EDITORIAL

Child genital cutting and surgery across cultures, sex, and gender. Part 2: assessing consent and medical necessity in "endosex" modifications

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This editorial introduces the second part of a two-part special issue on genital cutting and surgery affecting young people. The first part (Part 1) emphasized broad questions of anthropology, medicine, ethics, politics, and law, with a particular focus on practices affecting persons with intersex traits: that is, congenital variations in sex characteristics deemed atypical for females or males [1]. As noted in Part 1, in many contemporary Western societies, such persons regularly undergo genital surgeries and other interventions aimed at "normalizing" their sexual anatomy. That is, the aim is to make their genitals appear more stereotypically feminine or masculine, albeit often on a non-voluntary basis (e.g., in infancy or early childhood, before it is possible to obtain their consent) [2]. Although the presence of intersex traits due to a difference of sex development [3] can, in some cases, signal the likely existence of an underlying, urgent health problem, "normalization" surgeries, as such, do not serve this purpose. Instead, they are done for what are sometimes characterized as "non-medical" reasons (see the "Coda"), or for intended—but unproven—psychosocial benefits that may or may not materialize. Increasingly, human rights organizations have taken a stand against such surgeries, insofar as they are indeed neither voluntary nor strictly required on grounds of physical health [4, 5]. Moreover, some governments (e.g., in Malta, Germany) have lately passed statues to ban such practices, with similar legislation now being considered in other countries [6].

This part of the special issue (Part 2) takes a complementary focus. It puts the spotlight on genital modifications affecting those born, not with intersex traits, but with "endosex" [7] traits: congenital sex characteristics deemed biologically normative for either females or males. And yet, as the articles in this collection make clear, even apparent biological normativity does not necessarily entail cultural acceptability. Thus, in some societies, it is not only young people born with intersex traits, but also those born with endosex traits, who may be subjected to various forms of genital cutting or surgery for "non-medical" reasons (i.e., in the absence of a relevant physical-functional pathology) [8].

Depending on the context, such operations may or may not be performed by a licenced healthcare professional [9–12]. However, regardless of medicalization, a major purpose or effect of these practices—whether involving intersex or endosex bodies—is to reshape a person's sexual anatomy so as to bring it into greater alignment with locally prevailing gender norms (i.e., what is socially prescribed for members of one's designated sex category in a given culture, including ideals relating to genital function and appearance) [13–15]. Accordingly, one contributor proposes to describe all such practices—irrespective of their relative prevalence, familiarity, or acceptability in the Global North or South—as "gendered genital modifications" (GGMs) [16, 17].

Gender norms are a special type of social norm. As such, they are upheld by a system of more or less explicit, socially imposed costs or punishments for perceived non-compliance [18–21]. Thus, there will typically be some amount of social pressure at play in decisions about GGMs, ranging from relatively weak to overwhelming. This pressure, in turn, will affect the degree to which a given decision can be seen as meaningfully voluntary (widely held to be a precondition for giving morally valid consent) [22, 23] even in the case of mature adults deciding about GGMs for themselves [24, 25]. Such pressure may also strongly influence parental decision-making about GGMs for their minor children [26–31].

That being said, as a general rule, the more voluntary a decision is to authorize (especially self-affecting) GGMs, the less controversial it tends to be. And the less voluntary such a decision is—up to and including modifications that are entirely non-voluntary, and so, unambiguously non-consensual—the more controversial it tends to be, holding all else equal. Similarly, the more a given procedure is widely agreed to be medically necessary (i.e., necessary to restore or maintain a minimally acceptable level of health), the less controversial it tends to be. And the more it is agreed not to be medically necessary, the more controversial it tends to be (and so on).

Given these controversies, as in Part 1, the practices evaluated in the present collection are primarily, though not exclusively, both non-voluntary and medically unnecessary. We believe this emphasis is justified by the distinctive moral concerns that are raised by any intervention into a person's body, but in particular into their sexual anatomy, that is conjointly characterized by those two features (see Fig. 1). In the context of a highly power-asymmetric relationship, such as that between a parent and child or a doctor and their patient, such concerns will often be magnified. However, as noted previously [32], both the concept of medical necessity and the criteria for determining when, if ever, a young person can give morally valid consent to various types of genital cutting or surgery are not a matter of consensus. Rather, they are hotly contested, often being subject to polarized opinion in the context of ongoing moral and political debates.

This can make it difficult to draw clear, principled lines around which types of procedures should be considered permissible or impermissible, whether morally or legally. In other words, even if one accepts the general evaluative framework depicted in Fig. 1, which is based on commonly accepted norms or standards within Western medical, pediatric, and sexual ethics [33–35], the question of where exactly to locate any given genital intervention vis-à-vis the axes of consent and medical necessity may in some cases remain controversial.

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Status of Genital Intervention (e.g., palpation, cutting, or surgery)	**Consensual** (competently authorized by the affected individual)	**"Gray Zone"** (agreement given by the affected individual; consent capacity unclear)	**Non-consensual** (due to incapacity)	**Non-consensual** (due to competent refusal)
Medically Necessary	Permissible	Likely permissible, especially if valid "proxy" consent (also) obtained	Permissible if valid "proxy" consent obtained	Impermissible
"Gray Zone" (medical necessity status unclear)	Permissible	???	Potentially permissible if valid "proxy" consent obtained	Impermissible
Medically Unnecessary	Likely permissible	Likely impermissible	Impermissible	Impermissible

Fig. 1 An illustrative model for evaluating the permissibility of genital interventions (e.g., in a medical context), including palpation, cutting, or surgery. The model is based on widely accepted standards in contemporary medical, pediatric, and sexual ethics and codes of professional conduct, although it may not reflect a universal consensus. Interventions into non-genital (or sexual/reproductive) areas of the body may not fit this model. Note: moral permissibility or impermissibility does not necessarily entail legal permissibility or impermissibility. For the purposes of this editorial, we do not claim to endorse every aspect of this model; it is offered for illustrative purposes only.

Consider consent-status first. While some of the practices included in the special issue are plainly non-consensual (for example, "normalization" surgeries on infants born with intersex traits, ritual "nicking" of the vulva of prepubescent girls [36, 37], newborn penile circumcision), others might be said to exist in a "gray zone" of consent. This gray zone consists of seemingly voluntary, or at least non-forced, interventions into the sexual or reproductive anatomy of relatively older youths (i.e., adolescents), who typically have more adult-like consent capacities than do newborns, infants, or small children, but who may still lack the requisite life experience, cognitive or emotional maturity, or insight into their future preferences or values to adequately appreciate the long-term implications of such a decision.

Examples of such "gray zone" practices may include medically elective labiaplasty requested by teenage girls (assuming the concurrent authorization of their parents or guardians) [38, 39]; genital cutting that is willingly undergone as part of an adolescent rite of passage into adulthood (assuming that non-participation is realistically possible, which may or may not be the case in some high-prevalence societies) [40, 41]; and certain genital modifications that may be pursued by trans or non-binary identified minors as they near adulthood [42–45], such as vaginoplasty (this procedure is rare before the age of 18, especially in Europe, but appears to be increasingly performed prior to adulthood in the United States [46]; for discussion, see our previous editorial) [32].

In contrast to legal minors, adult women who request a GGM such as labiaplasty—among other "cosmetic" procedures—are more likely to be assumed capable of consenting to the surgical modification of their sexual anatomy. However, as contributors to this collection note, in reality, things are not so simple [47, 48]. Instead, in many Western countries, when it comes certain GGMs, at least, appraisals of consent-capacity do not seem to turn on objective facts about each woman's actual decision-making ability (or on the specific risks or potential benefits associated with the requested procedure). Rather, they seem to turn on dominant Western concepts of genital "normality" combined with problematically stereotyped beliefs about some women's racial, religious, or ethnic background [49–53].

Such apparently prejudiced appraisals seem to be most common in the case of recently immigrated women, in particular those who come from communities that historically perform GGMs on endosex children (both female and male: as shown in one contribution to the special issue [54], there are no known societies with a high prevalence of customary female, but not male, genital modifications; as other contributors argue, upon immigrating to Western countries, the female custom, but not the male custom, is often discontinued, despite frequently alarmist rhetoric to the contrary [55, 56]). In other words, even when such women are seen as generally competent to make self-affecting decisions in most areas of life—including with respect to other body modifications—their ability to consent to genital cutting, specifically, may more reflexively be called into question.

If, however, they have already experienced a genital modification that is strongly stigmatized within Western culture (i.e., prior to immigration), an allowance may be made for additional cutting or surgery, especially if it can be interpreted as "undoing" the earlier procedure (even if only symbolically). Thus, for example, minoritized women's consent to be "de-infibulated" [57] or to undergo clitoral "reconstruction" surgery [58] will usually be treated as valid, even if, as in the latter case, there is often no physical health indication. One possible explanation for this allowance is that such procedures could be seen as "normalizing" their genitals in accordance with dominant Western expectations for how female genitalia should look or function. (Meanwhile, resentfully circumcised men or transgender women who seek "foreskin restoration" in societies with a high prevalence of non-voluntary penile circumcision—such as the United States—may be more likely to be met with resistance, dismissal, or even ridicule from healthcare professionals [59, 60]). See Box 1 for two

illustrative examples of apparently differential treatment of women from different backgrounds seeking a GGM.

Box 1. Two types of female genital modification—or two perceived "types" of women?

Consider a Somali immigrant who asks to be partially re-infibulated (i.e., to any extent) after giving birth to a child, so as to restore her sexual anatomy to a state that feels more "normal" or otherwise comfortable for her—whether on phenomenological, functional, or esthetic grounds, or in terms of her personal or cultural identity. In most Western countries, she will be denied the operation as it constitutes an instance of "female genital mutilation" or "FGM" as defined by the Word Health Organization (WHO) [61]. By contrast, de-infibulation or clitoral "reconstruction" surgery (including clitoral re-exposition or transposition)—both of which may be interpreted as "undoing FGM"—are often encouraged on that basis even when not strictly necessary to resolve a physical health issue, despite themselves introducing further surgical risk [62–64]. Meanwhile, an otherwise similarly-situated woman with a dominant culture background who asks for a medically elective "vaginal rejuvenation" procedure (or even a tellingly named "husband stitch" following childbirth), may be more likely, compared to the Somali woman seeking partial re-infibulation, to find a surgeon willing to "tighten" her vaginal opening or passage (i.e., to suit what *her* culture regards as an acceptable ideal for female sexual anatomy) [65–68].

Now consider a Muslim woman from a community that customarily practices what they see as gender-inclusive circumcision: that is, not only male circumcision (partial or total removal of the penile prepuce), but also female circumcision (pricking, nicking, or partial removal of the clitoral prepuce or hood without clitoral glans modification), a common pattern in parts of South and Southeast Asia [69–71]. Suppose this woman's parents did not, in fact, have her genitally altered in childhood, reasoning that such a decision should be hers to make when she was relatively more autonomous. Further suppose that she believes such an operation is a religious requirement for devout women in her community, and that undergoing it will (as she trusts male circumcision does for men) dignify her spiritually. If she is a resident of England or Australia, where current "anti-FGM" laws do not have an age limit, consent clause, or religious exception, she is likely to be told that what she seeks is, again, "FGM"—defined in these countries as any medically non-indicated cutting or alteration of the external female genitalia, regardless of consent—where this is viewed as a serious criminal offense independent of any demonstrable harm [72–74]. (As of 2020, U.S. federal law likewise treats ritual "nicking" or "pricking" of the clitoral hood as a criminal act of genital mutilation, with no exemption for sincere religious practice, although the law only applies until the age of 18 [75].)

Now consider another woman in the same context, perceived to be of a "Western" cultural background, who requests an anatomically indistinguishable (or even more physically invasive) surgical procedure to modify her non-diseased clitoral hood or labia for what could more readily be described as "purely cosmetic" reasons: for example, clitoral "unhooding" (i.e., WHO FGM Type 1a) or labiaplasty (i.e., WHO FGM Type 2a). Notwithstanding the facially equal relevance of the "anti-FGM" laws to her case, in practice, she may be more likely to have her genital modification preferences accommodated [76].

Identifying a principled justification for such differential treatment has proved elusive. It is sometimes argued that the health risks of non-Western-associated "ritual" female GGMs are greater than those of Western-associated "cosmetic" female GGMs, but this is untenable. The anatomical repercussions of each type of GGM overlap substantially [47, 72], and if both were allowed to be done by a sufficiently skilled practitioner in a clinical setting, the health risks would similar. If there is a difference in health risks currently, this may largely be due to the fact that one set of procedures is illegal in many countries (and so cannot be done openly in a medically controlled way), while the other is not (and so can be done in a relatively safe manner) [77]. As an additional consideration, the question of whether certain negative health outcomes, commonly associated with "ritual" female GGMs, are in fact causally attributable to the cutting itself, as opposed to other factors (e.g., discrimination in healthcare or other settings), is a matter of ongoing debate among experts, as seen in this issue [78–80].

Another approach suggests that a principled line can be drawn, not in terms of health risks (which in any case depend on the specific procedure and the extent to which it has been medicalized), but rather, degree of voluntariness. Applied to the examples in Box 1, it might then be thought that the second woman in each pair, but not the first, is (more) capable of freely choosing the GGM in question (that is, without being unduly influenced by unjust gender norms or other potentially coercive societal pressures), thus making her consent (more) morally valid. However, such a simple dichotomy has been forcefully challenged by many scholars, including contributors to the current collection [47, 48]. They argue that women from communities that customarily practice both female and male GGMs are not necessarily as compromised in terms of "meaningfully voluntary" decision-making as they are commonly made out to be. At the same time, they argue, women who are more closely associated with dominant Western cultures are not, on the whole, as free and unfettered in their decision-making about potential GGMs as has often been assumed.

Yet another approach, then, has been to try to draw a distinction, not around perceptions of the relative validity of different women's consent (after all, "FGM" is illegal in some jurisdictions irrespective consent; see Box 1) but instead around judgments of medical necessity. This distinction is indeed crucial because all laws that criminalize "FGM"—whether or not they have an age limit or consent clause—invariably make an exception for therapeutic female genital procedures carried out by a qualified medical professional.

This has also been the policy approach of the WHO. According to its conceptualization of "FGM"—which is reflected in the laws of many countries—acts of female genital modification that are materially indistinguishable from those it characterizes as "mutilations" become "non-mutilations" just as soon as they are deemed medically necessary (again, irrespective of consent; see "Coda"). This, then, raises the all-important question of what *makes* a given act of genital cutting medically necessary as opposed to medically unnecessary. According to what might seem to be a common-sense interpretation, cutting or alteration of person's genitals or other sexual anatomy should be regarded as "medically necessary" if and only if, at the given time and under the given circumstances:

(1) it is causally, instrumentally required to restore or preserve the health—including the mental health—of someone whose well-being is (at a serious risk of being) substantially diminished relative to some normative standard due to an aberrant biological or psychological state or condition, where
(2) the intervention in question is reasonably judged to be at least as effective as, and not substantially riskier than, all other realistically achievable treatment options.

However, that is not the sense of "medical necessity" that is, in practice, evoked in selectively justifying what might appear to be purely "cosmetic" genital procedures in (non-transgender endosex) women—and even adolescent girls—perceived to be from dominant-culture backgrounds (see Box 1). Instead, the operative sense of the term seems to be something more like the following: the surgical alteration of non-diseased, normatively female genital tissues is medically necessary (or at least medically justifiable) insofar as:

(1) the individual in question reports feeling dissatisfied by the appearance of, the actual or imagined social implications of others' perceptions of, or the subjective experience of partaking in certain activities in relation to, her vulva, even though it is anatomically unremarkable (i.e., falls within broad statistical norms with no apparent pathology), just in case
(2) her cosmetic surgeon judges that the operation is likely to relieve her dissatisfaction, at least to some extent, even if
(3) other interventions might well be comparably effective yet less risky (as made evident by the fact that mental health evaluations or counseling, for instance, are not routinely required before "cosmetic" female genital surgeries are undertaken) [81].

But this still leaves open the puzzle of differential treatment. To return to the example of the Muslim woman who believes that

female "circumcision" is a religious requirement, and who may feel alienated from God or her community unless she is permitted to undergo the procedure (Box 1), a certain level of dissatisfaction and even distress about her unmodified genitalia could very well be at play, such that electively being "circumcised" might reasonably be expected to bring some measure of mental relief. Nevertheless, assuming she lives in England, to use an example from Box 1, her distress about not being "circumcised"—no matter how severe or preoccupying—does not fall under the mental health exception to the current "anti-FGM" law of that country. Instead, the law makes clear that in determining "whether an operation is necessary for the mental health of a girl [note: 'girl' is stipulated to include 'woman'] it is immaterial whether she or any other person believes that the operation is required as a matter of custom or ritual" [82]. (The current "anti-FGM" law in the United States includes similar language—also ruling out "religion" as an excuse for medically unnecessary female genital modification—but again, applies only before age 18 [75]).

In other words, in England, as in other Western countries, the concept of "medical necessity" is either tacitly or overtly understood in such a way as to rule out—as categorically invalid—the motivations and interests of those women who might seek a GGM primarily for religious reasons (but who also see it as important for their sense of well-being and in line with their culturally-informed esthetic preferences), while simultaneously embracing the motivations or interests of culturally dominant women—and increasingly, adolescent girls—who may seek an anatomically identical or even more invasive GGM for "cosmetic" reasons (with the same proviso) [39].

Meanwhile, "medical necessity" is also interpreted broadly to allow intersex "normalization" surgeries on physically healthy infants who are incapable of consenting [83], while non-consensual penile circumcision for cultural or religious reasons is permitted without even the pretence of its being medically necessary.

In the latter two cases—intersex "normalization" surgeries and non-therapeutic penile circumcision—the justification for proceeding even without the consent of the affected individual is often given in terms of potential "health benefits" (whether physical or mental) which might be expected to accrue to the child as a result of the surgery, that is, speculatively (or on a statistical basis) over the long run. Such a justification rests on the assumption that these potential future health benefits will in some way "outweigh" the harms of the procedure, whether intrinsic (e.g., pain, damage to or loss of sensitive, prima facie valuable genital tissue [84–86]), or accidental (e.g., possible surgical complications, negative psychosexual sequalae) [87–90]. Whether this is a reasonable assumption, at least for penile circumcision, is debated by several authors in this issue [91–95], while an analogous debate on the potential benefits and harms of intersex surgeries can be found in Part 1.

What emerges from these debates is that, even if the precise likelihood of various potential benefits or harms could be assessed for each type of procedure, which is not currently possible given the generally poor state of the empirical evidence regarding such claims (in addition to ongoing conceptual disagreements about what counts, or should count, as a benefit versus harm each case) [96], the question of how much weight to assign to each type of outcome would still be unresolved. So too would the question of how to balance different potential outcomes against one another, given that, in many cases, there may be no "common currency" between potential benefits and harms.

For example, in the case of newborn penile circumcision, it is unclear how one should weigh the potential benefit of a reduced risk of acquiring a urinary tract infection (according to the American Academy of Pediatrics, ~100 circumcisions would be needed to prevent 1, likely-treatable infection, assuming the underlying data are reliable) [97] against the potential harm of aversive sexual sensations due to nerve damage [84], or, perhaps, psychological distress resulting from the discovery [89] that one's sexual anatomy was previously altered without one's own consent [59, 87]. Again, even if the likelihood of each type of outcome were known with certainty, which is far from the case, there would still be no objective "scale" with which to meaningfully weigh them against each other without invoking one's own preferences and values.

Such preference-sensitivity and value-ladenness is inherent to any process of assigning weights to, much less balancing, potential benefits and harms in relation to GGMs of whatever type. Given this, combined with the fact that the genitals are widely believed to constitute an especially intimate, personal, or "private" part of the body [34], several authors propose that the person to make such trade-off decisions, at least in the absence of a relevant medical emergency requiring immediate intervention, should be the affected individual themselves, i.e., when they are capable of making their own informed determination. In the case of ritual or religious genital cutting, it is increasingly argued that alternative rites might be considered (such as *B'rit shalom* in the case of Judaism, described in one contribution [98]) that do not involve the performance of medically unnecessary genital cutting on someone who lacks consent capacity, but which may nevertheless serve similar practical or symbolic functions for some families.

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In the main text, we stated that the WHO definition of "FGM" refers to "medical necessity" as the criterion for distinguishing "FGM" from "non-FGM." In fact, it refers to "medical reasons" [61]. However, this standard is arguably much too weak to serve its intended purpose, which is why some scholars have shifted to the stronger standard of medical necessity. If an attribution of "medical reasons" is all that separates a presumptively impermissible act of female genital modification ("FGM") from an otherwise physically identical but presumptively permissible modification, what follows? One seeming implication is that any community that values ritual endosex female (and male) child genital modifications for cultural or religious reasons would need only to attribute some "medical reason" or another to their custom to shield it from criticism.

This, in turn, might incentivize the performance of culturally motivated research into "finding" just such a medical reason, however compelling or uncompelling it may be. As the historical medicalization of ritual penile circumcision (and the concomitant search for health benefits [99–101]) might suggest, this is not a far-fetched possibility. Already, in Western societies, "mental health" benefits are regularly attributed to female genital "cosmetic" surgeries [102]. And in some "non-Western" societies, too, medical professionals who culturally value female (and male) GGMs attribute health benefits not only to penile circumcision (as some "Westerners" do) but also to removing tissues from the vulva (e.g., easier to keep clean, fewer folds of skin to trap bacteria, and so on) [71, 103]. Thus, as one of us has argued, "medical benefits" or "medical reasons" should not be used to distinguish permissible from impermissible forms of non-consensual genital modification (as in the current WHO approach), but rather, the stricter standard of medical necessity [104].

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REFERENCES

1. Liao L-M. Variations in sex development: medicine, culture and psychological practice. Cambridge: Cambridge University Press; 2022.
2. Liao L-M, Baratz A. Medicalization of intersex and resistance: a commentary on Conway. Int J Impot Res. 2023;35:51–5.
3. Conway GS. Differences in sex development (DSD) and related conditions: mechanisms, prevalences and changing practice. Int J Impot Res. 2023;35:46–50.
4. Catalan M, Emilova M. Drawing and critiquing ethical distinctions among diverse forms of genital modification: commentary on Fusaschi (2022). Int J Impot Res. 2023;35:16–7.
5. Human Rights Watch. "I want to be like nature made me." Medically unnecessary surgeries on intersex children in the US. 2017.
6. Danon LM, Schweizer K, Thies B. Opportunities and challenges with the German act for the protection of children with variations of sex development. Int J Impot Res. 2023;35:451–8.
7. Carpenter M, Dalke K, Earp BD. Endosex. J Med Ethics. 2023;49:225–6.
8. Darby R, Svoboda JS. A rose by any other name? Rethinking the similarities and differences between male and female genital cutting. Med Anthropol Q. 2007;21:301–23.
9. Kimani S, Barrett H, Muteshi-Strachan J. Medicalisation of female genital mutilation is a dangerous development. BMJ. 2023;380:302.
10. Townsend KG. Re: medicalisation of female genital mutilation is a dangerous development. 2023;380. https://www.bmj.com/content/380/bmj.p302/rr.
11. Earp BD. Medicalised genital cutting in the Global North may impede abandonment efforts in the South—rapid response to 'Medicalisation of female genital mutilation is a dangerous development'. BMJ. 2023;380. https://www.bmj.com/content/380/bmj.p302/rr.
12. Shell-Duncan B. To make progress in settling debates over medicalisation of female genital mutilation/cutting (FGM/C), it is important to question assumptions and accurately assess evidence-based claims. BMJ. 2023;380. https://www.bmj.com/content/380/bmj.p302/rr.
13. Fox M, Thomson M. Foreskin is a feminist issue. Aust Fem Stud. 2009;24:195–210.
14. Davis G, Evans MJ. Surgically shaping sex: a gender structure analysis of the violation of intersex people's human rights. In: Risman BJ, Froyum CM, Scarborough WJ, editors. Handbook of the sociology of gender. Cham: Springer International Publishing; 2018. p. 273–84.
15. Earp BD. Genital cutting as gender oppression: time to revisit the WHO paradigm. Front Hum Dyn. 2022;4:1–22.
16. Fusaschi M. Gendered genital modifications in critical anthropology: from discourses on FGM/C to new technologies in the sex/gender system. Int J Impot Res. 2023;35:6–15.
17. Fusaschi M. GGMo: a universalistic anthropological approach. Response to Catalán and Emilova. Int J Impot Res. 2023;35:18–20.
18. Waldeck SE. Using male circumcision to understand social norms as multipliers. Univ Cincinnati Law Rev. 2003;72:455–526.
19. Earp BD. Systems thinking in gender and medicine. J Med Ethics. 2020;46:225–6.
20. Chawla M, Earp BD, Crockett MJ. A neuroeconomic framework for investigating gender disparities in moralistic punishment. Curr Opin Behav Sci. 2020;34:166–72.
21. Dembroff RA. Real men on top: how patriarchy weaponizes gender. Oxford: Oxford University Press; 2024.
22. Kiener M. Voluntary consent: theory and practice. Abingdon and New York: Routledge; 2023. https://doi.org/10.4324/9781003301417.
23. Pugh J. Autonomy, rationality, and contemporary bioethics. Oxford: Oxford University Press; 2020.
24. Braun V. 'The women are doing it for themselves": the rhetoric of choice and agency around female genital 'cosmetic surgery'. Aust Fem Stud. 2009;24:233–49.
25. Chambers C. Medicalised genital cutting and the limits of choice. In: Creighton S, Liao L-M, editors. Female genital cosmetic surgery: solution to what problem? Cambridge: Cambridge University Press; 2019. p. 72–9.
26. Roen K, Hegarty P. Shaping parents, shaping penises: how medical teams frame parents' decisions in response to hypospadias. Br J Health Psychol. 2018;23:967–81.
27. Meoded Danon L. The parental struggle with the Israeli genital socialization process. Qual Health Res. 2021;31:898–912.
28. Alderson J, Skae M, Crowne EC. Why do parents recommend clitoral surgery? Parental perception of the necessity, benefit, and cost of early childhood clitoral surgery for congenital adrenal hyperplasia (CAH). Int J Impot Res. 2023;35:56–60.
29. Guevara CG, et al. Neonatal circumcision: what are the factors affecting parental decision? Cureus. 2021;13:1–6.
30. Cannoot P. Do parents really know best? Informed consent to sex assigning and 'normalising' treatment of minors with variations of sex characteristics. Cult Health Sex. 2021;23:564–78.
31. Roen K. Hypospadias surgery: understanding parental emotions, decisions and regrets. Int J Impot Res. 2023;35:67–71.
32. Earp BD, Abdulcadir J, Liao L-M. Child genital cutting and surgery across cultures, sex, and gender. Part 1: female, male, intersex—and trans? The difficulty of drawing distinctions. Int J Impot Res. 2023;35:1–5.
33. Schachter D, Kleinman I, Harvey W. Informed consent and adolescents. Can J Psychiatry. 2005;50:534–40.
34. Archard D. Sexual consent. Abingdon and New York: Routledge; 2019.
35. Lempert A, Chegwidden J, Steinfeld R, Earp BD. Non-therapeutic penile circumcision of minors: current controversies in UK law and medical ethics. Clin Ethics. 2023;18:36–54.
36. Wahlberg A, Påfs J, Jordal M. Pricking in the African diaspora: current evidence and recurrent debates. Curr Sex Health Rep. 2019;11:95–101.
37. O'Neill S, Bader D, Kraus C, Godin I, Abdulcadir J, Alexander S. Rethinking the anti-FGM zero-tolerance policy: from intellectual concerns to empirical challenges. Curr Sex Health Rep. 2020;12:266–75.
38. Kalampalikis A, Michala L. Cosmetic labiaplasty on minors: a review of current trends and evidence. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-021-00480-1.
39. Abdulcadir O, Bader D, Abdulcadir J, Catania L. Different cultures but similar requests: adolescents' demands for non-therapeutic genital modifications. Curr Sex Health Rep. 2020;12:289–91.
40. Ahmadu FS. Empowering girls in Sierra Leone: initiation into the Bondo society. J Dev Behav Pediatr. 2010;31:172–3.
41. Leonard L. "We did it for pleasure only." Hearing alternative tales of female circumcision. Qual Inq. 2000;6:212–28.
42. Milrod C. How young is too young: ethical concerns in genital surgery of the transgender MTF adolescent. J Sex Med. 2014;11:338–46.
43. Ashley F. Adolescent medical transition is ethical: an analogy with reproductive health. Kennedy Inst Ethics J. 2022;32:127–71.
44. Horowicz E. Transgender adolescents and genital-alignment surgery: is age restriction justified? Clin Ethics. 2019;14:94–103.
45. Latham A. Puberty blockers for children: can they consent? New Bioeth. 2022;28:268–91.
46. Milrod C, Karasic DH. Age is just a number: WPATH-affiliated surgeons' experiences and attitudes toward vaginoplasty in transgender females under 18 years of age in the United States. J Sex Med. 2017;14:624–34.
47. Shahvisi A. "FGM" vs. female "cosmetic" surgeries: why do they continue to be treated separately? Int J Impot Res. 2023. https://doi.org/10.1038/s41443-021-00514-8.
48. Townsend KG. On becoming autonomous and "coercive cultural acts": a reply to Max Buckler. Int J Impot Res. 2023;35:35–7.
49. Johnsdotter S, Essén B. Genitals and ethnicity: the politics of genital modifications. Reprod Health Matters. 2010;18:29–37.
50. Dustin M. Female genital mutilation/cutting in the UK: challenging the inconsistencies. Eur J Womens Stud. 2010;17:7–23.
51. Boddy J. The normal and the aberrant in female genital cutting: shifting paradigms. HAU J Ethnogr Theory. 2016;6:41–69.
52. Shahvisi A. Why UK doctors should be troubled by female genital mutilation legislation. Clin Ethics. 2017;12:102–8.
53. Boddy J. Re-thinking the zero tolerance approach to FGM/C: the debate around female genital cosmetic surgery. Curr Sex Health Rep. 2020;12:302–13.
54. Gruenbaum E, Earp BD, Shweder RA. Reconsidering the role of patriarchy in upholding female genital modifications: analysis of contemporary and pre-industrial societies. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00581-5.
55. Karlsen S, Howard J, Carver N, Mogilnicka M, Pantazis C. Available evidence suggests that prevalence and risk of female genital cutting/mutilation in the UK is much lower than widely presumed—policies based on exaggerated estimates are harmful to girls and women from affected communities. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-021-00526-4.
56. Johnsdotter S, Wendel L. Cultural change demands proportionate societal response in the handling of suspected FGM/C cases. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00535-x.
57. Gruenbaum E. Debating deinfibulation: why some women resist the WHO advice and what clinicians and researchers can do. Arch Sex Behav. 2021;50:1–6.
58. Villani M. Clitoral reconstruction: challenges and new directions. Int J Impot Res. 2023: https://doi.org/10.1038/s41443-022-00572-6.
59. Hammond T, Sardi L, Jellison W, McAlister R, Snyder B, Fahmy MAB. Foreskin restorers: insights into motivations, successes, challenges and experiences with medical and mental health professionals (an abridged summary of key findings). Int J Impot Res. 2023. https://doi.org/10.1038/s41443-023-00686-5.
60. Mokken SE, Özer M, Timmermans FW. Comment: Foreskin restorers: insights into motivations, successes, challenges and experiences with medical and mental health professionals. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-023-00693-6.

61. WHO. Female genital mutilation. World Health Organization; 2023. https://www.who.int/news-room/fact-sheets/detail/female-genital-mutilation.
62. Abdulcadir J, Rodriguez MI, Say L. A systematic review of the evidence on clitoral reconstruction after female genital mutilation/cutting. Int J Gynecol Obstet. 2015;129:93–7.
63. Sharif Mohamed F, Wild V, Earp BD, Johnson-Agbakwu C, Abdulcadir J. Clitoral reconstruction after female genital mutilation/cutting: a review of surgical techniques and ethical debate. J Sex Med. 2020;17:531–42.
64. Johnsdotter S. The growing demand in Europe for reconstructive clitoral surgery after female gential cutting: a looping effect of the dominant discourse? Droit Cult. 2020;79:93–118.
65. Kent D, Pelosi MA. Vaginal rejuvenation: an in-depth look at the history and technical procedure. Am J Cosmet Surg. 2012;29:89–96.
66. Barbara G, Facchin F, Buggio L, Alberico D, Frattaruolo MP, Kustermann A. Vaginal rejuvenation: current perspectives. Int J Women's Health. 2017;9:513–9.
67. Shahvisi A, Earp BD. The law and ethics of female genital cutting. In: Creighton SM, Liao L-M, editors. Female genital cosmetic surgery: solution to what problem? Cambridge: Cambridge University Press; 2019. p. 58–71.
68. Jacobson D, Grace D, Boddy J, Einstein G. How Canadian law shapes the health care experiences of women with female genital mutilation/cutting/circumcision and their providers: a disjuncture between expectation and actuality. Arch Sex Behav. 2023;52:107–19.
69. Dawson A, Rashid AK, Shuib R, Wickramage K, Budiharsana M, Hidayana IM, et al. Addressing female genital mutilation in the Asia Pacific: the neglected sustainable development target. Aust N Z J Public Health. 2020;44:8–10.
70. Shweder RA. The prosecution of gender equal Abrahamic circumcision: implications for Jews and Muslims. In: Cole J, Bilgrami A, editors. Non-coercive threats to freedom. New York: Columbia University Press; 2023, in press.
71. Rashid AK, Iguchi Y, Afiqah SN. Medicalization of female genital cutting in Malaysia: a mixed methods study. PLoS Med. 2020;17:e1003303.
72. Kelly B, Foster C. Should female genital cosmetic surgery and genital piercing be regarded ethically and legally as female genital mutilation? BJOG Int J Obstet Gynaecol. 2012;119:389–92.
73. Rogers J. The first case addressing female genital mutilation in Australia: where is the harm? Altern Law J. 2016;41:235–8.
74. Mason C. Exorcising excision: medico-legal issues arising from male and female genital surgery in Australia. J Law Med. 2001;9:58–67.
75. Bootwala Y. Exploring opposition to ritual female genital cutting since the first U.S. federal prosecution: the 2017 Detroit case. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00532-0.
76. Ahmadu FS. Equality, not special protection: multiculturalism, feminism, and female circumcision in Western liberal democracies. In: Cassaniti J, Menon U, editors. Universalism without uniformity: explorations in mind and culture. Chicago: University of Chicago Press; 2017. p. 214–36.
77. Ahmadu FS, Kamau T. Dr Tatu Kamau vs The Attorney General and Others: problems and prospects in Kenya's 2021 High Court ruling to uphold the Prohibition of Female Genital Mutilation Act 2011. Glob Discourse. 2022;12:29–46.
78. Johnson-Agbakwu CE, Michlig GJ, Koukoui S, Akinsulure-Smith AM, Jacobson DS. Health outcomes and female genital mutilation/cutting: how much is due to the cutting itself? Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00661-6.
79. Essén B. Comment on: "Health outcomes and female genital mutilation/cutting: how much is due to the cutting itself?" Int J Impot Res. 2023. https://doi.org/10.1038/s41443-023-00667-8.
80. Koukoui SD, Michlig GJ, Johnson-Agbakwu CE. Response to Comment on "Health outcomes and female genital mutilation/cutting: how much is due to the cutting itself?" Int J Impot Res. 2023. https://doi.org/10.1038/s41443-023-00670-z.
81. Özer M, Mortimore I, Jansma EP, Mullender MG. Labiaplasty: motivation, techniques, and ethics. Nat Rev Urol. 2018;15:175–89.
82. UK Government. Female Genital Mutilation Act 2003. Legislation.gov.uk; 2003. https://www.legislation.gov.uk/ukpga/2003/31/contents.
83. Hegarty P, Prandelli M, Lundberg T, Liao L-M, Creighton S, Roen K. Drawing the line between essential and nonessential interventions on intersex characteristics with European health care professionals. Rev Gen Psychol. 2021;25:101–14.
84. Cepeda-Emiliani A, Gándara-Cortés M, Otero-Alén M, García H, Suárez-Quintanilla J, Gallego R, et al. Immunohistological study of the density and distribution of human penile neural tissue: gradient hypothesis. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00561-9.
85. Cunningham EJ. Scientists must engage with the ethical implications of their work: a commentary on Cepeda-Emiliani et al. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00618-9.
86. Cepeda-Emiliani A. Response to: Scientists must engage with the ethical implications of their work. Int J Impot Res. 2023:1. https://doi.org/10.1038/s41443-022-00638-5.
87. Tye MC, Sardi LM. Psychological, psychosocial and psychosexual aspects of penile circumcision. Int J Impot Res. 2023, in press. https://doi.org/10.1038/s41443-022-00553-9.
88. Hammond T. Deficiencies and biases in professional understanding of the effects of childhood male genital cutting. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00574-4.
89. Uberoi M, et al. Potentially under-recognized late-stage physical and psychosexual complications of non-therapeutic neonatal penile circumcision: a qualitative and quantitative analysis of self-reports from an online community forum. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00619-8.
90. Bañuelos Marco B. Is it time for a time-out? Progress versus politics in studying the psychosexual implications of penile circumcision. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00608-x.
91. Deacon M, Muir G. What is the medical evidence on non-therapeutic child circumcision? Int J Impot Res. 2023. https://doi.org/10.1038/s41443-021-00502-y.
92. Morris BJ, Moreton S, Krieger JN, Klausner JD, Cox G. Re: the medical evidence on non-therapeutic circumcision of infants and boys—setting the record straight. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00579-z.
93. Deacon M, Muir G. Reply to Morris et al. re: 'The medical evidence on non-therapeutic circumcision of infants and boys—setting the record straight'. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00631-y.
94. Luseno WK, Rennie S, Gilbertson A. A review of public health, social and ethical implications of voluntary medical male circumcision programs for HIV prevention in sub-Saharan Africa. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-021-00484-x.
95. Garenne M. HIV prevention in Africa: is VMMC useful and acceptable? Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00575-3.
96. Earp BD, Darby R. Circumcision, sexual experience, and harm. Univ Pa J Int Law. 2017;37:1–57.
97. AAP. Male circumcision (technical report). Pediatrics. 2012;130:e756–85.
98. DuBoff M, Davis DS. B'rit shalom: a Jewish ritual alternative to newborn male circumcision. Int J Impot Res. 2023. https://doi.org/10.1038/s41443-022-00607-y.
99. Gollaher DL. From ritual to science: the medical transformation of circumcision in America. J Soc Hist. 1994;28:5–36.
100. Hellsten SK. Rationalising circumcision: from tradition to fashion, from public health to individual freedom—critical notes on cultural persistence of the practice of genital mutilation. J Med Ethics. 2004;30:248–53.
101. Carpenter LM. On remedicalisation: male circumcision in the United States and Great Britain. Sociol Health Illn. 2010;32:613–30.
102. Sharp G, Tiggemann M, Mattiske J. A retrospective study of the psychological outcomes of labiaplasty. Aesthet Surg J. 2017;37:324–31.
103. Dawson A, Wijewardene K. Insights into preventing female genital mutilation/cutting in Sri Lanka: a qualitative interpretative study. Reprod Health. 2021;18:1–12.
104. Earp BD. Male or female genital cutting: why 'health benefits' are morally irrelevant. J Med Ethics. 2021;47:e92.

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BDE drafted the editorial based on input from the coauthors. JA and LL provide edits and further feedback. BDE revised and finalized the manuscript and all authors agreed to the final version.

COMPETING INTERESTS

The authors declare no competing interests.

ADDITIONAL INFORMATION

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