

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/320853591>

# Circumcision, autonomy, and public health

Article *in* Public Health Ethics · January 2018

---

CITATION

1

READS

289

2 authors, including:



**Brian D. Earp**

University of Oxford

107 PUBLICATIONS 714 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Relationship Neuroenhancement [View project](#)



Moral Psychology and Human Enhancement [View project](#)

**Circumcision, autonomy, and public health**

**ACCEPTED MANUSCRIPT - NOW IN PRESS**

Journal:	<i>Public Health Ethics</i>
Manuscript ID	PHE-2017-0057.R1
Manuscript Type:	Original Article
Keywords:	circumcision, public health, autonomy, HIV, bodily integrity

SCHOLARONE™  
Manuscripts

Peer Review

Please note: this is the accepted version of an in-press article. For the version of record (when available) please visit the journal's website: <https://academic.oup.com/phe>. In the meantime, the paper may be cited as follows:

Earp, B. D., & Darby, R. (in press). Circumcision, autonomy, and public health. *Public Health Ethics*, in press. Available online ahead of print at [https://www.researchgate.net/publication/320853591\\_Circumcision\\_autonomy\\_and\\_public\\_health](https://www.researchgate.net/publication/320853591_Circumcision_autonomy_and_public_health)

# Circumcision, autonomy, and public health

## Introduction

Male circumcision refers to the partial or total removal of the penile prepuce (foreskin) (Cold and Taylor, 1999; Taylor et al., 1996). There is little disagreement among ethicists about the legitimacy of therapeutic circumcision—i.e., circumcision intended to address an extant pathology that has not responded to conservative treatment—nor is there much debate over the ethics of adult circumcision insofar as consent is fully informed (a condition that is not always met; Fox and Thomson, 2010; Sidler et al., 2017). What does engender controversy are circumcisions performed on healthy babies or young boys who are not old enough to provide their own consent, most commonly for sociocultural or religious reasons rather than out of medical necessity (Benatar and Benatar, 2003; Ben-Yami, 2013; Darby, 2015a; Davis, 2001, 2013; DeLaet, 2009; Earp, 2013; Foddy, 2013; Fox and Thomson, 2006; Jacobs and Arora, 2015; Mazor, 2013; Savulescu, 2013; Svoboda et al., 2016; Ungar-Sargon, 2015; Van Howe, 2013). In a recent paper, Azim McMath (2015a, p. 687) argues that while much of the controversy surrounding such non-therapeutic circumcision stems from disputes about empirical matters, some of it has to do with more theoretical questions concerning the autonomy of the child:

while still an infant, the child cannot act autonomously. Nor has he ever been able to do so. However, if all goes well, he will eventually develop the capacity for autonomy. In addition, many of the professed benefits of circumcision, such as reduced risk of HIV infection, will occur primarily after the child becomes autonomous. Furthermore, there may be alternative means of achieving similar benefits, such as the responsible use of condoms, which depend largely on the child's future autonomous choices. In these circumstances, what does respect for autonomy require?

McMath argues that while a child's interest in future autonomy should generally be respected in relation to his own interests, the well-being of other parties may require that his autonomy be overridden in the interests of public health. At the same time, McMath seems conflicted about whether the seriousness of the threat of HIV, especially in developed countries, can in fact justify the sacrifice of individual freedom that is entailed by circumcision in infancy or

1  
2  
3  
4 early childhood (that is, the freedom to make one's own decision about whether to undergo  
5 an elective genital surgery at an age of understanding) (McMath, 2015b). In this context,  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
early childhood (that is, the freedom to make one's own decision about whether to undergo an elective genital surgery at an age of understanding) (McMath, 2015b). In this context, McMath's discussion about the child's interest in making decisions that reflect his mature preferences and values when he is older is compelling (McMath, 2015a) (p. 689). But when considering arguments for paternalism in the name of public health, we suggest that McMath moves too quickly from certain empirical premises to associated policy proposals, skipping over gaps in evidence as well as important questions of value.

We do not mean to pick on McMath. In fact, his paper represents a good-faith attempt to navigate between the extreme and often polarized positions that have been articulated in the recent literature (for discussions, see Collier, 2012; Earp, 2015a). Even so, we claim, he adopts some of the same problematic assumptions about both the available data concerning health benefits and risks associated with circumcision, as well as their ethical implications, that have come to characterize the wider debate (Fox and Thomson, 2010). Using McMath's paper as a case study, then, our present aim is to slow the reel down in order to examine some of the intervening steps between data analysis and practical healthcare recommendations that must be taken into account.

Such an exercise, we hope, will have relevance not only for the debate over circumcision but also for other areas of health policy where there may be trade-offs between attempts at health promotion and respect for individuals' autonomy. In the course of our argument, we will touch on some of the main ongoing ethical disagreements concerning the permissibility of performing non-therapeutic infant or childhood male circumcisions, particularly in light of conceptual questions about the nature of a child's right to bodily integrity. First, however we provide some historical background in order to frame the contemporary debates.

## Background

Male circumcision originated in prehistory as a ritual practice (Glick, 2005). It was long regarded by its supporters as conferring primarily symbolic, spiritual, or social benefits. During the Victorian period, however, doctors in Britain and the United States introduced circumcision not only as a measure of moral hygiene—dulling the sexual organ was thought to discourage childhood masturbation—but also as an intended preventive against certain physical diseases in adulthood (Darby, 2005). Routine circumcision reached a peak in

1  
2  
3  
4 popularity in the mid-twentieth century, but was subsequently rejected by the majority of  
5 child health authorities by the 1970s. Since that time, with the exception of the United States,  
6 it has largely been abandoned in the Anglophone countries that originally took it up (Gollaher,  
7 2000; Wallerstein, 1985).  
8  
9

10  
11  
12 In the last few decades, facing increased scrutiny from legal theorists and medical ethicists as  
13 well as criticism from human rights advocates (Abu-Sahlieh, 1994; Boyle et al., 2000; Cruz  
14 et al., 2003; Denniston and Milos, 1997; Price, 1997; Sommerville, 2004), supporters of  
15 circumcision have sought to revive the ‘medical benefits’ narrative, casting the procedure as  
16 a secularly-defensible measure of individual and public health, as opposed to solely a  
17 religious practice (Glick, 2005; Gollaher, 2000; Miller, 2002). The search for benefits has  
18 been most fruitful in the United States, where, as noted, circumcision was adopted as a quasi-  
19 medicalized cultural norm in the late nineteenth century (Gollaher, 1994; Hodges, 1997). The  
20 acceptance and perpetuation of the procedure by key actors within the U.S. medical  
21 community at that time and thereafter established the procedure as a ubiquitous birth custom,  
22 viewed as no more remarkable than clipping the umbilical cord after delivery. Consequently,  
23 the circumcised penis became the social norm (Hodges, 1997; Waldeck, 2003). There is now  
24 a vast literature, disproportionately generated by American doctors and researchers,  
25 purporting to show that circumcision is at least partially protective against a wide range of  
26 diseases and other problems. These range from urinary tract infections (UTIs) in early  
27 childhood, through sexually transmitted infections—including HIV—after sexual debut, to  
28 penile cancer in old age (AAP, 2012; Hodges, 1997; Wallerstein, 1980).  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40

41  
42 Against this backdrop, a prominent feature of much current circumcision advocacy has been  
43 the underlying assumption that the biomedical evidence concerning such health benefits  
44 ‘speaks for itself.’ Once the data are available, that is, many advocates seem to assume that  
45 certain medical or public health policies should follow automatically as a logical  
46 consequence (Schoen, 2006; Tobian and Gray, 2011; for discussion, see Earp and Darby,  
47 2015). This tendency has been particularly apparent in arguments that rely on evidence from  
48 three randomized controlled trials (RCTs) carried out in the early 2000s in Sub-Saharan  
49 Africa (Auvert et al., 2005; Bailey et al., 2007; Gray et al., 2007). These RCTs provided  
50 evidence that voluntary circumcision of adult men may reduce the risk of female-to-male  
51 HIV transmission in areas with high rates of such heterosexual transmission and a low  
52 baseline prevalence of circumcision. As Aaron T. Norton argues (Norton, 2017, p. 3), the  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3  
4 epidemiologists who conducted these trials, upon seeing the results, also saw a direct path to  
5 policy recommendations, their arguments reflecting “an assemblage of scientific and ethical  
6 concerns.”  
7  
8

9  
10 Stressing that circumcision had the potential to save lives, for example, the epidemiologists  
11 urged that to refuse to act was to act unethically. According to Nathan Hodson and Susan  
12 Bewley (2017), such alarmist rhetoric has featured prominently in many policy proposals  
13 surrounding HIV/AIDS, leading to a climate of ‘AIDS exceptionalism’ (i.e., the tendency to  
14 coopt the language of ethics to promote urgent action—and suppress dissent—without fully  
15 considering the moral dimensions of the problem or alternative ethical or policy views).  
16  
17

18 Moreover, the epidemiologists seemed to believe that  
19  
20

21  
22  
23  
24 science is the arbiter of ethical concerns via projections about future infections that  
25 rely not only upon modeling studies that employ the RCTs’ statistical results, but also  
26 evidence of the foreskin’s biomolecular susceptibility. If we know that foreskin is  
27 susceptible to infection by nature and that cutting it off saves lives, the implication is  
28 that not doing so kills, foregrounding the cause of death not in sexual behavior *per se*,  
29 nor in broader structural conditions, but in the body’s own biological properties.  
30  
31

32 (Norton, 2017, p. 3)  
33  
34  
35

36  
37 Faced with the RCT evidence, many public health officials, medical practitioners, journalists  
38 and even some bioethicists joined the rush to engage in extrapolation (Fox and Thomson,  
39 2010). For example, if circumcision can lower the risk of so serious and, in some contexts, so  
40 prevalent a disease as HIV/AIDS, then, some seemed to think, it must be both medically  
41 desirable and ethically acceptable to perform it anywhere (Bossio et al., 2014, 2015; Fox and  
42 Thomson, 2010). Moreover, if it ‘works’ for consenting adults, it should also be performed  
43 on infants and young boys (see Bossio et al., 2015); and not only in response to individual  
44 (parental) demand, but through high-pressure public programs (Katisi and Daniel, 2015). In  
45 an interview (Norton, 2017, p. 3), one epidemiologist stated: “A lot of men are calling it a  
46 mutilation. It’s like, it *is*, but it saves lives, you know? There’s a basis for it.” In this way,  
47 Norton remarks, “concerns about the foreskin’s loss pale in comparison to circumcision’s  
48 ability to prevent death.”  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3  
4 In light of such thinking, mass circumcision as a strategy for HIV/AIDS control is now in full  
5 swing throughout the African continent, with the generous backing of American funders such  
6 as the Bill & Melinda Gates foundation (Bell, 2015; Garenne et al., 2013; Giami et al., 2015;  
7 Katisi and Daniel, 2015). Moreover, it has been construed as a straightforward instance of  
8 applying the discoveries of modern science to human betterment, akin to vaccination  
9 campaigns for polio or clean water for the prevention of cholera (Bill & Melinda Gates  
10 Foundation, 2017; Coghlan, 2009). But the relationship between evidence of health benefits  
11 associated with an intervention in a particular context, and the appropriate health policy to  
12 pursue on the basis of that evidence, whether in the original context or elsewhere, is not  
13 straightforward (Cartwright, 2007, 2011). As the philosophers of science Nancy Cartwright  
14 and Kathryn Joyce point out (Cartwright and Joyce, 2017, p. 3):

21  
22  
23 studies don't produce policies. Rather, studies test hypotheses about whether an  
24 intervention will produce an effect [under certain conditions]. If the intervention  
25 yields a positive result—it produces the effect—in several well-conducted RCTs, we  
26 can say that the studies support the claim that an intervention works in the study  
27 settings. Now, we have a fact. But when will this fact count as evidence supporting  
28 use of an intervention?  
29  
30  
31  
32

33  
34  
35 Answering her own question in a separate paper (Cartwright, 2011, p. 1401), Cartwright  
36 writes that “for policy and practice we do not need to know ‘it works somewhere.’ We need  
37 evidence for ‘it-will-work-for-us’ claims: the treatment will produce the desired outcome in  
38 our situation as implemented here.” For this, in turn, we need “a large and varied inductive  
39 base ... lots of RCTs from different populations—plus reason to believe the observations are  
40 projectable, plus an account of the range across which they project.” In other words, while  
41 *efficacy* might be demonstrated under ideal/research conditions, there is no guarantee that an  
42 intervention will be *effective* in a real world setting. Thus effectiveness trials, also known as  
43 translational research, are typically undertaken before generalized policy positions are taken.  
44 No such translational research was performed in regards to male circumcision and HIV  
45 infection.  
46  
47  
48  
49  
50  
51  
52

53  
54 Some advocates of circumcision seem to appreciate the need for a basis for projection. That  
55 is, they recognize that even if the RCT findings are taken at face value, they are not sufficient  
56 to show that circumcision will be effective—much less prudent on public health or ethical  
57  
58  
59  
60

1  
2  
3  
4 grounds—in other settings apart from Sub-Saharan Africa. This realization has led to  
5 “attempts to generalize the results of the circumcision RCTs to novel contexts via appeals to  
6 the foreskin’s biomolecular susceptibility” (Norton, 2017, p. 4). In other words, circumcision  
7 advocates have begun to argue that simply having a foreskin should be “effectively  
8 considered a pre-disease state defined in relation to HIV risk” (Norton, 2017, p. 5).  
9

10  
11  
12  
13 This conceptual shift represents a radical departure from how risk is normally understood.  
14 Unlike the identification of pre-cancerous cells in the cervix, say, that may be associated with  
15 an increase in the future risk of cervical cancer, “arguments that the foreskin poses a risk do  
16 not rely on claims that the foreskin’s cells have *become* compromised, but rather, on claims  
17 that the foreskin’s ‘normal’ cellular state is *already* risky” (Norton, 2017, pp. 5-6).  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
Construing a healthy body part as in-and-of-itself a source of risk has proven strategically  
valuable for circumcision advocates: “if HIV susceptibility is an inherent feature of the  
foreskin, it becomes easier to dismiss contextual factors that may have shaped the RCT  
results, and thus generalize not only from trial context to the real world, but across real-world  
contexts” (*ibid.*)

It is true that human genital mucosa, whether found on the bodies of males or females, may  
be penetrated by HIV (Cold and Taylor, 1999; Hladik and Hope, 2009; Taube et al., 2007). It  
is not implausible, therefore, that reducing the surface area of such mucosa—in males, by  
excising the foreskin—would lower a person’s risk of becoming infected with HIV by some  
amount, just as excising any other body part would reduce the risk of some disease affecting  
it, or introduced to other body sites through it (Earp et al., in press; Kluge, 1994). But to slide  
from such a biological assertion to the proposition that circumcision is therefore on balance  
desirable as a personal or public health intervention is a non sequitur (Darby, 2016). There  
are many possible responses to such claims, and the appropriate response will be determined  
not by science by in and itself, but also by the relevant values of the individuals and societies  
in question (Douglas, 2009).

The very notion of what constitutes optimal health, for example, is subject to cultural  
variation (Levesque and Li, 2014), and a preference for (say) a modest reduction in the  
absolute risk of a treatable infection over certain kinds of sexual sensation or experiences of  
bodily integrity is also a culturally influenced priority (Dekkers et al., 2005; Dekkers, 2009;  
Earp, 2017a, 2017b; Earp and Darby, 2017). It is telling that in countries where circumcision



1  
2  
3  
4 is the norm, such as Saudi Arabia or the United States, health professionals tend to commend  
5 circumcision as a prophylactic against HIV (AAP, 2012; Alkhenizan and Elabd, 2009; see  
6 also Earp, 2015b); whereas in those countries and regions where surgically unmodified male  
7 and female genitalia are the norm—such as most of Europe, Britain, Canada, Brazil,  
8 Australia, and New Zealand—health professionals do not regard circumcision as favourably  
9 and have by and large rejected it as an HIV control tactic (BMA, 2004; CPS, 2015; Earp and  
10 Shaw, in press; Frisch et al., 2013; KNMG, 2010; RACP, 2010).  
11  
12  
13  
14  
15

16  
17 Public health crises, such as the syphilis scare in nineteenth century Britain no less than  
18 HIV/AIDS in contemporary Africa, have historically given rise to demands for drastic action  
19 in which the autonomy interests of individuals become subordinated to the greater good, with  
20 an attendant rise in the level of state or social paternalism (Darby, 2015b; Gonsalves and  
21 Staley, 2014; Hodges, 1997). There are certainly situations in which the demands of public  
22 health will require the restriction of individual autonomy—for example, quarantine in the  
23 case of highly infectious diseases; and even then governments must be on guard against  
24 overreaction (Cetron and Landwirth, 2005; Drazen et al., 2014)—but it does not necessarily  
25 follow that the HIV/AIDS crisis in Sub-Saharan Africa is an instance of this proposition, nor  
26 that it warrants the heavy-handed promotion (Katisi and Daniel, 2015; Rudrum et al., 2017)  
27 of an irreversible genital alteration whose risks have not adequately been studied (AAP,  
28 2012; Earp, 2015c; Earp and Shaw, in press; Frisch and Simonsen, 2015a, 2015b, 2016).  
29 Nevertheless, respect for autonomy entails that adult men should be allowed to elect  
30 circumcision for themselves, whether as an attempted form of prophylaxis against HIV or for  
31 any other reason. Problematically, however, as adult male volunteers have failed to  
32 materialize in sufficient numbers to meet the quotas set by circumcision backers, advocates  
33 are now pressing for the procedure to be performed on infants and young children, who  
34 cannot decline (Bailey et al., 2017; Hatzold et al., 2014; Mavhu et al., 2012; Sidler et al.,  
35 2017).  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49

50  
51 Some researchers have begun to resist what they perceive as an ill-advised circumcision  
52 policy juggernaut. For example, Kenneth Rochel de Camargo and colleagues have recently  
53 argued that the current approach to policy is both technocratic and authoritarian, running  
54 roughshod over the complexities of culturally sensitive and ethically responsible medical  
55 decision-making (de Camargo et al., 2013; de Camargo et al., 2015; de Camargo et al.,  
56 2015b; Giami et al., 2015). Inadequate attention is given to social, behavioural, and other  
57  
58  
59  
60

1  
2  
3  
4 contextual factors that are relevant to disease prevention and management (Darby, 2015b;  
5 Giami and Perrey, 2012; Norton, 2013, 2017; Van Howe and Storms, 2011). Bioethical and  
6 human rights principles are dismissed as nebulous (Fox and Thomson, 2010). And  
7 ‘subjective’ issues such as individual preferences and values regarding bodily aesthetics and  
8 genital integrity are deemed to be irrelevant (Darby and Cox, 2009; Earp and Darby, 2017;  
9 Richters, 2009).<sup>1</sup>

10  
11  
12  
13  
14  
15 Circumcision is not, however, ‘just another’ public health intervention, based primarily on  
16 evidence of net benefit rather than harm. As Peter Aggleton observes, circumcision “has its  
17 roots in the deep structure of society. Far from being a simple technical act, even when  
18 performed in medical settings, it is a practice which carries with it a whole host of social  
19 meanings” (Aggleton, 2007, p. 15). These meanings may relate to rites of passage, religious  
20 customs or beliefs about hygiene, and are often “a potent indicator of hierarchy and social  
21 difference.” Circumcision, then, is not a “value neutral” act, but “nearly always a strongly  
22 political act, enacted upon others by those with power.” It is for this reason that close ethical  
23 scrutiny of proposals by “those with power” to enforce circumcision on the bodies of those  
24 without it is required.

### 33 **A right to bodily integrity?**

34  
35  
36  
37 In order to set the stage for a potential trade-off between child autonomy and public health,  
38 McMath raises the issue of a ‘right to bodily integrity.’ Critics of non-therapeutic  
39 circumcision sometimes claim that the procedure violates a child’s right to bodily integrity  
40 (Androus, 2004; Denniston et al., 2007; Ungar-Sargon, 2015), while supporters deny this  
41 (Benatar and Benatar, 2003; Mazor, 2013). Resolving this dispute is important because if  
42 non-therapeutic circumcision does violate a child’s rights—whether to bodily integrity or  
43 anything else—its use as a public health measure would be much more difficult to justify.  
44  
45  
46  
47  
48  
49

50  
51 There is disagreement in the bioethical literature about whether children have an absolute  
52 right to—as opposed to, say, a very strong interest in—having their bodily integrity preserved  
53

---

54  
55 <sup>1</sup> Another problem with the current approach is that it ignores ongoing concerns about the reproducibility of  
56 basic findings across the biomedical and social sciences (Earp and Trafimow, 2015; Begley and Ioannidis, 2015;  
57 Collins and Tabak, 2014; Ioannidis, 2005, 2017), often taking contentious claims for granted while ignoring or  
58 downplaying concerns about researcher bias, politicking in peer review, and agenda-driven science in this and  
59 other areas (Bero, 2017; Earp, 2016a, 2016b; Earp and Darby, 2015; Easterbrook et al., 1991; Ploug and Holm,  
60 2015; Shaw, 2014; Smith, 2010; Van Howe, 1999, 2017).

1  
2  
3  
4 (Ludbrook, 1995; Mazor, 2013; Ungar-Sargon, 2015). But even if one simply grants that  
5 children do have such a right, it would not entail that one must never break the skin or  
6 otherwise alter the body of a child. As can be seen with so-called ‘medically necessary’  
7 surgeries (such as might be needed to correct a heart defect, or even a therapeutic  
8 circumcision in the event of severe frostbite or incurable balanitis xerotica obliterans), it is  
9 usually permissible to infringe upon the bodily integrity of the child if doing so is clearly in  
10 the child’s best interests (Kopelman, 2007; Maslen et al., 2014).  
11  
12  
13  
14  
15  
16

17 What counts as being in the child’s best interests, however, is a matter of dispute (Earp and  
18 Shaw, in press; Kopelman, 2014; Kopelman and Kopelman, 2007). McMath raises the  
19 example of vaccination. As he notes, this an intervention that breaks the child’s skin without  
20 being medically necessary, and yet is widely considered to be consistent with the child’s best  
21 interests (and certainly not a rights violation). Insofar as this observation is meant to pave the  
22 way for the acceptability of circumcision, however, the analogy is strained (Lyons, 2013).  
23 Those who argue for a ‘right to bodily integrity’ do not typically hold so sensitive a notion of  
24 bodily integrity in mind that they would regard it as being impermissibly infringed by a mere  
25 pinprick on the arm (especially when the prick is needed to deliver medicines that are  
26 expected to boost the child’s immunity to disease while she or he is still in childhood). Rather,  
27 they have in mind a more robust sense of bodily integrity: the absence of substantial changes  
28 to the body that may reasonably be regarded as a harm (Earp and Darby, 2017; Jonsen, 1978).  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38

39 Parents who alter their children’s bodies—as with nontherapeutic genital surgeries—typically  
40 do not intend to harm them. Rather, in most cases, they view the alteration as an enhancement  
41 (i.e., something that is expected to improve the child in some way, whether physically,  
42 spiritually, or socially; Earp, 2016c; Svoboda, 2013). But many children—female, male, and  
43 intersex—whose genitals were altered without a strict medical need, grow up to regard the  
44 intervention or the associated bodily change as a diminishment or even a mutilation (Bossio  
45 and Pukall, 2017; Earp and Steinfeld, 2017; Hammond, 1999; Hammond and Carmack, 2017;  
46 Lightfoot-Klein et al., 2000). This phenomenon has inspired a worldwide ‘genital autonomy’  
47 movement that is largely fueled by such resentful individuals (DeLaet, 2012; Silverman,  
48 2004; Wisdom, 2012). Such a polar ‘flip’ from intended enhancement to experienced net  
49 harm or mutilation appears to occur in a minority of cases across sexes (albeit with  
50 considerable variance depending on the context), especially when the sociocultural norms  
51 upholding such practices are relatively widespread and not typically questioned (Abdulcadir  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3  
4 et al., 2012; Dreger, 1999; Earp, 2017a; Earp et al., in press; Gage and Van Rossem, 2006;  
5 Karkazis, 2008; Reis, 2009; Shweder, 2013, 2016; Sircili et al., 2010). Nevertheless, such  
6 extreme negative feelings appear to be more common as a response to non-therapeutic early  
7 childhood genital modifications than to other commonly-cited forms of intended pediatric  
8 enhancement—such as cosmetic orthodontia—that also involve making permanent physical  
9 changes (Bossio and Pukall, 2017; Earp, 2015d, 2015e; Hammond and Carmack, 2017;  
10 Mollov et al., 2010). Why might this be so?

11  
12  
13  
14  
15  
16  
17 One possible explanation is that alterations that by necessity damage or remove sensitive  
18 genital tissue—or more generally, tissue that it is reasonable to regard as having value in and  
19 of itself (Kipnis and Diamond, 1998)—are more likely later to be perceived as harmful  
20 compared to other bodily alterations or intended enhancements that do not have such a  
21 necessary effect. In simplest terms, if the guaranteed or intended outcome of the procedure is  
22 to excise tissue that one might rationally wish to have retained (see Earp and Darby, 2017),  
23 then the procedure is at a greater risk of being seen as ‘mutilating’ than one whose threat to  
24 such tissue is relatively minor or unintended. Thus, while cosmetic orthodontics do certainly  
25 alter the body for ‘non-medical’ reasons—and while there are non-trivial risks associated  
26 with such alteration (e.g., infections, bleeding, poor cosmetic outcome)—the potentially  
27 adverse physical changes are either temporary or accidental to the procedure; they are not its  
28 intended effect (Alani et al., 2015). Accordingly, there is no groundswell of resistance to  
29 aesthetic braces. More broadly, when the status of an intervention as an enhancement—as  
30 opposed to something that diminishes or causes harm—is stable across time and place and  
31 highly secure against possible changes in perspective, it is more likely to be in the child’s  
32 best interests overall (Earp, 2016c; Maslen et al., 2014).

33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45 It is the existence of this implicit, ‘robust’ sense of bodily integrity that is perhaps the main  
46 reason why piercing of girls’ ears for cosmetic or cultural reasons does not arouse  
47 particularly heated moral arguments (Earp, 2012; Holm, 2004). Although such an  
48 intervention is non-therapeutic and does technically infringe upon the girl’s bodily integrity,  
49 like cosmetic braces, it is normally considered too minimal to deserve special attention.  
50 Although there is momentary pain as well as some risk of infection, the ‘final result’ is a  
51 small hole that may very well close up if the child later decides she would like her earlobes to  
52 be hole-free. By contrast, male circumcision irreversibly removes between 1/3 and 1/2 of the  
53 motile skin system of the penis, consisting of highly innervated, touch-sensitive, functional  
54  
55  
56  
57  
58  
59  
60

1  
2  
3  
4 and protective tissue (Bossio et al., 2016; Earp, 2016d; Kigozi et al., 2009; Scott, 1999;  
5 Sorrells et al., 2007; Taylor et al., 1996; Werker et al., 1998). We do not wish to defend the  
6 practice of infant ear-piercing; but in terms of degree of invasiveness and permanence, ear  
7 piercings are far removed from a surgical operation that excises a substantial amount of  
8 erogenous tissue from a psycho-sexually significant external organ. The latter, compared to  
9 the former, is much more easily classified as a ‘substantial change to the body that may  
10 reasonably be regarded as a harm.’  
11  
12  
13  
14

15  
16  
17 While these considerations do not vitiate McMath’s point that it is the best interests standard  
18 rather than an overriding or unqualified right to bodily integrity that is the relevant moral  
19 concern (for further discussion, see Carmack et al., 2016), they do suggest that the *burden of*  
20 *proof* that circumcision really is in the child’s best interests is considerably higher than the  
21 burden of proof that immunization is in the child’s best interests (Adler, 2016; Lyons, 2013).  
22 Among other differences, vaccination does not (a) remove erogenous or any other healthy  
23 tissue; (b) does not eliminate any bodily functions (such as the protective function of the  
24 foreskin and any and all sexual functions that involve manipulation of the foreskin); and (c)  
25 does not involve the permanent surgical modification of a body part whose altered state is not  
26 uncommonly perceived as a diminishment rather than an improvement.  
27  
28  
29  
30  
31  
32  
33  
34

### 35 **Paternalism and harm to others**

36  
37  
38 Having established that the focus should be on what is in the child’s best interests, rather than  
39 on broad or unqualified appeals to potential rights-violations, McMath states that male  
40 children have an interest in reducing their risk of contracting HIV (McMath, 2015a, p. 687).  
41 Undoubtedly, they do. But this does not mean that they have an interest in being circumcised  
42 *in infancy* on such grounds, since there is no controlled evidence that infant circumcision—as  
43 opposed to adult circumcision—can in fact reduce transmission of HIV, much less to a  
44 meaningful degree outside of the context of Sub-Saharan Africa, where absolute rates of HIV  
45 transmission are among the highest in the world (Bossio et al., 2014, 2015; Darby and Van  
46 Howe, 2011; Frisch and Earp, in press; Sidler et al., 2008). Since one’s susceptibility to  
47 sexually transmitted infections is far more strongly governed by socio-behavioral  
48 mechanisms than by strictly biological mechanisms (such as the presence or absence of a  
49 foreskin), it cannot be assumed that a partial protective effect accruing from adult  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3  
4 circumcision in Sub-Saharan Africa would also follow from circumcision of infants in other  
5 contexts (RACP, 2010).  
6  
7

8  
9 But what if it could be assumed? In other words, what if, one day, there is convincing  
10 evidence that specifically infant circumcision in some setting can reduce the risk of female-  
11 to-male transmission of HIV in that setting? Would that justify infant circumcision? No, it  
12 would not. At best it would count in favor of such circumcision—it could be added to the  
13 benefit column—but the *weight* to be assigned to this benefit would depend on many factors,  
14 both ethical and epidemiological. For example, what is the absolute risk of contracting HIV  
15 through heterosexual intercourse in the relevant context? If it is very low, as it is in most  
16 contexts outside of Sub-Saharan Africa, then the weight to be assigned in this regard should  
17 also be low. To see why this is the case, consider the following analysis of HIV transmission  
18 in the United States by Sarah Bundick (2009):  
19  
20  
21  
22  
23  
24  
25

26  
27 Heterosexual contact is estimated to be responsible for only 5,250 new infections in  
28 men each year ... there is no strong evidence that circumcision reduces the risk  
29 of male-to-female or male-to-male transmission via sexual contact [and it] is not  
30 related to HIV transmission by injecting drug use. Therefore, the current data suggest  
31 that the 5,250 female-to-male transmissions are the only ones [even eligible] to be  
32 prevented by male circumcision. If we assume that all 5,250 men who get HIV from a  
33 female sexual partner are not circumcised (though this is certainly not the case), the  
34 data suggest that about half of these infections — around 2,625 infections or ~5% of  
35 new infections — may have been prevented if the men had been circumcised. If we  
36 then factor in the number of men who are circumcised when they are infected  
37 (approximately 70-80% of American men are already circumcised), the number of  
38 infections that could have been prevented by circumcision drops considerably. Taken  
39 together, the data suggest that the number of HIV infections that could be prevented  
40 in the U.S. by promoting infant male circumcision is likely to be only in the hundreds  
41 per year — a tiny fraction of the estimated 50,000 new HIV infections.  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52

53  
54 Such ‘tiny’ numbers are based on generous assumptions about the potential effectiveness of  
55 infant circumcision as an HIV preventive in the United States because the applicability of the  
56 African RCT data pertaining to adult males is being simply stipulated. Nevertheless, they  
57 demonstrate the importance of taking context—including baseline risk figures—into  
58  
59  
60



1  
2  
3  
4 consideration when trying to assess whether (male) children have any interest at all in being  
5 circumcised as prophylaxis against HIV. But let us just assume that they do—that *some*  
6 weight should be assigned to this potential benefit of circumcision, however small. This still  
7 does not tell us whether the surgery is in the overall best interests of the child, because  
8 additional weights would have to be assigned, not only to other purported benefits, but also to  
9 risks and harms, many of which have not been accurately estimated (and some of which, such  
10 as feelings of loss or resentment, are subjective in nature and therefore impossible to  
11 quantify; see Frisch and Earp, in press).  
12  
13  
14  
15  
16  
17

18 Finally, the attitudes and values of the child himself with respect to risk-types, risk-  
19 comparisons, and alternative risk-reduction strategies also have to be factored in. For  
20 example, is a slight reduction in the absolute risk of contracting a rare and treatable infection  
21 that can also be avoided non-surgically ‘worth’ the risk of a similarly rare surgical error  
22 resulting in damage to the head of the penis? Is it ‘worth’ the risk of removing too much  
23 foreskin, leading to painful erections or penile curvature later in life? There is no objective  
24 answer to such questions. Instead, only the child himself when he is grown can assess such  
25 trade-offs, at which point he can take into consideration the fullness of his circumstances as  
26 well as his own values (Earp and Darby, 2017). What this suggests is that no amount of new  
27 evidence concerning either the benefits or risks of circumcision will be sufficient to  
28 determine the question of interests. There will always be a personal, subjective aspect to such  
29 judgments, which even McMath sees as counting in favor of refraining from elective  
30 circumcisions before an age of consent (McMath, 2015a, p. 689). He asks the reader to  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40

41  
42 Consider the extent to which STI [sexually transmitted infection] prevention  
43 constitutes a benefit. If the child grows up to be celibate, it will not be a benefit at all;  
44 if he grows up to be sexually profligate, it may be a significant benefit. The child  
45 himself, once he reaches an age of competence, will be in a better position to judge  
46 his own interests than his parents will be while he is still an infant.  
47  
48  
49  
50

51 Moreover, giving the child the opportunity to decide for himself at a later age can help  
52 resolve disagreements over values. As McMath notes, reasonable people disagree over what  
53 constitutes a harm or benefit. For example, “Some people believe circumcision benefits the  
54 child by bringing him closer to God, while others disagree. In light of such disagreement,  
55  
56  
57  
58  
59  
60

1  
2  
3  
4 some commentators conclude that the parents should decide” (p. 689). But this does not  
5 follow:  
6

7  
8  
9 After all, the child will have an interest in living according to his own values, which  
10 may not reflect those of his parents ... only the child himself, when he is older, can be  
11 certain of his values. Thus, if disagreement over values constitutes a reason to let the  
12 parents decide, it constitutes an even stronger reason to postpone the decision until the  
13 child himself can decide. (McMath, 2015a, p. 689)  
14  
15  
16

17  
18  
19 Given these and other considerations, McMath concludes that we should be “idealists” about  
20 the infant child’s future autonomous choices insofar as they affect himself. But what if they  
21 affect others? This is where McMath brings in his argument about public health. Given the  
22 lack of any controlled evidence for a protective effect of infant circumcision against the  
23 acquisition of HIV, we can assume that McMath takes for granted something like the  
24 “biomolecular” view of foreskin risk proposed by circumcision advocates (Norton, 2017).  
25 That is, based on the unproven assumption that it is the sheer lack of a foreskin in the  
26 circumcised men that was chiefly responsible for the RCT findings—and that this lack *per se*  
27 will result in a similar risk-reduction in any epidemiological environment—McMath argues  
28 that we must consider the interests not only of the child himself, but also “anyone who, in  
29 future, has sex with him or shares needles with him” (McMath, 2015a, p. 687). We need to  
30 do this because, according to McMath, “reducing one person’s risk of contracting HIV—or  
31 any other infectious disease—also reduces the risk to many other people. Thus, we need to  
32 consider the impact of circumcision not only on the interests of the child, but also on public  
33 health.”  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44

45 Now, by ‘public health,’ McMath really appears to mean ‘HIV prevention,’ since he does  
46 define the term and his examples almost exclusively concern the latter. But there are several  
47 issues being obfuscated here. First, simply having been circumcised, whether in infancy or  
48 later in life, does not entail that a man’s risk of contracting HIV is lower than it otherwise  
49 would be, much less that he is less likely to transmit HIV to others. Part of the reason for this  
50 is that some circumcised men engage in ‘risk compensation’ (Feldblum et al., 2015; Grund  
51 and Hennink, 2012; Jung et al., 2016; Kibira et al., 2017; Riess et al., 2010). This occurs  
52 when a circumcised man, presumably because he believes that his risk of contracting HIV is  
53 lower due to his lack of foreskin, comes to rely less on more surefire forms of safe sex, such  
54  
55  
56  
57  
58  
59  
60



1  
2  
3  
4 as condom use or a reduction in the number of concurrent sexual partners. If he does reduce  
5 his reliance on these measures, he may actually increase both his and his partners' risk of  
6 infection, over and above whatever advantage he may initially have had (in this respect) in  
7 being circumcised. Moreover, the only RCT looking specifically at male-to-female  
8 transmission of HIV as a function of the male's circumcision status had to be stopped early  
9 due to futility: more female partners of circumcised men, compared to intact men, were  
10 becoming infected with HIV, possibly due to early resumption of sex during wound-healing  
11 (Wawer et al., 2009). If public health or harm-to-others is the concern, then, one needs to take  
12 such considerations into account (Dushoff et al., 2011).  
13  
14  
15  
16  
17  
18  
19

20 Failing to raise such caveats, McMath nevertheless maintains that the prospect of harm-to-  
21 others may play a legitimate role in justifying infant circumcision on public health grounds,  
22 presumably in any setting (since he does not specify an epidemiological environment). He is  
23 aware, however, that this line of thought could lead to policy conclusions that might be seen  
24 as overly paternalistic. To address this concern, he writes:  
25  
26  
27  
28  
29

30 People sometimes make autonomous decisions that result in risks and harms to others.  
31 There is nothing paternalistic about coercive intervention to prevent these other-  
32 regarding risks and harms. While people should generally be at liberty to assume risks  
33 to themselves, they should not generally be at liberty to impose risks on others. To the  
34 extent that the child's future choices may harm others, and to the extent that  
35 circumcision may help to mitigate these harms, the procedure may be justified as a  
36 matter of public health. (McMath, 2015a, p. 689)  
37  
38  
39  
40  
41  
42  
43

44 It is true that people are not generally at liberty to impose (undue or unwarranted) risks of  
45 harm on others. But the mere possession of an intact penis does not impose risk on anybody,  
46 and certainly not undue or unwarranted risk. In other words, McMath slides invisibly in this  
47 passage from harm caused by potential "future choices" (such as failure to wear a condom),  
48 to harms caused by *simply having an unaltered penis*—i.e., the only factor that could be  
49 "mitigated" by a circumcision. But as Norton notes, "the presence or absence of a body part  
50 cannot reasonably be said to be the cause of HIV-infection, but rather plays an indirect or  
51 'moderating' effect in the likelihood of infection that may or may not apply depending upon  
52 other conditions" (Norton, 2013, p. 276).  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3  
4 What is the more general implication of McMath's suggestion? In another paper, Norton  
5 writes: "Policies aimed at making routine neonatal circumcision more accessible prioritize  
6 removing the 'vulnerable' foreskin over what kinds of sexual practices or HIV prevention  
7 strategies an infant may eventually engage in as a sexually mature person" (Norton, 2017, p.  
8 7). In response to such observations, McMath notes that "many people do not use condoms  
9 responsibly. Consider the fact that nearly half of all pregnancies in the developed world are  
10 unintended. We cannot necessarily assume that the child will autonomously decide to use  
11 condoms responsibly when he grows up" (McMath, 2015a, p. 688).

12  
13  
14  
15  
16  
17  
18 The reference McMath gives for unintended pregnancies is to a study that made no  
19 breakdown on the basis of whether or not the male was circumcised; it may well be that  
20 unintended pregnancies are more common among the circumcised. In fact, some studies  
21 suggest that circumcised men, compared to genitally intact men, are less likely to use  
22 condoms as well as more likely to experience condom slippage when they do (Crosby and  
23 Charnigo, 2013; Frisch, 2016; Richters et al., 1995). Thus, although McMath argues that it is  
24 necessary to be a realist rather than an idealist in such matters, it is not obvious that the realist  
25 response requires us to accept the propriety of infant genital surgery, even on other-affecting  
26 grounds.

27  
28  
29  
30  
31  
32  
33  
34  
35 Instead, it leads us to consider how adult sexual partners might choose to negotiate the risks  
36 to which they may expose themselves: except in the case of rape, nobody is forced to have  
37 sex with a 'riskier' sexual partner.<sup>2</sup> Moreover, people do not have sex as embodied statistical  
38 averages: individual differences in sexual context and behavior are far more predictive of  
39 one's transmission risk than circumcision status, such that men's prospective partners would  
40 do well to focus on those other differences rather than on whether the men have had their  
41 foreskins removed (which, if they have, could create a false sense of security). To summarize,  
42 it is only consensual adult behavior—engaged in by both or all parties who may be  
43 affected—that presents a risk of harm. Sexually transmitted infections are not like sneezes:  
44 they cannot be spread throughout a school or a shopping center to unsuspecting third parties.

45  
46  
47  
48  
49  
50  
51  
52  
53 Tying these strands together, as Norton (2017, p. 15) notes, "promoting circumcision to  
54 reduce risk for a given infant"—much less a possible future sexual partner of his—"is based

55  
56  
57  
58 <sup>2</sup> Assuming that is what the average, all-things-considered non-circumcised male is. However, it is not clear that  
59 we are justified in assuming this, especially given the higher rates of male-to-female transmission of HIV  
60 among circumcised men in the fourth RCT (Wawer et al., 2009).

1  
2  
3  
4 on a number of assumptions at the moment the decision is made, assumptions that reflect the  
5 emergence of circumcision status as an HIV risk category rooted not in sexual identity or  
6 behavior but in the body's own biological properties.”  
7  
8  
9

10 Yet such assumptions about risk lead to absurd consequences. Any healthy part of person's  
11 body could, in principle, be 'misused' to inflict harm on other people. For example, one's  
12 finger could be used for poking out someone's eye. But since it can also be used for morally  
13 unproblematic purposes, and it serves many important functions, infant finger-removal  
14 should not be entertained. In other words, it is problematic to remove an unoffending part of  
15 a person's body *just in case* he might use it in a way that would increase the risk of harm to  
16 others, especially insofar as those other people also possess agency in protecting themselves  
17 from any such harm.  
18  
19  
20  
21  
22  
23  
24

25 When looking at an infant, we do not know what his “future choices” regarding sex and  
26 sexual behavior will be. If, as McMath suggests, it is nevertheless permissible to excise his  
27 healthy foreskin without his consent, on the assumption that its sheer retention on his body  
28 puts others at risk of harm, then why is it not permissible to sever an adult man's foreskin,  
29 whose future sexual behavior is much easier to predict? If the mere possession of intact  
30 genitalia is meant to be understood as 'risky' and potentially other-harming, then—on public  
31 health grounds—there is equal, if not more reason, to engage in coerced circumcision of men.  
32  
33  
34  
35  
36  
37  
38

39 But this would be criminal assault (Merkel and Putzke, 2013). If it is not permissible to  
40 coercively circumcise a man on public health grounds, it is questionable why we should be  
41 able to circumcise an infant or small child on the same grounds, simply because the latter is  
42 pre-autonomous and can neither give nor withhold his consent. In other words, given that  
43 healthy genital tissue is *prima facie* valuable, and that the mere possession of intact body  
44 parts cannot reasonably be construed as presenting a special kind of risk, a stance of  
45 skepticism toward proposals such as McMath's seems in order.<sup>3</sup>  
46  
47  
48  
49  
50  
51

---

52 <sup>3</sup> It is conceivable that this analysis would differ if the foreskin had no functions or positive properties; if it were  
53 a uniquely vulnerable vector for diseases with serious public health ramifications (that could not be addressed in  
54 less ethically problematic ways); if the surgery could not be delayed without increasing the absolute risk of  
55 serious harms to an ethically decisive degree (see Earp and Darby, 2017); or if it were sound as a matter of  
56 general principle to construe healthy tissues as dangerous simply by virtue of being left on the body. Since none  
57 of these propositions hold, however, the prospect of non-consensual childhood circumcision is hard to justify  
58 from a public health perspective.  
59  
60

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

McMath himself, writing subsequently on the *Journal of Medical Ethics Blog*, does appear to concede some of the problematic implications of his view. Responding to the release of a non-peer-reviewed draft policy by the U.S. Centers for Disease Control and Prevention (CDC) stating that the benefits of circumcision outweigh the risks (CDC, 2014), McMath (2015b) writes:

the CDC relies far too heavily on HIV prevention as a justification for infant circumcision. In the United States, the adult prevalence of HIV is 0.6 percent – not very high by global standards. Furthermore, as the CDC itself admits, only 10 percent of new infections are transmitted sexually from a female to a male ... as I have argued, most of these initial infections cannot justify infant circumcision; it is the extent to which these infections increase risks to others that is ethically relevant. All of this suggests it would take very many (perhaps thousands) of circumcisions to prevent one new ethically relevant HIV infection in the United States. The public health justification for infant circumcision, at least in terms of HIV prevention, seems much weaker than the CDC's enthusiasm would suggest.

### Conclusion

McMath's basic argument—that individual rights and interests must sometimes give way to the general good—is in principle sound, but the question is whether it is correctly applied to the instance of child circumcision. Nobody but an extreme libertarian would disagree that it can be reasonable to restrict an individual's freedom of action—including with respect to certain decisions about the state of his own body—if the general welfare interests are substantial enough and the burdens placed on the individual are proportionate to the gravity of the problem and equitably distributed.

In the public health field a good example is quarantine—once a regular feature of trans-oceanic travel, and still seen sometimes today in regions of severe infectious epidemics. Under quarantine an individual's liberty is restricted for a short period in order to protect other members of society from diseases that he or she is or may be carrying. Since all individuals have an interest in freedom of movement, society or other authorities (parents in the case of children) must have good reason to override this interest. But unlike circumcision, quarantine is short-term and has no lasting consequences (provided proper access to medical

1  
2  
3  
4 care and other necessities); although it is a harm, it is a minor harm that imposes a short-lived  
5 burden. Once the prescribed period has elapsed, an individual can resume his life at the point  
6 where he left off; the only lasting effects are memories. It is also equitable in that all persons  
7 at risk are subject to the same restraint. Once the issue is cast in these terms it is clear that the  
8 public health justification for quarantine is not applicable to childhood male circumcision.  
9  
10  
11

12  
13 The inadequacy of the public health argument for circumcision of boys was well summarized  
14 in a paper as early as 2002. In “Prophylactic Interventions on Children: Balancing Human  
15 Rights with Public Health,” Hodges et al. performed a systematic analysis of the rights and  
16 interests of children in relation to public health benefit (Hodges et al., 2002). With a view to  
17 laying down a set of standards on how conflicts between the demands of public health and  
18 the principles of human rights might be resolved, and observing that prophylactic  
19 interventions on children were traditionally justified on the grounds of “best interests of the  
20 child” and/or “public health,” Hodges et al. proposed two sets of criteria that should be met  
21 for an intervention along these lines to be acceptable.  
22  
23  
24  
25  
26  
27  
28  
29

30 The criteria for the “best interests of the child” argument were (1) presence of clinically  
31 verifiable disease, deformity, or injury; (2) least invasive and most conservative treatment  
32 option; (3) net benefit to the patient and minimal negative impact on patient’s health; (4)  
33 competence to consent to the procedure; (5) standard practice; (6) individual at high risk of  
34 developing the disease. The criteria for the “public health benefit” argument were: (1)  
35 substantial danger to public health; (2) condition must have serious consequences if  
36 transmitted; (3) effectiveness of the intervention; (4) degree of invasiveness of the  
37 intervention; (5) whether individual receives an appreciable benefit not dependent on  
38 speculation about future behavior; (6) the health benefit to society must outweigh the human  
39 rights cost to the individual.  
40  
41  
42  
43  
44  
45  
46  
47

48 The authors evaluated prophylactic mastectomy and cosmetic ear surgery against the best  
49 interests of the child criteria, immunization against the benefit to public health criteria, and  
50 childhood male circumcision against both sets of criteria. They concluded that while  
51 immunization generally satisfied the best interests and public health justifications,  
52 circumcision satisfied neither. Such an intervention was thus impermissible because it was  
53 performed on a minor without consent; the human rights cost to the individual exceeded the  
54 proven public health benefit; and the diseases from which circumcision might provide some  
55  
56  
57  
58  
59  
60

1  
2  
3  
4 level of protection could be avoided through appropriate behavioral choices or otherwise  
5 managed non-surgically.  
6  
7

8  
9 Individuals have a substantial interest in bodily integrity (including genital integrity) and  
10 autonomy (including what medical treatments to adopt). In contrast with quarantine, the  
11 harms of circumcision (as felt by those who do regard themselves as harmed by the  
12 procedure) are permanent and irreversible—loss of an valued external bodily structure that  
13 cannot be recovered, taken without consent (Earp and Darby, 2017; Hammond and Carmack,  
14 2017; Watson, 2014). Moreover, childhood male circumcision is inequitable in that it targets  
15 only male infants and boys (leaving females, intersex children, and adults alone), thus forcing  
16 them to bear the whole cost of whatever public health benefit is being pursued. It follows that  
17 the case for the permissibility of childhood male circumcision as a public health initiative  
18 must be far stronger than the case for the permissibility of either vaccination or quarantine—a  
19 case we have argued that McMath has not succeeded in establishing.  
20  
21  
22  
23  
24  
25  
26  
27

### 28 **Acknowledgments**

29 The authors thank Aaron T. Norton and Nathan Hodson for valuable feedback on an earlier  
30 draft of this essay.  
31  
32  
33  
34

### 35 **References**

- 36  
37 AAP, 2012. Male circumcision (technical report). *Pediatrics* 130, e756–e785.  
38 doi:10.1542/peds.2012-1990  
39 Abdulcadir, J., Ahmadu, F.S., Essen, B., Gruenbaum, E., Johnsdotter, S., Johnson, M.C.,  
40 Johnson-Agbakwu, C., Kratz, C., Sulkin, C.L., McKinley, M., Wairimu, N., Rogers,  
41 J., Shell-Duncan, B., Shweder, R.A., 2012. Seven things to know about female genital  
42 surgeries in Africa. *Hastings Cent. Rep.* 42, 19–27.  
43 Abu-Sahlieh, S.A.A., 1994. To mutilate in the name of Jehovah or Allah: legitimization of  
44 male and female circumcision. *Med. Law* 13, 575–622.  
45 Adler, P., 2016. Resolving circumcision controversies: the burden of proof and the benefit of  
46 the doubt. *Circumcision Law Blog*.  
47 Aggleton, P., 2007. “Just a snip”? A social history of male circumcision. *Reprod. Health*  
48 *Matters* 15, 15–21.  
49 Alani, A., Kelleher, M., Hemmings, K., Saunders, M., Hunter, M., Barclay, S., Ashley, M.,  
50 Djemal, S., Bishop, K., Darbar, U., Briggs, P., Fearne, J., 2015. Balancing the risks  
51 and benefits associated with cosmetic dentistry – a joint statement by UK specialist  
52 dental societies. *BDJ* 218, 543–548. doi:10.1038/sj.bdj.2015.345  
53 Alkhenizan, A., Elabd, K., 2009. Non-therapeutic infant male circumcision. Evidence, ethics,  
54 and international law perspectives. *Saudi Med. J.* 37, 941–947.  
55 Androus, Z.T., 2004. The United States, FGM, and global rights to bodily Integrity., in: *The*  
56 *United States and Global Human Rights*. Presented at the The Rothermere American  
57 Institute Conference, University of Oxford, pp. 1–7.  
58  
59  
60



- 1  
2  
3  
4 Auvert, B., Taljaard, D., Lagarde, E., Sobngwi-Tambekou, J., Sitta, R., Puren, A., 2005.  
5 Randomized, controlled intervention trial of male circumcision for reduction of HIV  
6 infection risk: the ANRS 1265 trial. *PLoS Med.* 2, e298.  
7 doi:10.1371/journal.pmed.0020298
- 8 Bailey, R.C., Moses, S., Parker, C.B., Agot, K., Maclean, I., Krieger, J.N., Williams, C.F.,  
9 Campbell, R.T., Ndinya-Achola, J.O., 2007. Male circumcision for HIV prevention in  
10 young men in Kisumu, Kenya: a randomised controlled trial. *The Lancet* 369, 643–  
11 656. doi:10.1016/S0140-6736(07)60312-2
- 12 Bailey, R.C., Nyaboke, I., Otieno, F.O., 2017. What device would be best for early infant  
13 male circumcision in east and southern Africa? Provider experiences and opinions  
14 with three different devices in Kenya. *PLOS ONE* 12, e0171445.  
15 doi:10.1371/journal.pone.0171445
- 16 Begley, C.G., Ioannidis, J.P.A., 2015. Reproducibility in science. *Circ. Res.* 116, 116–126.  
17 doi:10.1161/CIRCRESAHA.114.303819
- 18 Bell, K., 2015. HIV prevention: making male circumcision the “right” tool for the job. *Glob.*  
19 *Public Health* 10, 552–572. doi:10.1080/17441692.2014.903428
- 20 Benatar, M., Benatar, D., 2003. Between prophylaxis and child abuse: the ethics of neonatal  
21 male circumcision. *Am. J. Bioeth.* 3, 35–48.
- 22 Ben-Yami, H., 2013. Circumcision: What should be done? *J. Med. Ethics* 39, 459–462.  
23 doi:10.1136/medethics-2012-101274
- 24 Bero, L., 2017. Addressing bias and conflict of interest among biomedical researchers.  
25 *JAMA* 317, 1723–1724. doi:10.1001/jama.2017.3854
- 26 Bill & Melinda Gates Foundation, 2017. HIV strategy overview [WWW Document]. Bill  
27 Melinda Gates Found. URL [http://www.gatesfoundation.org/What-We-Do/Global-  
28 Health/HIV](http://www.gatesfoundation.org/What-We-Do/Global-Health/HIV) (accessed 6.29.17).
- 29 BMA, 2004. The law and ethics of male circumcision: guidance for doctors. *J. Med. Ethics*  
30 30, 259–263. doi:10.1136/jme.2004.008540
- 31 Bossio, J.A., Pukall, C.F., 2017. Attitude toward one’s circumcision status is more important  
32 than actual circumcision status for men’s body image and sexual functioning. *Arch.*  
33 *Sex. Behav.* in press. doi:10.1007/s10508-017-1064-8
- 34 Bossio, J.A., Pukall, C.F., Steele, S.S., 2016. Examining penile sensitivity in neonatally  
35 circumcised and intact men using quantitative sensory testing. *J. Urol.* 195, 1848–  
36 1853. doi:10.1016/j.juro.2015.12.080
- 37 Bossio, J.A., Pukall, C.F., Steele, S.S., 2015. Response to: The literature supports policies  
38 promoting neonatal male circumcision in N. America. *J. Sex. Med.* 12, 1306–1307.  
39 doi:10.1111/jsm.12852
- 40 Bossio, J.A., Pukall, C.F., Steele, S.S., 2014. A review of the current state of the male  
41 circumcision literature. *J. Sex. Med.* 11, 2847–2864. doi:10.1111/jsm.12703
- 42 Boyle, G.J., Svoboda, J., Price, C., Turner, J.N., 2000. Circumcision of healthy boys:  
43 criminal assault? *J. Law Med.* 7, 301–310.
- 44 Bundick, S., 2009. Promoting infant male circumcision to reduce transmission of HIV: a  
45 flawed policy for the US [WWW Document]. *Harv. Health Hum. Rights J. Blog.*  
46 URL [https://www.hhrjournal.org/2009/08/promoting-infant-male-circumcision-to-  
47 reduce-transmission-of-hiv-a-flawed-policy-for-the-us/](https://www.hhrjournal.org/2009/08/promoting-infant-male-circumcision-to-reduce-transmission-of-hiv-a-flawed-policy-for-the-us/) (accessed 12.24.16).
- 48 Carmack, A., Notini, L., Earp, B.D., 2016. Should surgery for hypospadias be performed  
49 before an age of consent? *J. Sex Res.* 53, 1047–1058.  
50 doi:10.1080/00224499.2015.1066745
- 51 Cartwright, N., 2011. A philosopher’s view of the long road from RCTs to effectiveness. *The*  
52 *Lancet* 377, 1400–1401.
- 53 Cartwright, N., 2007. Are RCTs the gold standard? *BioSocieties* 2, 11–20.  
54 doi:10.1017/S1745855207005029
- 55  
56  
57  
58  
59  
60

- 1  
2  
3  
4 Cartwright, N., Joyce, K., 2017. Meeting our standards for educational justice: doing our best  
5 with the evidence. *Univ. San Diego Dep. Philos. Unpubl. Manusc.* 1–19.
- 6 CDC, 2014. Draft CDC recommendations for providers counseling male patients and parents  
7 regarding male circumcision and the prevention of HIV infection, STIs, and other  
8 health outcomes. *US Cent. Dis. Control.*
- 9 Cetron, M., Landwirth, J., 2005. Public health and ethical considerations in planning for  
10 quarantine. *Yale J. Biol. Med.* 78, 325–3330.
- 11 Coghlan, A., 2009. Bill Gates helps fund mass circumcision programme [WWW Document].  
12 *New Sci.* URL [https://www.newscientist.com/article/dn17312-bill-gates-helps-fund-](https://www.newscientist.com/article/dn17312-bill-gates-helps-fund-mass-circumcision-programme/)  
13 [mass-circumcision-programme/](https://www.newscientist.com/article/dn17312-bill-gates-helps-fund-mass-circumcision-programme/) (accessed 6.29.17).
- 14 Cold, C.J., Taylor, J.R., 1999. The prepuce. *BJU Int.* 83, 34–44.
- 15 Collier, R., 2012. Ugly, messy and nasty debate surrounds circumcision. *Can. Med. Assoc. J.*  
16 184, E25–E26. doi:10.1503/cmaj.109-4017
- 17 Collins, F.S., Tabak, L.A., 2014. NIH plans to enhance reproducibility. *Nature* 505, 612–613.
- 18 CPS, 2015. Newborn male circumcision. *Paediatr. Child Health* 20, 311–320.
- 19 Crosby, R., Charnigo, R.J., 2013. A comparison of condom use perceptions and behaviours  
20 between circumcised and intact men attending sexually transmitted disease clinics in  
21 the United States. *Int. J. STD AIDS* 24, 175–178. doi:10.1177/0956462412472444
- 22 Cruz, R., Glick, L.B., Travis, J.W., 2003. Circumcision as human-rights violation: assessing  
23 Benatar and Benatar. *Am. J. Bioeth.* 3, 19–20. doi:10.1162/152651603766436351
- 24 Darby, R., 2016. Targeting patients who cannot object? Re-examining the case for non-  
25 therapeutic infant circumcision. *SAGE Open* 6, 2158244016649219.
- 26 Darby, R., 2015a. Risks, benefits, complications and harms: neglected factors in the current  
27 debate on non-therapeutic circumcision. *Kennedy Inst. Ethics J.* 25, 1–34.
- 28 Darby, R., 2015b. Syphilis 1855 and HIV-AIDS 2007: Historical reflections on the tendency  
29 to blame human anatomy for the action of micro-organisms. *Glob. Public Health* 10,  
30 573–588. doi:10.1080/17441692.2014.957231
- 31 Darby, R., 2005. *A Surgical Temptation: The Demonization of the Foreskin and the Rise of*  
32 *Circumcision in Britain.* University of Chicago Press, Chicago.
- 33 Darby, R., Cox, L., 2009. Objections of a sentimental character: the subjective dimensions of  
34 foreskin loss. *Matatu-J. Afr. Cult. Soc.* 37, 145–168.
- 35 Darby, R., Van Howe, R., 2011. Not a surgical vaccine: there is no case for boosting infant  
36 male circumcision to combat heterosexual transmission of HIV in Australia. *Aust. N.*  
37 *Z. J. Public Health* 35, 459–465. doi:10.1111/j.1753-6405.2011.00761.x
- 38 Davis, D.S., 2013. Ancient rites and new laws: how should we regulate religious  
39 circumcision of minors? *J. Med. Ethics* 39, 456–458. doi:10.1136/medethics-2013-  
40 101469
- 41 Davis, D.S., 2001. Male and female genital alteration: a collision course with the law. *Health*  
42 *Matrix* 11, 487–570.
- 43 de Camargo, K.R., de Oliveira Mendonça, A.L., Perrey, C., Giami, A., 2015. Making the  
44 circumcision controversy controversial: Going meta and taking aim at the  
45 messenger(s): Reply to Wamai et al. *Glob. Public Health* 10, 667–671.  
46 doi:10.1080/17441692.2014.989533
- 47 de Camargo, K.R., de Oliveira Mendonça, A.L., Perrey, C., Giami, A., 2013. Male  
48 circumcision and HIV: A controversy study on “facts” and “values.” *Glob. Public*  
49 *Health* 8, 769–783. doi:10.1080/17441692.2013.817599
- 50 de Camargo, K.R., Mendonça, A.L.O., Perrey, C., Giami, A., 2015. LETTER TO THE  
51 EDITOR: A response to Wamai et al. *Glob. Public Health* 10, 1252–1252.  
52 doi:10.1080/17441692.2015.1094933
- 53 Dekkers, W., 2009. Routine (non-religious) neonatal circumcision and bodily integrity: a  
54 transatlantic dialogue. *Kennedy Inst. Ethics J.* 19, 125–146. doi:10.1353/ken.0.0279
- 55  
56  
57  
58  
59  
60



- 1  
2  
3  
4 Dekkers, W., Hoffer, C., Wils, J.-P., 2005. Bodily integrity and male and female  
5 circumcision. *Med. Health Care Philos.* 8, 179–191. doi:10.1007/s11019-004-3530-z
- 6 DeLaet, D.L., 2012. Genital autonomy, children’s rights, and competing rights claims in  
7 international human rights law. *Int. J. Child. Rights* 20, 554–583.  
8 doi:10.1163/15718182-55680007
- 9 DeLaet, D.L., 2009. Framing male circumcision as a human rights issue? Contributions to the  
10 debate over the universality of human rights. *J. Hum. Rights* 8, 405–426.  
11 doi:10.1080/14754830903324795
- 12 Denniston, G.C., Hodges, F.M., Milos, M.F., 2007. Male and female circumcision: medical,  
13 legal, and ethical considerations in pediatric practice. Springer Science & Business  
14 Media, New York.
- 15 Denniston, G.C., Milos, M.F. (Eds.), 1997. *Sexual Mutilations*. Springer US, Boston, MA.
- 16 Douglas, H., 2009. *Science, Policy, and the Value-free Ideal*. University of Pittsburgh Press,  
17 Pittsburgh.
- 18 Drazen, J.M., Kanapathipillai, R., Campion, E.W., Rubin, E.J., Hammer, S.M., Morrissey, S.,  
19 Baden, L.R., 2014. Ebola and quarantine. *N. Engl. J. Med.* 371, 2029–2030.  
20 doi:10.1056/NEJMe1413139
- 21 Dreger, A., 1999. *Intersex in the Age of Ethics*. University Publishing Group, Hagerstown.
- 22 Dushoff, J., Patocs, A., Shi, C.-F., 2011. Modeling the population-level effects of male  
23 circumcision as an HIV-preventive measure: a gendered perspective. *PLOS ONE* 6,  
24 e28608. doi:10.1371/journal.pone.0028608
- 25 Earp, B., 2017a. Gender, genital alteration, and beliefs about bodily harm. *J. Sex. Med.*, 23rd  
26 Congress of the World Association for Sexual Health 14, e225.  
27 doi:10.1016/j.jsxm.2017.04.182
- 28 Earp, B., 2017b. The right to bodily integrity and the concept of sexual harm. *J. Sex. Med.*,  
29 23rd Congress of the World Association for Sexual Health 14, e239.  
30 doi:10.1016/j.jsxm.2017.04.153
- 31 Earp, B.D., 2016a. The unbearable asymmetry of bullshit. *Health Watch Spring*, 4–5.
- 32 Earp, B.D., 2016b. Mental shortcuts. *Hastings Cent. Rep.* 46, inside front cover.
- 33 Earp, B.D., 2016c. Between moral relativism and moral hypocrisy: reframing the debate on  
34 “FGM.” *Kennedy Inst. Ethics J.* 26, 105–144. doi:10.1353/ken.2016.0009
- 35 Earp, B.D., 2016d. Infant circumcision and adult penile sensitivity: implications for sexual  
36 experience. *Trends Urol. Mens Health* 7, 17–21. doi:10.1002/tre.531
- 37 Earp, B.D., 2015a. Addressing polarisation in science. *J. Med. Ethics* 41, 782–784.  
38 doi:10.1136/medethics-2015-102891
- 39 Earp, B.D., 2015b. Do the benefits of male circumcision outweigh the risks? A critique of the  
40 proposed CDC guidelines. *Front. Pediatr.* 3, 1–6. doi:10.3389/fped.2015.00018
- 41 Earp, B.D., 2015c. The need to control for socially desirable responding in studies on the  
42 sexual effects of male circumcision. *PLoS One* 10, 1–12.
- 43 Earp, B.D., 2015d. Sex and circumcision. *Am. J. Bioeth.* 15, 43–45.  
44 doi:10.1080/15265161.2014.991000
- 45 Earp, B.D., 2015e. Female genital mutilation and male circumcision: toward an autonomy-  
46 based ethical framework. *Medicolegal Bioeth.* 5, 89–104. doi:10.2147/MB.S63709
- 47 Earp, B.D., 2013. The ethics of infant male circumcision. *J. Med. Ethics* 39, 418–420.
- 48 Earp, B.D., 2012. The AAP report on circumcision: Bad science + bad ethics = bad medicine.  
49 *Pract. Ethics Univ. Oxf.*
- 50 Earp, B.D., Darby, R., 2017. Circumcision, sexual experience, and harm. *Univ. Pa. J. Int.*  
51 *Law* 37, 1–57.
- 52 Earp, B.D., Darby, R., 2015. Does science support infant circumcision? A skeptical reply to  
53 Brian Morris. *The Skeptic* 25, 23–30.
- 54  
55  
56  
57  
58  
59  
60

- 1  
2  
3  
4 Earp, B.D., Hendry, J., Thomson, M., in press. Reason and paradox in medical and family  
5 law: shaping children's bodies. *Med. Law Rev.*
- 6 Earp, B.D., Sardi, L., Jellison, W., in press. False beliefs predict increased circumcision  
7 satisfaction. *Cult. Health Sex.*
- 8 Earp, B.D., Shaw, D.M., in press. Cultural bias in American medicine: the case of infant male  
9 circumcision. *J. Pediatr. Ethics.*
- 10 Easterbrook, P.J., Gopalan, R., Berlin, J.A., Matthews, D.R., 1991. Publication bias in  
11 clinical research. *The Lancet*, Originally published as Volume 1, Issue 8746 337,  
12 867–872. doi:10.1016/0140-6736(91)90201-Y
- 13 Feldblum, P.J., Okech, J., Ochieng, R., Hart, C., Kiyuka, G., Lai, J.J., Veena, V., 2015.  
14 Longer-term follow-up of Kenyan men circumcised using the ShangRing device.  
15 *PLOS ONE* 10, e0137510. doi:10.1371/journal.pone.0137510
- 16 Foddy, B., 2013. Medical, religious and social reasons for and against an ancient rite. *J. Med.*  
17 *Ethics* 39, 415–415. doi:10.1136/medethics-2013-101605
- 18 Fox, M., Thomson, M., 2010. HIV/AIDS and circumcision: lost in translation. *J. Med. Ethics*  
19 36, 798–801. doi:10.1136/jme.2010.038695
- 20 Fox, M., Thomson, M., 2006. Short changed? The law and ethics of male circumcision, in:  
21 *Children's Health and Children's Rights*. Brill, Leiden, pp. 161–182.
- 22 Frisch, M., 2016. Higher frequency of unprotected insertive anal sex among young black  
23 MSM who are circumcised. *AIDS Behav.* 20, 2543–2544.
- 24 Frisch, M., Aigrain, Y., Barauskas, V., Bjarnason, R., Boddy, S.-A., Czauderna, P., Gier,  
25 R.P.E. de Jong, T.P.V.M. de, Fasching, G., Fetter, W., Gahr, M., Graugaard, C.,  
26 Greisen, G., Gunnarsdottir, A., Hartmann, W., Havranek, P., Hitchcock, R., Huddart,  
27 S., Janson, S., Jaszczak, P., Kupferschmid, C., Lahdes-Vasama, T., Lindahl, H.,  
28 MacDonald, N., Markestad, T., Märtson, M., Nordhov, S.M., Pälve, H., Petersons, A.,  
29 Quinn, F., Qvist, N., Rosmundsson, T., Saxen, H., Söder, O., Stehr, M., Loewenich,  
30 V.C.H. von, Wallander, J., Wijnen, R., 2013. Cultural bias in the AAP's 2012  
31 technical report and policy statement on male circumcision. *Pediatrics* 131, 796–800.  
32 doi:10.1542/peds.2012-2896
- 33 Frisch, M., Earp, B.D., in press. Circumcision of male infants and children as a public health  
34 measure in developed countries: a critical assessment of recent evidence. *Glob. Public*  
35 *Health*. doi:10.1080/17441692.2016.1184292
- 36 Frisch, M., Simonsen, J., 2016. Cultural background, non-therapeutic circumcision and the  
37 risk of meatal stenosis and other urethral stricture disease: Two nationwide register-  
38 based cohort studies in Denmark 1977–2013. *The Surgeon* in press.  
39 doi:10.1016/j.surge.2016.11.002
- 40 Frisch, M., Simonsen, J., 2015a. Ritual circumcision and risk of autism spectrum disorder in  
41 0- to 9-year-old boys: national cohort study in Denmark. *J. R. Soc. Med.* 108, 266–  
42 279. doi:10.1177/0141076814565942
- 43 Frisch, M., Simonsen, J., 2015b. Circumcision-autism link needs thorough evaluation:  
44 Response to Morris and Wiswell. *J. R. Soc. Med.* 108, 297–298.  
45 doi:10.1177/0141076815593048
- 46 Gage, A.J., Van Rossem, R., 2006. Attitudes toward the discontinuation of female genital  
47 cutting among men and women in Guinea. *Int. J. Gynecol. Obstet.* 92, 92–96.  
48 doi:10.1016/j.ijgo.2005.09.019
- 49 Garenne, M., Giami, A., Perrey, C., 2013. Male circumcision and HIV control in Africa:  
50 questioning scientific evidence and the decision-making process, in: Giles-Vernik, T.,  
51 Webb, J. (Eds.), *Global Health in Africa: Historical Perspectives on Disease Control*.  
52 Ohio University Press, Athens, pp. 185–210.
- 53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3  
4 Giami, A., Perrey, C., 2012. Transformations in the medicalization of sex: HIV prevention  
5 between discipline and biopolitics. *J. Sex Res.* 49, 353–361.  
6 doi:10.1080/00224499.2012.665510
- 7 Giami, A., Perrey, C., de Oliveira Mendonça, A.L., de Camargo, K.R., 2015. Hybrid forum  
8 or network? The social and political construction of an international “technical  
9 consultation”: Male circumcision and HIV prevention. *Glob. Public Health* 10, 589–  
10 606. doi:10.1080/17441692.2014.998697
- 11 Glick, L.B., 2005. *Marked in Your Flesh: Circumcision from Ancient Judea to Modern*  
12 *America.* Oxford University Press, Oxford.
- 13 Gollaher, D.L., 2000. *Circumcision: A History of the World’s Most Controversial Surgery.*  
14 *Basic Books, New York.*
- 15 Gollaher, D.L., 1994. From ritual to science: the medical transformation of circumcision in  
16 America. *J. Soc. Hist.* 28, 5–36.
- 17 Gonsalves, G., Staley, P., 2014. Panic, paranoia, and public health — the AIDS epidemic’s  
18 lessons for ebola. *N. Engl. J. Med.* 371, 2348–2349. doi:10.1056/NEJMp1413425
- 19 Gray, R.H., Kigozi, G., Serwadda, D., Makumbi, F., Watya, S., Nalugoda, F., Kiwanuka, N.,  
20 Moulton, L.H., Chaudhary, M.A., Chen, M.Z., Sewankambo, N.K., Wabwire-Mangen,  
21 F., Bacon, M.C., Williams, C.F., Opendi, P., Reynolds, S.J., Laeyendecker, O., Quinn,  
22 T.C., Wawer, M.J., 2007. Male circumcision for HIV prevention in men in Rakai,  
23 Uganda: a randomised trial. *The Lancet* 369, 657–666. doi:10.1016/S0140-  
24 6736(07)60313-4
- 25 Grund, J.M., Hennink, M.M., 2012. A qualitative study of sexual behavior change and risk  
26 compensation following adult male circumcision in urban Swaziland. *AIDS Care* 24,  
27 245–251. doi:10.1080/09540121.2011.596516
- 28 Hammond, T., Carmack, A., 2017. Long-term adverse outcomes from neonatal circumcision  
29 reported in a survey of 1,008 men: an overview of health and human rights  
30 implications. *Int. J. Hum. Rights* 21, 189–218. doi:10.1080/13642987.2016.1260007
- 31 Hatzold, K., Mavhu, W., Jasi, P., Chatora, K., Cowan, F.M., Taruberekera, N., Mugurungi,  
32 O., Ahanda, K., Njeuhmeli, E., 2014. Barriers and motivators to voluntary medical  
33 male circumcision uptake among different age groups of men in Zimbabwe: results  
34 from a mixed methods study. *PLOS ONE* 9, e85051.  
35 doi:10.1371/journal.pone.0085051
- 36 Hladik, F., Hope, T.J., 2009. HIV infection of the genital mucosa in women. *Curr. HIV/AIDS*  
37 *Rep.* 6, 20–28. doi:10.1007/s11904-009-0004-1
- 38 Hodges, F., 1997. A short history of the institutionalization of involuntary sexual mutilation  
39 in the United States, in: *Sexual Mutilations.* Springer, New York, pp. 17–40.
- 40 Hodges, F.M., Svoboda, J.S., Howe, R.S.V., 2002. Prophylactic interventions on children:  
41 balancing human rights with public health. *J. Med. Ethics* 28, 10–16.  
42 doi:10.1136/jme.28.1.10
- 43 Hodson, N., Bewley, S., n.d. Pursuing ethical coherence in the prevention of vertical  
44 transmission of HIV: justice and injustice in Option B+. *J. Virus Erad.* 3, 163–166.
- 45 Holm, S., 2004. Irreversible bodily interventions in children. *J. Med. Ethics* 30, 237–237.  
46 doi:10.1136/jme.2004.009001
- 47 Ioannidis, J.P.A., 2017. Hijacked evidence-based medicine: stay the course and throw the  
48 pirates overboard. *J. Clin. Epidemiol.* 84, 11–13. doi:10.1016/j.jclinepi.2017.02.001
- 49 Ioannidis, J.P.A., 2005. Why most published research findings are false. *PLoS Med.* 2, e124.  
50 doi:10.1371/journal.pmed.0020124
- 51 Jacobs, A.J., Arora, K.S., 2015. Ritual male infant circumcision and human rights. *Am. J.*  
52 *Bioeth.* 15, 30–39. doi:10.1080/15265161.2014.990162
- 53 Jonsen, A.R., 1978. Do no harm. *Ann. Intern. Med.* 88, 827–832.
- 54  
55  
56  
57  
58  
59  
60

- 1  
2  
3  
4 Jung, J., Kim, B., Kim, H.B., Cristian, P.-E., 2016. Long-term effects of male circumcision  
5 on risky sexual behaviors and STD infections: evidence from Malawian schools. KDI  
6 Sch. Work. Pap. Ser. Working Paper 16-08, 1–43.
- 7 Karkazis, K., 2008. *Fixing Sex: Intersex, Medical Authority, and Lived Experience*. Duke  
8 University Press, Durham.
- 9 Katisi, M., Daniel, M., 2015. Safe male circumcision in Botswana: Tension between  
10 traditional practices and biomedical marketing. *Glob. Public Health* 10, 739–756.  
11 doi:10.1080/17441692.2015.1028424
- 12 Kibira, S.P.S., Atuyambe, L.M., Sandøy, I.F., Makumbi, F.E., Daniel, M., 2017. “Now that  
13 you are circumcised, you cannot have first sex with your wife”: post circumcision  
14 sexual behaviours and beliefs among men in Wakiso district, Uganda. *J. Int. AIDS  
15 Soc.* 20. doi:10.7448/ias.20.1.21498
- 16 Kigozi, G., Wawer, M., Ssettuba, A., Kagaayi, J., Nalugoda, F., Watya, S., Mangen, F.W.,  
17 Kiwanuka, N., Bacon, M.C., Lutalo, T., Serwadda, D., Gray, R.H., 2009. Foreskin  
18 surface area and HIV acquisition in Rakai, Uganda (size matters). *AIDS Lond. Engl.*  
19 23, 2209–2213. doi:10.1097/QAD.0b013e328330eda8
- 20 Kipnis, K., Diamond, M., 1998. Pediatric ethics and the surgical assignment of sex. *J. Clin.  
21 Ethics* 9, 398–410.
- 22 Kluge, E.-H., 1994. Dr. Kluge responds. *CMAJ Can. Med. Assoc. J.* 150, 1542.
- 23 KNMG, 2010. Nontherapeutic circumcision of male minors. *R. Dutch Med. Assoc. KNMG*  
24 1–17.
- 25 Kopelman, L.M., 2014. Make her a virgin again: when medical disputes about minors are  
26 cultural clashes. *J. Med. Philos.* 39, 8–25. doi:10.1093/jmp/jht055
- 27 Kopelman, L.M., 2007. The best interests standard for incompetent or incapacitated persons  
28 of all ages. *J. Law. Med. Ethics* 35, 187–196. doi:10.1111/j.1748-720X.2007.00123.x
- 29 Kopelman, L.M., Kopelman, A.E., 2007. Using a new analysis of the best interests standard  
30 to address cultural disputes: whose data, which values? *Theor. Med. Bioeth.* 28, 373–  
31 391. doi:10.1007/s11017-007-9050-0
- 32 Levesque, A., Li, H.Z., 2014. The relationship between culture, health conceptions, and  
33 health practices: a qualitative–quantitative approach. *J. Cross-Cult. Psychol.* 45, 628–  
34 645. doi:10.1177/0022022113519855
- 35 Ludbrook, R., 1995. The child’s right to bodily integrity. *Curr. Issues Crim Just* 7, 123.
- 36 Lyons, B., 2013. Male Infant Circumcision as a “HIV Vaccine.” *Public Health Ethics* 6, 90–  
37 103. doi:10.1093/phe/phs039
- 38 Maslen, H., Earp, B.D., Cohen Kadosh, R., Savulescu, J., 2014. Brain stimulation for  
39 treatment and enhancement in children: an ethical analysis. *Front. Hum. Neurosci.* 8,  
40 1–5. doi:10.3389/fnhum.2014.00953
- 41 Mavhu, W., Hatzold, K., Laver, S.M., Sherman, J., Tengende, B.R., Mangenah, C., Langhaug,  
42 L.F., Hart, G., Cowan, F.M., 2012. Acceptability of early infant male circumcision as  
43 an HIV prevention intervention in zimbabwe: a qualitative perspective. *PLOS ONE* 7,  
44 e32475. doi:10.1371/journal.pone.0032475
- 45 Mazor, J., 2013. The child’s interests and the case for the permissibility of male infant  
46 circumcision. *J. Med. Ethics* 39, 421–428. doi:10.1136/medethics-2013-101318
- 47 McMath, A., 2015a. Infant male circumcision and the autonomy of the child: two ethical  
48 questions. *J. Med. Ethics* 41, 687–690. doi:10.1136/medethics-2014-102319
- 49 McMath, A., 2015b. Autonomy and the circumcision wars [WWW Document]. *J. Med.  
50 Ethics Blog*. URL [http://blogs.bmj.com/medical-ethics/2015/02/27/autonomy-and-  
51 the-circumcision-wars/](http://blogs.bmj.com/medical-ethics/2015/02/27/autonomy-and-the-circumcision-wars/) (accessed 6.29.17).
- 52 Merkel, R., Putzke, H., 2013. After Cologne: male circumcision and the law. Parental right,  
53 religious liberty or criminal assault? *J. Med. Ethics* 39, 444–449.  
54 doi:10.1136/medethics-2012-101284
- 55  
56  
57  
58  
59  
60



- 1  
2  
3  
4 Miller, G.P., 2002. Circumcision: cultural-legal analysis. *Va. J. Soc. Policy Law* 9, 497–585.
- 5 Mollov, N.D., Lindauer, S.J., Best, A.M., Shroff, B., Tufekci, E., 2010. Patient attitudes  
6 toward retention and perceptions of treatment success. *Angle Orthod.* 80, 656–661.  
7 doi:10.2319/102109-594.1
- 8 Norton, A.T., 2017. Foreskin and the molecular politics of risk. *Soc. Stud. Sci.* in press.
- 9 Norton, A.T., 2013. Surveying risk subjects: public health surveys as instruments of  
10 biomedicalization. *BioSocieties* 8, 265–288.
- 11 Ploug, T., Holm, S., 2015. Conflict of interest disclosure and the polarisation of scientific  
12 communities. *J. Med. Ethics* 41, 356–358. doi:10.1136/medethics-2014-102114
- 13 Price, C., 1997. Male circumcision: an ethical and legal affront. *Bull. Med. Ethics* 128, 13–19.
- 14 Publication bias and the canonization of false facts, 2016. arXiv:1609.00494.
- 15 RACP, 2010. Circumcision of infant males. *R. Australas. Coll. Physicians* 1–28.
- 16 Reis, E., 2009. *Bodies in Doubt: An American History of Intersex.* JHU Press, Baltimore.
- 17 Richters, J., 2009. Bodies, pleasure and displeasure. *Cult. Health Sex.* 11, 225–236.  
18 doi:10.1080/13691050701834626
- 19 Richters, J., Gerofi, J., Donovan, B., 1995. Why do condoms break or slip off in use? An  
20 exploratory study. *Int. J. STD AIDS* 6, 11–18. doi:10.1177/095646249500600104
- 21 Riess, T.H., Achieng, M.M., Otieno, S., Ndinya-Achola, J.O., Bailey, R.C., 2010. “When I  
22 was circumcised I was taught certain things”: risk compensation and protective sexual  
23 behavior among circumcised men in Kisumu, Kenya. *PLOS ONE* 5, e12366.  
24 doi:10.1371/journal.pone.0012366
- 25 Rudrum, S., Oliffe, J.L., Benoit, C., 2017. Discourses of masculinity, femininity and  
26 sexuality in Uganda’s Stand Proud, Get Circumcised campaign. *Cult. Health Sex.* 19,  
27 225–239. doi:10.1080/13691058.2016.1214748
- 28 Savulescu, J., 2013. Male circumcision and the enhancement debate: harm reduction, not  
29 prohibition. *J. Med. Ethics* 39, 416–417. doi:10.1136/medethics-2013-101607
- 30 Schoen, E.J., 2006. Ignoring evidence of circumcision benefits. *Pediatrics* 118, 385–387.  
31 doi:10.1542/peds.2005-2881
- 32 Scott, S., 1999. The anatomy and physiology of the human prepuce, in: *Male and Female*  
33 *Circumcision.* Springer, pp. 9–18.
- 34 Shaw, D.M., 2014. Beyond conflicts of interest: disclosing medical biases. *J. Am. Med.*  
35 *Assoc.* 312, 697–698. doi:10.1001/jama.2014.8035
- 36 Shweder, R.A., 2016. Equality now in genital reshaping: Brian Earp’s search for moral  
37 consistency. *Kennedy Inst. Ethics J.* 26, 145–154. doi:10.1353/ken.2016.0016
- 38 Shweder, R.A., 2013. The goose and the gander: the genital wars. *Glob. Discourse* 3, 348–  
39 366. doi:10.1080/23269995.2013.811923
- 40 Sidler, D., Earp, B.D., van Niekerk, A., Moodley, K., Kling, S., 2017. Targeting mothers and  
41 selling men what they do not want: A response to “Missed opportunities for  
42 circumcision of boys.” *S. Afr. Med. J.* 107, 281.
- 43 Sidler, D., Smith, J., Rode, H., 2008. Neonatal circumcision does not reduce HIV/AIDS  
44 infection rates. *SAMJ South Afr. Med. J.* 98, 762–766.
- 45 Silverman, E.K., 2004. Anthropology and circumcision. *Annu. Rev. Anthropol.* 33, 419–445.  
46 doi:10.1146/annurev.anthro.33.070203.143706
- 47 Sircili, M.H.P., de Queiroz e Silva, F.A., Costa, E.M.F., Brito, V.N., Arnhold, I.J.P., Dénes,  
48 F.T., Inacio, M., de Mendonca, B.B., 2010. Long-term surgical outcome of  
49 masculinizing genitoplasty in large cohort of patients with disorders of sex  
50 development. *J. Urol.* 184, 1122–1127. doi:10.1016/j.juro.2010.05.022
- 51 Smith, R., 2010. Classical peer review: an empty gun. *Breast Cancer Res.* 12, S13.  
52 doi:10.1186/bcr2742
- 53 Sommerville, M., 2004. *The ethical canary: science, society, and the human spirit.* McGill-  
54 Queen’s University Press, Montreal.
- 55  
56  
57  
58  
59  
60

- 1  
2  
3  
4 Sorrells, M.L., Snyder, J.L., Reiss, M.D., Eden, C., Milos, M.F., Wilcox, N., Van Howe, R.S.,  
5 2007. Fine-touch pressure thresholds in the adult penis. *BJU Int.* 99, 864–869.  
6 doi:10.1111/j.1464-410X.2006.06685.x
- 7 Svoboda, J.S., 2013. Promoting genital autonomy by exploring commonalities between male,  
8 female, intersex, and cosmetic female genital cutting. *Glob. Discourse* 3, 237–255.  
9 doi:10.1080/23269995.2013.804757
- 10 Svoboda, J.S., Adler, P.W., Van Howe, R.S., 2016. Circumcision is unethical and unlawful. *J.*  
11 *Law. Med. Ethics* 44, 263–282. doi:10.1177/1073110516654120
- 12 Taube, J.M., Nichols, A.D., Bornman, L.S., Bornman, D.M., Jackson, J.B., 2007. Langerhans  
13 cell density and high-grade vulvar intraepithelial neoplasia in women with human  
14 immunodeficiency virus infection. *J. Cutan. Pathol.* 34, 565–570. doi:10.1111/j.1600-  
15 0560.2006.00663.x
- 16 Taylor, J.R., Lockwood, A.P., Taylor, A.J., 1996. The prepuce: specialized mucosa of the  
17 penis and its loss to circumcision. *Br. J. Urol.* 77, 291–295.
- 18 Tobian, A.A., Gray, R.H., 2011. The medical benefits of male circumcision. *JAMA* 306,  
19 1479–1480.
- 20 Ungar-Sargon, E., 2015. On the impermissibility of infant male circumcision: a response to  
21 Mazor (2013). *J. Med. Ethics* 41, 186–190. doi:10.1136/medethics-2013-101598
- 22 Van Howe, R.S., 2017. Expertise or ideology? A response to Morris et al. 2016,  
23 “Circumcision is a primary preventive against HIV infection: Critique of a contrary  
24 meta-regression analysis by Van Howe.” *Glob. Public Health* 1–19.  
25 doi:10.1080/17441692.2016.1272939
- 26 Van Howe, R.S., 2013. Infant circumcision: the last stand for the dead dogma of parental  
27 (sovereign) rights. *J. Med. Ethics* 39, 475–481. doi:10.1136/medethics-2012-101209
- 28 Van Howe, R.S., 1999. Peer-review bias regarding circumcision in American medical  
29 publishing, in: Denniston, G.C., Hodges, F.M., Milos, M.F. (Eds.), *Male and Female*  
30 *Circumcision*. Springer US, pp. 357–378. doi:10.1007/978-0-585-39937-9\_32
- 31 Van Howe, R.S., Storms, M.R., 2011. How the circumcision solution in Africa will increase  
32 HIV infections. *J. Public Health Afr.* 2, 11–15. doi:10.4081/jphia.2011.e4
- 33 Waldeck, S.E., 2003. Using male circumcision to understand social norms as multipliers.  
34 *Univ. Cincinnati Law Rev.* 72, 455–526.
- 35 Wallerstein, E.J., 1985. Circumcision: the uniquely American medical enigma. *Urol. Clin.*  
36 *North Am.* 12, 123–132.
- 37 Wallerstein, E.J., 1980. *Circumcision: An American Health Fallacy*. Springer US, New York.
- 38 Watson, L., 2014. *Unspeakable Mutilations: Circumcised Men Speak Out*. Amazon Media,  
39 Ashburton.
- 40 Wawer, M.J., Makumbi, F., Kigozi, G., Serwadda, D., Watya, S., Nalugoda, F., Buwembo,  
41 D., Ssempijja, V., Kiwanuka, N., Moulton, L.H., Sewankambo, N.K., Reynolds, S.J.,  
42 Quinn, T.C., Opendi, P., Iga, B., Ridzon, R., Laeyendecker, O., Gray, R.H., 2009.  
43 Circumcision in HIV-infected men and its effect on HIV transmission to female  
44 partners in Rakai, Uganda: a randomised controlled trial. *The Lancet* 374, 229–237.  
45 doi:10.1016/S0140-6736(09)60998-3
- 46 Werker, P.M.N.M.D., Terng, A.S.C., Kon, M.M.D., 1998. The prepuce free flap: dissection  
47 feasibility study and clinical application of a super-thin new flap. *Plast. Reconstr.*  
48 *Surg.* 102, 1075–1082.
- 49 Wisdom, T., 2012. Advocating genital autonomy: methods of intactivism in the United States.  
50 *Res. J. Hum. Sci.* 11, <http://www.kon.org/urc/v11/wisdom.html>.
- 51  
52  
53  
54  
55  
56  
57  
58  
59  
60