disord 231–42.
47 D Fine, ‘How a Transgender Woman Could Get Pregnant’ (15 June 2016) Scientific American. <www.scientificamerican.com/article/how-a-transgender-woman-could-get-pregnant> accessed 16 February 2019.
48 T Reisman and Z Goldstein, ‘Induced Lactation in a Transgender Woman’ [2018] (3) J Transgender Health 24–26.
To be sure, trans men who have children genetically related to them through ova will be the genetic mothers of children for whom they are the social father; trans women who have children genetically related to them through sperm will be the genetic fathers of children for whom they are the social mother. Trans people who become parents may find themselves at odds with the way the state genders their parenthood, as mother or father. Some transmen, for example, do not want to be seen as mothers even if they gestate a child; they understand themselves as a birth parent.49

Efforts to preserve fertility in the foregoing ways does not, of course, oblige anyone to have genetically related children later on. In fact, some trans adults might not wish to have children in these ways, preferring instead children that align entirely with their expressed identities: transwomen having children who are genetically related to them as their mothers and transmen having children who are genetically related to them as their fathers.50 Synthetic gamete research might open that prospect up to them by perhaps enabling genetic males to produce ova and genetic females to produce sperm. Certain successes in this kind of gamete synthesis in animals has generated a lot of discussion for its human implications, but it is far from clear that safe and effective synthetic human gametes are likely anytime soon.51

VII. CONCLUSIONS

In general, ethics and the law treat parents as healthcare decision-makers for their minor children, unless reasons exist to otherwise provide for decision-makers. The emergence of atypical gender identities in young children does not alter this near-axiomatic assumption in the healthcare of those children. For children prior to puberty, parents have presumptive moral and legal rights to make healthcare decisions for their children, limited by certain moral and legal expectations of preserving the children’s best interests. Parents and other legally recognized decision-makers face important choices regarding the welfare of children with atypical gender identities and their requests for body modifications. Dissatisfaction with the body can be understood as developmentally characteristic but not itself grounds for body modification in all stages of the life of a child with gender dysphoria. It is not clear that young children need body modifications in order to manage the psychological dissonance between their identities and the identities imposed on them by others. Acceptance in the desired gender identity and being allowed to live in the desired gender roles can be ‘therapeutic enough’ in terms of responding clinically to childhood gender dysphoria.

As minors mature, the strength of their interest in being respected in regard to healthcare decisions increases because their decision-making capacities increase, those capacities being understood as those necessary to identify a conception of a good life for themselves and to make choices consonant with that conception, doing so in the context of meaningful informed consent practices. As a matter of law in a number of jurisdictions, maturing adolescents may make healthcare decisions for themselves in

49 T McDonald, Where’s the Mother? Stories from a Transgender Dad (Trans Canada Press 2016).
50 TF Murphy, ‘The Ethics of Helping Transgender Men and Women Have Children’ (2010) 53 (1) Perspect Biol Med 46–60.
51 For a scientific summary, see Z Li and others, ‘Generation of Bimaternal and Bipaternal Mice from Hypomethylated Haploid ESCs with Imprinting Regions Deleted’ (2018) 23 (5) Cell Stem Cell P665–676.E4. For an ethical analysis, see G Testa and J Harris, ‘Ethics and Synthetic Gametes’ (2005) 19 (2) Bioethics 146–66.
In consideration of prenatal care, terminating a pregnancy, entering clinical research trials, organ donation, and even life-saving treatment. The law provides options for adolescents as a class to make these kinds of decisions (e.g., laws permitting pregnant adolescents as a class to make healthcare decisions) and options for specific individuals (e.g., legal emancipation allowing given individuals to act as decision-makers on their own behalf regardless of not being the legal age of majority). These ‘exceptions to the rule’ are themselves morally predicated on recognition of the gradual emergence of autonomy.

Respect for the emergence of autonomy is no less relevant for minors interested in irreversible body modification than it is elsewhere in healthcare. As Melinda Jones has put it, competence to make decisions like these ‘does not depend on the age of the child, but on subjective features of the child in relation to the particular treatment proposal’. As mentioned, some professional advisories recommend that such modifications be deferred until the age of 18 or whatever age constitutes legal majority in a particular place. This recommendation is undercut in force by the way in which the law accommodates other decisions by minors that have far-reaching effects in their lives. As a matter of ethics, the threshold of autonomy—having capacities for being self-determining—is not age per se, but capacities that ground respect for autonomy, the very least of which are the capacities to understand the nature and consequences of desired and very difficult-to-undo modifications. In practice, one may be hard pressed to make the case that reflective and informed 16-year-olds or 17-year-olds who have experienced gender dysphoria most of their lives necessarily lack the cognitive wherewithal to commit themselves to body modifications having durable effects.

The matter of fertility preservation does raise important questions in regard to the ethics of body modification, since certain practices will render adolescents infertile. Any possible objection to body modification for adolescents on the grounds that it would necessarily leave them infertile—and thus involves a kind of harm it is important to avoid at all costs—fails because options for fertility preservation—in the sense of options for genetically related children—are available through existing techniques, which might be augmented by experimental techniques on the research horizon (such as synthetic gametes). Mention of the options of sperm and ova freezing—and maybe other emerging techniques—should be part of the informed consent process for any modification of the body that may cause infertility, for adolescents, no less than for others whose medical management leaves them unable to produce gametes.

I want to move toward a conclusion by noting that the social accommodation of people with gender atypical identities is gaining traction. Even if social accommodation is not the rule worldwide, the progress thus far might well enable and encourage more expression of gender-variant identities. An open question at this point is

52 MT Derish and KV Hevel, ‘Should Minors Have the Right to Refuse Life-sustaining Medical Treatment?’ (2000) 28 (2) J Law Med Ethics 109–24.
53 M Jones, ‘Adolescent Gender Identity and the Courts’ in M Freeman (ed), Children’s Health and Children’s Rights (Martinus Nijhoff 2006) 121–48, 129.
54 The question of whether some atypical gender identities can emerge in ‘rapid onset’ in adolescence has generated some controversy. See L Littman, ‘Rapid Onset of Gender Dysphoria in Adolescents and Young Adults: A Study of Parental Reports’ (2018) 13 (8) PLoS One e0202330. DOI: 10.1371/journal.pone.0202330. See also M Wadman, ‘“Rapid Onset”of Transgender Identity Ignites Storm’ (2018) 361 (6406) Science 958–59.
whether trans identities might become normalized to the point that an atypical gender identity will raise no particular fuss or muss for the child, for the child’s parents, or for anyone except those who maintain that people should be only male or only female in unambiguous ways, as determined by some supposedly clear-cut bioanatomical standard. Moreover, the emergence of more and more people asserting gender queer or non-binary identities may weaken expectations that people must only ever express a typical gender identity or ever only ever modify their bodies in ways that align with conventionally gendered identities. Even in a world imagined as degendered so far as possible, it does not follow that body modifications should occur at will for minors, since some children and adolescents will lack relevant decision-making capacity, and it remains important to protect against treatments that could create as much distress as they are intended to alleviate.

No matter what the future holds by way of gendered identities, it seems the most defensible approach to children with gender atypical identities is to move toward a capacity-based threshold for body modifications, including surgical modifications of the body. Such a threshold would, at the very least, acknowledge that some clinicians are, in fact, surgically modifying the bodies of parties younger than 18 and doing so would also open the way toward establishing best clinical practices in these cases. In any case, a capacity-based standard seems inevitable if only because the social normalization of trans identities in many parts of the world is likely to encourage trans adolescents to seek modification at ever earlier ages.

Should a test ever come along that could predict with some degree of certainty whether an adolescent with atypical gender identity will persist into adulthood, then we might be having a different discussion about the timing of body modifications in the name of gender identity expression. Given the vagaries of human psychosexual development in all its multiple pathways, however, it is unlikely that any unambiguous marker like this will ever come along; the failed quest for biological markers for homosexuality is a cautionary tale against any such expectation. The origins of gender identity are likely to prove elusive in the same way. In the meantime, we still have reliable sources about what is good for gender-atypical children: gender-atypical children themselves. Their characterizations of their gender should be taken as the starting point for any healthcare offered to them and their choices respected in a way scaled to their decision-making capacities.

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55 I will not take up here the contentious question of whether trans identities themselves wrongly trade on or reinforce gendered expectations of human beings, by assuming that certain traits are ‘male’ or ‘female’ and that any given person may assume a male or female identity by the appropriation of these traits so far as possible.