



Critical Evaluation of Adler's Challenge to the CDC's Male Circumcision Recommendations

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Abstract

We evaluate Peter Adler's challenge to the Centers for Disease Control and Prevention (CDC) draft recommendations on male circumcision (this issue, see pp. 237–262). The CDC advocates elective male circumcision (MC) to improve public health in the USA based on strong scientific evidence. In marked contrast to the CDC, Adler's criticisms depend on speculative claims and obfuscation of the scientific data. Adler's central argument that circumcision in infancy should be delayed to allow a boy to make up his own mind as an adult fails to appreciate that circumcision later in life is a more complex operation, entails higher risk, is more likely to involve general anaesthesia and presents financial, psychological and organisational barriers. These limitations are avoided

by circumcision early in infancy, when it is convenient, safe, quick, low risk, usually involves local anaesthesia and provides benefits immediately. Benefits of male circumcision include: protection against: urinary tract infections that are ten times higher in uncircumcised infants; inflammatory skin conditions; other foreskin problems; sexually transmitted infections and genital cancers in the male and his female sexual partners. Circumcision during infancy is also associated with faster healing and improved cosmetic outcomes. Circumcision does not impair sexual function or pleasure. Some authorities regard the failure to offer circumcision as unethical, just as it would be unethical to fail to encourage paediatric vaccination. Since the benefits vastly outweigh the risks, each intervention is in the best interests of the child. In conclusion, Adler's criticisms of the CDC's evidence-based male circumcision policy are flawed scientifically, ethically and legally, and should be dismissed as endangering public health and individual well-being.

Keywords

male circumcision – children's rights – critical perspective – Centers for Disease Control and Prevention – policy

Introduction

We evaluate an article by Peter Adler (Adler, 2016), a legal advisor for an anti-circumcision organisation. His article attempts to undermine draft recommendations favouring male circumcision (MC) in the United States that were developed by the Centers for Disease Control and Prevention (CDC) after a thorough evaluation of the scientific evidence (Centers, 2014). The CDC's document supports the policy statement on infant MC (IMC) from the American Academy of Pediatrics (AAP) in 2012 which found that the benefits of IMC outweigh the risks (American, 2012a).

Adler claims, 'the draft CDC recommendations are not medically correct, ethically sound, legally permissible, or procedurally valid'. He goes on to say, 'accordingly they should not be implemented and would be legally invalid if they are'. His statement that the CDC's draft recommendations, 'provide erroneous and misleading advice to physicians that exposes them to the threat of lawsuits'¹

1 Lawsuits over circumcision other than for medical negligence when the procedure led to a documented adverse outcome have never succeeded. They appear to involve disputes by

by men and parents', is based on fallacious arguments propagated by the anti-circumcision lobby. Adler refers to, 'thousands of official [?] comments [that] have been filed opposed to the CDC proposal', and, 'public protests against it'. This simply reflects the efficient use of social media by anti-MC groups to mobilise their members, most of whom are lay activists whose *modus operandi* is akin to childhood vaccination opponents. Almost all of those comments were short, repetitious and lacked scientific merit or legal foundation for US policy. Policy should be decided on scientific evidence and current law, not public protests by fringe groups. Adler's conclusion is that,

the CDC must revise its draft guidelines to comport with the prevailing view that circumcision is on balance deleterious to health; that men have the right to make the "circumcision decision" for themselves; that physicians are not permitted to circumcise healthy boys; and that Medicaid cannot be used to pay for unnecessary surgery.

Below, we summarise the scientific and legal evidence that contradicts each of Adler's arguments.

partners over the circumcision of their child after the individuals have separated. Examples include: (i) *Hironimus v. Nebus*, Case No. 4D14-1744, Fourth District Court of Appeal for Palm Beach County. A Motion to File Amicus Curiae Brief was made by Daniel Lustig on 28 May 2014 on behalf of Doctors Opposing Circumcision, Attorneys for the Rights of the Child, and Intact America, but the judge denied the motion. Thus, no brief was filed. The anti-circumcision organisation that Adler belongs to (Attorneys for the Rights of the Child) posted a press release for this lawsuit on its website (<http://www.arclaw.org/news/arc-news-protesters-doctors-office-hope-stop-4-year-old-being-circumcised>) indicating that they co-authored this brief. It was not accepted by the court. (ii) The website of the Attorneys for the Rights of the Child states that the organisation, 'has represented plaintiffs in several state and federal lawsuits to protect genital integrity'. One case was a federal civil rights lawsuit involving a doctor in New York City who circumcised infants born to Latino parents without informed consent. This case is *Armatas v. Elmhurst Hospital*, which was filed in the Eastern District of New York. This case was not reported in Federal Supplement 2d, but has a citation of No. cv 98-5459, 1999 WL 1495420 (E.D.N.Y. Nov. 22, 1999). The judge ruled in the doctor's favour. The organisation claims that, '[e]ven though there were legitimate issues of bias on the judge's behalf, we did not have enough support to appeal the case' (<http://www.arclaw.org/about-us/recognition>) and '[d]espite the dedicated work of our team that included Charles Bonner, Paul Garner, and myself, a highly biased Jewish visiting judge from Michigan managed to forestall justice through a series of startlingly arrogant maneuvers' (<http://www.arclaw.org/our-work/projects>).

1 Medically Justified?

1.1 *Unscientific and Isolated Medical Opinion?*

1.1.1 Undisclosed and Unaddressed Criticisms?

Adler cites, 'a group of 38 distinguished physicians from Europe and Canada'² (Frisch *et al.*, 2013) who criticised the AAP's IMC policy, that the CDC supported. He fails to mention that the AAP responded at the time, arguing convincingly that a cultural bias against IMC is more likely to exist in Europe than cultural bias favouring IMC in the USA, since the USA comprises similar proportions of men who are circumcised and uncircumcised and both options are considered culturally acceptable (Task, 2013). The lead author of the European article, Morten Frisch, is a vocal IMC critic whose research reflects this bias (Morris *et al.*, 2012c; Morris and Krieger, 2013; Morris and Wiswell, 2015).

In saying that the, 'CDC has not responded as required by law', Adler refers to critical commentaries by Europeans (Kupferschmidt *et al.*) and Van Howe (the most prolific publisher of articles opposing IMC) that were not peer-reviewed and were simply posted as user comments on the CDC's website. The CDC has no legal duty to respond to such individual comments. Rather, Adler fails to acknowledge that the CDC document states it

will share the summary of public comments with external experts who conduct a peer review of the evidence on this topic. Their review will include an evaluation of completeness, accuracy, interpretation, and generalisability of the evidence to the United States and whether the evidence is sufficient to support the draft counseling recommendations. After considering all public comment and the results of the peer review, CDC will publish a notice in the Federal Register announcing the final recommendations.

1.1.2 Lack of Scientific and Scholarly Rigour?

Adler complains that whereas, 'the CDC draft contains only 255 references, a Pub Med [*sic*] search for "circumcision" identified 6,338 publications'. The implication is that only a document citing all of these would be sufficient. Such a position is patently absurd: it ignores the facts that (i) many publications are essentially opinion, (ii) medical science generally moves from weaker to

2 Referring to these '38' individuals as 'distinguished' is somewhat of an exaggeration. 37 were European (one being Canadian). Since 18 were from Scandinavian countries, in particular Denmark with 5 authors, the individuals were not a representative cross section of Europeans.

stronger evidence, with the more recent work being better designed and (iii) quantity is not quality. A PubMed search identified 5,567 articles within the date range used by the CDC. Only 732 of these met the CDC criteria as, 'including RCTs [randomised controlled trials], cohort studies, case-control studies, cross-sectional studies, case series and case reports', and that were assessed, 'according to strength of association, consistency of findings across studies and the methodologic rigor of study designs'.

1.1.3 The Opposite of the Prevailing Medical Opinion Worldwide?

Adler claims that the consensus is that (i) 'there is no valid medical basis for circumcision', (ii) 'that it is unethical for physicians to circumcise healthy boys', and (iii) 'that circumcision violates the rights of the child'. In the case of (i), it would be more correct to say that, the prevailing view amongst physicians and medical associations in most of the world is that there is no *requirement* for MC. Points (ii) and (iii) are, flatly, wrong. Almost every published statement supports parental choice regarding IMC, a stance incompatible with these two points. In fact, excluding outliers such as the Royal Dutch Medical Association (KNMG) whose policy seems to have been influenced by considerations other than medical/scientific considerations (Holligan, 2011), there are more similarities than differences between the AAP's policy and those of other organisations. Most policy statements agree that MC has medical benefits and most agree that it is appropriate to defer to parental choice. The main distinction from other policy statements is that the CDC and AAP explicitly acknowledge that benefits of MC exceed risks and advocate greater availability.

Most, but not all, other IMC policy statements pre-date the large RCTs published in 2005 and 2007. The three RCTs (involving more than 11,000 participants) changed the MC landscape (see review of all policies prior to 2012 (Jacobs *et al.*, 2012)). After endorsement by the World Health Organisation (WHO), numerous countries in sub-Saharan Africa have launched voluntary medical MC programmes. It is difficult to imagine that they would do so without the support of their medical associations.

All truly evidence-based policies support IMC and circumcision of older males (American, 2012a; Morris *et al.*, 2012e; Centers, 2014). Even a recent Canadian policy statement that employed a flawed risk-benefit analysis diluting the benefits and exaggerating the risks states, 'there may be a benefit for some boys in high-risk populations and circumstances where the procedure could be considered for disease reduction or treatment' (Sorokan *et al.*, 2015). The Canadian risk-benefit analysis failed to include protection against common STIs and prostate cancer, and used weak, outdated data on prevalence of adverse

events while ignoring the CDC's recent study of 1.4 million circumcisions in the USA. The CDC's study found the prevalence of adverse events from IMC to be 0.4 per cent, virtually all of these being minor and immediately treatable with complete resolution (El Bcheraoui *et al.*, 2014). A 2010 policy by the Royal Australasian College of Physicians (RACP) (Royal, 2010a) that claims to be evidence-based is not (Morris *et al.*, 2012d). Since then an affirmative evidence-based policy was published by Fellows of the RACP, including a member of the RACP committee, and Fellows of other medical bodies on behalf of the Circumcision Academy of Australia (Morris *et al.*, 2012e).

1.1.4 Scientifically Untenable?

Citing a post on the website of Intact America, Adler claims, "The German pediatric association concluded that the similar 2012 circumcision recommendations by the AAP, 'has been graded by almost all other paediatric societies and associations worldwide as being scientifically untenable'". The statement in question was apparently made by an individual and is essentially hearsay. If it had been so graded, then surely there would be written records. Adler's claim requires something more substantial in terms of evidence.

1.2 *Undisclosed and Understated Disadvantages*

1.2.1 Understated Risks and Unknown Complication Rate?

Adler alleges that, 'the CDC made no serious attempt to review the pain, risks, complications, or harms associated with circumcision'. This statement is inaccurate. Adler appears unaware of a CDC study, referred to above, of 1.4 million US circumcisions to determine the incidence and range of adverse events (El Bcheraoui *et al.*, 2014). This study found adverse event rates of 0.4 per cent for IMC, but adverse events were 10–20 times higher for older boys and men (El Bcheraoui *et al.*, 2014). The vast majority of adverse events were minor and easily treatable with complete resolution. The CDC study also clarifies Adler's claims of a complication rate of 2 per cent, since that figure applies to circumcisions performed after the newborn period (the 10–20 times higher figure above). A recent study of 95,046 elective circumcisions from 2014 to 2013 in ambulatory surgery centres of 43 US tertiary care paediatric hospitals found only 0.1 per cent underwent a second ambulatory procedure within the first seven days, being higher for older boys than for infants (Roth *et al.*, 2015).

Adler claims, 'severe meatal stenosis was found in 20 per cent of boys 5–10 years after circumcision in the neonatal period' (Joudi *et al.*, 2011). This figure was for 27 boys presenting for other problems at a paediatric clinic in Iran, the meatal stenosis being asymptomatic. There was no control (uncircumcised) group. Adler also cites a small, single author, case series by Van Howe

(Van Howe, 2006) that was shown to have serious methodological problems (Schoen, 2007). Amongst other criticisms, Schoen pointed out (i) that since diagnosis of meatal stenosis is somewhat subjective, one might be skeptical of diagnoses based on visual inspection by an ardent MC opponent, (ii) the study was underpowered, and (iii) the difference in prevalence of meatal stenosis between circumcised and uncircumcised boys was not statistically significant. In contrast, the large CDC study found prevalence of meatal stenosis to be 0.01 per cent (El Bcheraoui *et al.*, 2014) and a UK study found meatal stricture in 7/66,519 circumcised boys (or 0.01 per cent) (Cathcart *et al.*, 2006). Iranian studies reported prevalences of 0.55 per cent (Simforoosh *et al.*, 2012) and 0.9 per cent (Yegane *et al.*, 2006).

Adler then cites a 1999 survey conducted by the, 'National Organization to Halt the Abuse and Routine Mutilation of Males (NOHARM)' published online in claiming, 'men aggrieved to have been circumcised reported much higher complications than these'. This claim is not surprising since men who have had problems related to a circumcision are far more likely to join an anti-circumcision group, and other men belonging to anti-circumcision groups may believe that their problems (sometimes sexual dysfunction) stem from their IMC, whether that is actually the case or not. Amateur surveys such as this have little credibility, even when cited in an issue of *BJU International* which invited articles opposed to IMC (Hammond, 1999). Any, 'long-term [adverse] outcomes to men from infant circumcision' are very rare, being confined to unfortunate surgical mishaps, usually caused by inexperienced operators. The paucity of, 'judgements and settlements for circumcision injuries', relative to the high number of circumcisions (over one million) performed in the USA each year, is a testament to IMC safety in real world settings. To expand on Adler's statement, the long-term *beneficial* outcomes to men from IMC are considerable and well documented by high quality scientific research. We are not aware of lawsuits for the harmful consequences of retaining a foreskin, which would be akin to a lawsuit for the harmful consequences of *not* vaccinating.

The CDC study of adverse events undermines Adler's claim that, 'the CDC does not know the true incidence of minor complications, severe complications, and fatalities caused by circumcision'. In regard to fatalities, the CDC study reported that boys who were not circumcised had a higher rate of serious adverse medical problems than those who were circumcised. Apart from gangrene, a potential consequence of paraphimosis, these included infections, which can lead to death. For example, UTI, which is ten times more common in uncircumcised infant boys (Morris and Wiswell, 2013), can result in systemic infection and sepsis, a potentially fatal condition. The claim by IMC opponents of 117 deaths per year in the USA from IMC has been disproven (Morris *et al.*,

2012a). This figure was based on the incorrect assumption that the higher mortality rate for male than female newborns was all due to IMC, ignoring the similar sex difference seen in countries in which IMC is rare (Morris *et al.*, 2012a).

Several deaths have been attributed to herpes simplex type 1 infection caused by the very rare practice of *metzitzah b'peh* performed by a very small number of ultra-Orthodox Jewish mohels, but not by Orthodox, Reform or Conservative mohels (Centers, 2012). This practice has been widely condemned. More common are deaths from circumcisions performed by non-medical operators after initiation ceremonies in sub-Saharan Africa. This is another reason why circumcision should always be performed in a medical setting by experienced operators using sterile technique.

Taken together, the data strongly refute Adler's claims that, 'the risks associated with circumcision are many times higher [than "0.2 per cent"]' and, 'their true extent is unknown'. Substantial data support the CDC policy recommendations favouring IMC.

1.2.2 Pain Understated?

The CDC and AAP recommend adequate pain relief for MC. Local, rather than general, anaesthesia is safer, cheaper and therefore used most commonly for IMC. Instead of referring to extensive literature supporting the effectiveness of different local anaesthesia methods, Adler cites an opinion piece by MC opponents published in the 1999 issue of *BJU International* referred to above. He also refers to a study by Taddio *et al.* of 87 infants circumcised without any anaesthesia, describing a, 'stronger pain response to subsequent vaccination' 'up to 6 months later' (Taddio *et al.*, 1997a). There was no long-term follow-up. This study shows that infants feel pain and learn to develop their pain response. Thus those children whose first post-partum encounter with pain is vaccine injection should also show a stronger pain response to any subsequent painful stimulus. Adler refers to speculation about long-lasting effects on infant behaviour, but no adverse psychological aftermath has been demonstrated (Schlosberger *et al.*, 1992). A longitudinal study in the UK, beginning in 1946, involving over 5,000 individuals followed from birth to age 27 found no difference in developmental and behavioural indices between circumcised and uncircumcised males (Calnan *et al.*, 1978). Claimed long-term psychological, emotional, and sexual impediments from IMC are anecdotal (Williams and Kapila, 1993; Moses *et al.*, 1998) and can be discounted. It must be recognised that there are many painful experiences encountered by the child before, during and after birth (McIntosh, 1997). Circumcision, *if performed without anaesthetic*, is one of these. Cortisol levels, heart rate and respiration have registered an increase during and shortly after the procedure (Taddio *et al.*, 1997a; Taddio

et al., 1997b). Taddio *et al.* recommend local anaesthesia for both circumcision (Taddio *et al.*, 2000) and vaccination (Taddio *et al.*, 2002; Taddio *et al.*, 2009). So do the AAP and CDC.

Use of anaesthetic makes IMC either relatively or absolutely (Russell and Chaseling, 1996) pain-free. A long-term longitudinal study of New Zealand boys circumcised in 1977 found no adverse effect on breast-feeding outcomes or cognitive ability later in childhood (Fergusson *et al.*, 2008). A Swedish study found no adverse psychological effect of MC (Stenram *et al.*, 1986). Adler cites a study by Frisch and Simonsen of 0–9 year olds that reported an association of MC with autism spectrum disorder in a very small proportion of subjects (Frisch and Simonsen, 2015). Those findings were disputed in published critiques (Anonymous, 2015; Morris and Wiswell, 2015) that Adler failed to cite. In another Danish study ASD prevalence in *uncircumcised* boys was 7.2%, leading the authors to suggest that the study by Frisch and Simonsen suffered from confounding (Sneppen and Thorup, 2016). Paracetamol (acetaminophen) (which is often used post-circumcision for pain relief) is associated with autism, although causality has not been confirmed (Bauer and Kriebel, 2013). In men, the three large RCTs in sub-Saharan Africa reported that severe pain during MC procedures was experienced by only 0.8 per cent (Auvvert *et al.*, 2005), 0.3 per cent (Gray *et al.*, 2007) and 0.2 per cent (Bailey *et al.*, 2007).

1.2.3 No Discussion of the Foreskin?

Adler refers to circumcision as 'amputation'. Since the medical definition of amputation is removal of a limb, digit or the entire penis his use of that term is inaccurate and reflects emotive anti-circumcision rhetoric.

In any future discussion of the foreskin the CDC can refer to a recent detailed systematic review of penile sensory receptors that found no support for claims that the foreskin is responsible for sexual pleasure (Cox *et al.*, 2015).

1.2.4 Omission that Circumcision may and in Fact does Impair Men's Sex Lives?

Adler rebukes the CDC for failing to, 'mention anything about whether circumcision affects men's sex lives' and for not stating that, 'the foreskin is erogenous'. Adler's opinion is that the foreskin confers a, 'gliding action' during intercourse, and that there is a, 'prevailing opinion worldwide ... that circumcision ... impairs sexual sensation and satisfaction'. His 'gliding' claim would mean less pleasure in men with short foreskins as these stay retracted during sexual intercourse. It would also argue against condom use.

None of Adler's opinions about circumcision impairing sexual function is supported by good scientific evidence. Pain during intercourse was lower after

circumcision in large RCTs (Kigozi *et al.*, 2008; Krieger *et al.*, 2008). And this applied to the experience of the female partners as well (Kigozi *et al.*, 2009). The trial data (Krieger *et al.*, 2008) furthermore contradict Adler's 'gliding' claim above.

The CDC should have referred to a detailed systematic review of the medical literature comparing sexual function, sensitivity and satisfaction in circumcised and uncircumcised men (Morris and Krieger, 2013). This methodologically sound review found no adverse effect of circumcision on these parameters. One of the large RCTs found, 'Compared to before they were circumcised, 64.0 per cent of circumcised men reported their penis was 'much more sensitive', and 54.5 per cent rated their ease of reaching orgasm as 'much more' at month 24 (Krieger *et al.*, 2008). A meta-analysis found no difference between circumcised and uncircumcised men in the frequency of any sexual dysfunction (Tian *et al.*, 2013). Criticisms by an opponent of circumcision (Robert Darby) were exposed as fallacious (Morris and Krieger, 2015b). Misunderstandings by Bossio *et al.* (taken out of context by Adler) were corrected by the review's authors (Morris and Krieger, 2015a). Bossio *et al.* have since published a study that found, 'penile sensitivity did not differ across circumcision status for any stimulus type or penile site', concluding, 'this study challenges past research suggesting the foreskin is the most sensitive part of the adult penis' (Bossio *et al.*, 2016). Adler cites a study by Sorrells *et al.* that he says, 'suggests that circumcision desensitizes and removes the most sensitive part of the penis', but fails to cite publications revealing the serious flaws in the study design, discrepancies between methods and results sections in subject numbers, multiple statistical errors, bias and other problems (Waskett and Morris, 2007; Morris and Krieger, 2013) that are sufficiently serious as to invalidate those findings. It is also worth noting that the study by Sorrells *et al.* did not examine sexual sensations.

While the foreskin might be, 'highly innervated', Meissner's corpuscles (sensory nerve endings) in the foreskin are lower in density and smaller in size than those in other glabrous (hairless) tissues (Bhat *et al.*, 2008). A recent systematic review evaluated histological and anatomical data from all relevant publications on sensory receptors in the foreskin, glans and other parts of the penis, including changes in these during puberty (Cox *et al.*, 2015). The key conclusion was that the *foreskin has no significant role in sexual sensation*. The review found the nerve endings involved in sexual pleasure reside in the glans of the penis, the underside being particularly sensitive. Exposure of the highly erogenous glans by circumcision (or by foreskin retraction during erection) is the source of sexual sensations during sexual activity (Cox *et al.*, 2015).

Taken together the data suggest that circumcision *does not* impair, 'men's sex lives'. Perhaps the CDC should expand on that section of its document by

emphasizing the data outlined above to communicate that the claims of adverse effects of MC are contradicted by the scientific evidence.

1.2.5 Penile Reduction Surgery?

Adler refers to a 1995 study in which 156 white men self-reported the length of their penis when erect (Richters *et al.*, 1995). Length was 5 per cent (0.8 cm) lower in 113 circumcised than in 43 uncircumcised men. Measurement error is possible, given that some uncircumcised men have a long foreskin that overhangs the glans of the penis during an erection, so leading to an understandable overestimation of penile length. The study authors suggested that, 'insufficient residual foreskin in some circumcised men may have tethered their erections'. If true (unlikely), this might implicate the very tight circumcisions achieved by methods in vogue in the 1970s and earlier in Australia. Since in recent decades over half of paediatric circumcisions involved the Plastibell technique, which gives a 'looser' circumcision, tethering would be improbable. Since circumcised men in the study were older than the uncircumcised men a more likely explanation is the decrease in penis length with age (Habous *et al.*, 2015).

1.2.6 Undisclosed Risk of Anger and other Psychological Harms?

Apart from rare instances of botched circumcisions, the, 'increasing probability of regret of [or?] anger at one's parents' for having them circumcised is a result of the belief by a small number of men, some with sexual problems, in the claims by anti-circumcision organisations telling them that they are either missing out on something important or that any problems they have stem from their IMC. Adler cites a small Australian survey by MC opponent Gregory Boyle (Boyle and Bensley, 2001) that was, 'based on self-selected participants'. The survey population was not representative of the general population. Participants included 42 men who have sex with men (MSM), whose data was combined with data for 35 women. Boyle claimed that the sexual partners of circumcised men were unhappier than the sexual partners of uncircumcised men. This led Boyle to conclude there may be, 'possible negative effects of circumcision on adults' sexual function and psychological well-being' (Boyle and Bensley, 2001). The report's brevity, missing data, recruitment bias and stated anti-circumcision agenda renders it anecdotal at best.

Adler regards the findings of Taddio *et al.* on enhanced response in circumcised infants to vaccinations as representing, 'adverse psychological effects [up to 6 months] after circumcision'. This is, however, unlikely, as we discussed above. Together with his quote from Cold and Taylor in 1999, Adler ignores the substantial progress in scientific evidence since then.

There is evidence of various psychological disorders (Kafka, 2010; American, 2013) in men preoccupied with their absent foreskin (Mohl *et al.*, 1981). This,

sometimes leads them to undertake 'foreskin restoration', which can occasionally result in subsequent re-circumcision (Schultheiss *et al.*, 1998; Circumcisioncenter.com, 2015; Yahoo, 2015) or medical attention for genital mutilation (Walter and Streimer, 1990; Schultheiss *et al.*, 1998).

1.2.7 Undisclosed Certainty of Harm?

Adler refers to a 2006 California court decision about, 'unnecessary surgery'. That case was not about circumcision. A 2010 ballot initiative to ban IMC in the city of San Francisco was successfully challenged in court and removed from the ballot before the vote. A bill was subsequently passed unanimously by both houses of the California legislature (Senate and Assembly) and signed by the Governor, Jerry Brown, preventing any future municipal initiatives regulating circumcision and other medical procedures (California, 2011).

Adler cites a news media report of a 2012 decision by a minor court in Cologne, Germany, involving a doctor who had circumcised a Muslim boy who experienced some bleeding. The court in fact found the illegality of circumcision is among the, '... undecided questions of law ...', concluding the defendant was not guilty of a criminal act. The decision was misinterpreted by news media and others as Germany banning circumcision. Adler does not mention that in response to the Cologne decision, the German Parliament enacted legislation upholding the legal right of parents to choose MC for their sons, included a proviso that the MC should be performed by a trained professional in a safe environment (DW, 2012; Stafford, 2012). The wording suggested that any new law upholding circumcision in Germany would extend beyond religious reasons. In each of the above examples, the outcome may have been assisted by the Jewish and Muslim communities, who vigorously and publicly opposed both attempted bans, arguing that anti-Semitic and anti-Islamic bias was responsible.

Whilst MC, 'changes the appearance of' the penis, research shows the appearance of a circumcised penis is preferred by most women (Williamson and Williamson, 1988; Badger, 1989a; b; Bailey *et al.*, 2002; Cortés-González *et al.*, 2008; Cortés-González *et al.*, 2009; Kigozi *et al.*, 2009; Adam, 2014). Circumcision does not, 'destroy its mobility', and the scar is almost invisible for an IMC, although more evident when the procedure is performed on older boys and men. Adding to the Cologne decision above, Adler states, 'a German Court ... ruled in 2012 that circumcision inflicts, "bodily harm"', but instead of quoting from the ruling, as a lawyer would be expected to do, he cites a *BBC News* report. His conclusion that, 'circumcision harms all boys and men, whether or not they recognise it' is at odds with the evidence. Additionally, foreign court decisions do not appear to have any relevance for CDC policy. A review of CDC policy

documents and regulations did not find a single instance of the CDC using or citing a foreign source as guidance for the CDC's policies or regulations.

1.3 *Exaggerated Benefits*

1.3.1 Misleading Discussion of Benefits?

On page 23 of its review of the evidence the CDC stated, 'In a comprehensive risk-benefit analysis of newborn male circumcision based on reviews of the literature and meta-analyses, it is estimated that over a lifetime, benefits exceed risks by a factor of 100:1' (Centers, 2014). This risk-benefit analysis found that the foreskin contributes to adverse medical conditions in half of uncircumcised males during their life-time (Morris *et al.*, 2014). Adler dismisses the CDC's findings but fails to present any alternative risk-benefit analysis. Instead he inaccurately states, 'circumcision has at best only potential benefits'.

1.3.2 No Meaningful Benefit during Childhood?

The benefits of circumcision in childhood include risk reductions for UTIs (discussed immediately below), balanitis, balanoposthitis, phimosis, paraphimosis and foreskin injuries (discussed in item 4 below).

A 2013 meta-analysis, not cited by Adler, found that over the lifetime, 1 in 3 uncircumcised males will get a UTI, compared with 1 in 12 circumcised males (Morris and Wiswell, 2013). Of any year of life, risk of UTI was highest in the first year. Infant UTI is more serious than UTI at older ages. There is a high risk of renal damage from the ascending infection (Rushton and Majd, 1992b; Rushton and Majd, 1992a; Rushton, 1997; Hoberman *et al.*, 1999; Zorc *et al.*, 2005; Elder, 2007) and treatment usually requires hospital admission and intravenous rather than oral antibiotics (Morris and Tobian, 2013). The increase in 'superbugs' (bacteria resistant to most or all antibiotics, including methicillin) has raised concerns about the future availability of effective antibiotics to treat UTI (Pallett and Hand, 2010). IMC also ensures males will enter sexual maturity with the protections MC affords against STIs and, later in life, penile and prostate cancers.

1.3.3 Unproven that Circumcision Reduces HIV in Africa and the U.S.?

Whilst three large RCTs (Auvert *et al.*, 2005; Bailey *et al.*, 2007; Gray *et al.*, 2007) cited by the CDC found that, 'circumcision reduces female-to-male transmission of HIV by 50 per cent to 60 per cent', Adler points out that, 'the absolute risk reduction is only an unimpressive sounding 1.3 per cent'. This displays a general lack of familiarity with epidemiology and RCTs in particular. Adler either failed to read or failed to understand the conventional methodologies and statistical outcomes that were explained in the published

trial reports and the supplementary materials associated with these publications. Presenting trial data as relative risk is the correct (and usual) way of citing trial findings. A Cochrane systematic review and meta-analysis of all three trials pointed out that there was a, 'significant *absolute risk* reduction of 0.83 per cent at 12 months and of 1.80 per cent at 21 or 24 months, following circumcision' (Siegfried *et al.*, 2009). This led the esteemed Cochrane committee to state that the trials provided, '*strong evidence* that medical male circumcision reduces the acquisition of HIV by heterosexual men by between 38 per cent and 66 per cent over 24 months'. Post-trial follow-up has shown that the protective effect has increased over the years to 70 per cent (Gray *et al.*, 2012; Lei *et al.*, 2015). Adler seems unaware that his previous criticisms of the RCTs have been debunked (Moreton, 2014).

Adler disputes the ability of MC to reduce HIV in the USA. This may be true amongst MSM who engage in receptive anal intercourse or injecting drug users who share needles. However, MC provides substantial protection for heterosexual men and MSM who are insertive-only, both in the USA and other wealthy countries (see review (Morris *et al.*, 2012a)). Many factors contribute to the dynamics of HIV rates in resource poor countries. Among low HIV prevalence countries that were comparable for other HIV risk factors, heterosexually acquired HIV was found to be much higher in European countries, which have low MC rates, than in Israel where IMC is virtually universal (Chemtob *et al.*, 2015). Although HIV infection from heterosexual intercourse is currently 10 per cent in the USA, the proportion is rising and can clearly be counteracted by preventive measures such as MC. Higher HIV and STI rates in the USA compared with other wealthy countries are due in part to a greater prevalence of unsafe sex (UNICEF, 2001).

Adler claims, 'circumcised men engage more frequently in anal sex', but the original data source (Laumann *et al.*, 1997) reported this as 27 per cent vs. 23 per cent for uncircumcised men, which did not differ significantly.

Post-circumcision HIV transmission during wound healing in sexually active men can be averted by ensuring circumcision is performed in infancy. Circumcision is not regarded as a stand-alone intervention for HIV protection. Rather it is seen as part of a package of preventive measures that include abstinence and safe sex.

Condoms, when used correctly and consistently, provide 80 per cent protection against HIV according to a Cochrane meta-analysis (Weller and Davis-Beaty, 2002). The AAP pointed out that 40 per cent of sexually active high school students in the USA reported not using condoms during their most recent sexual intercourse (Task, 2013). However, seven RCTs (two in the USA, one in England and four in sub-Saharan African countries) found, 'little clinical evidence of real-world effectiveness of interventions promoting condom use

for dual protection' against HIV and pregnancy, and 42 per cent effectiveness against syphilis (Lopez *et al.*, 2013).

1.3.4 No Number-Needed-to-Treat or Number-Needed-to-Harm?

Without evidence, Adler states, 'the disadvantages of circumcision outweigh the potential benefits in childhood by 100 to 1 or more'. Whilst an old study (Singh-Grewal *et al.*, 2005), criticised at the time (Schoen, 2005), found 100 newborn boys would need to be circumcised to prevent one UTI during infancy, UTIs are regarded as common in infancy (Koyle *et al.*, 2003). Circumcision prevents phimosis, which affects 10 per cent of uncircumcised older boys and young men (Morris, 2007). Paraphimosis, which is less common, can lead to penile gangrene and auto-amputation of the penis, so represents a medical emergency (Vunda *et al.*, 2013). Circumcision also protects against inflammatory skin conditions, such as balanitis and balanoposthitis, that occur in 10 per cent of uncircumcised males (Morris *et al.*, 2012b). Uncircumcised adolescents and men have inferior penile hygiene owing to the proliferation of bacteria and accumulation of smegma under the foreskin (O'Farrell *et al.*, 2005; Nelson *et al.*, 2012; Liu *et al.*, 2013; Balci *et al.*, 2015; Liu *et al.*, 2015). The thin, fragile foreskin is easily torn and zipper injuries can occur. Taken together, in childhood alone the benefits of circumcision are considerable. Early circumcision also greatly reduces the risk of penile cancer (Daling *et al.*, 2005; Larke *et al.*, 2011) and prostate cancer (Wright *et al.*, 2012).

The evidence therefore contradicts Adler's claims that, 'the disadvantages of circumcision out weigh [*sic*] the potential benefits in childhood', without considering the additional benefits of MC in adulthood.

Whereas the CDC state lifetime risk of penile cancer to be 1 in 1,437 in uncircumcised men, the AAP policy cites data (Christakis *et al.*, 2000) indicating lifetime risk of penile cancer in uncircumcised men is 1 in 909, a figure that accords with estimates by others of ~1 in 1,000 (Morris *et al.*, 2011). Adler cites a figure of '909', but says it could be up to '322,000', a figure he obtained from an article by 'European physicians'. The '322,000' figure appears, however, to be the upper bound of the *annual incidence* rate (1 in 100,000) (Morris *et al.*, 2011; American, 2012a) and is misleading, given the lifetime risk for an uncircumcised male. Penile cancer is a devastating disease with a high morbidity and mortality. Whilst uncommon, the claim by Adler that risk of penile cancer is, 'as rare as the risk of being struck by lightning' might more likely apply to a circumcised man (Morris *et al.*, 2011). And that it, 'can be further reduced to close to zero by washing one's penis with soap' lacks evidential support. Risk factors for penile cancer including phimosis, balanitis, smegma and oncogenic types of human papillomavirus (HPV), are all markedly more prevalent in uncircumcised males (see meta-analyses in Morris *et al.*, 2011).

1.4 *Any Potential Benefits can be Achieved more Effectively without Circumcision?*

Contradicting Adler, antibiotics do not reduce viral infections such as oncogenic HPV and HSV-2. Further, the effectiveness of condoms in protecting against HIV is 80 per cent (Weller and Davis-Beaty, 2002) – not the ‘100 per cent’ Adler claims – when condoms are used correctly and consistently in clinical study situations. However, as discussed above, effectiveness of condoms is much lower in real world settings (Lopez *et al.*, 2013). Condoms do not protect boys against balanitis, balanoposthitis, phimosis, paraphimosis and foreskin injuries. Circumcision is the only way to prevent balanoposthitis, which occurs exclusively in uncircumcised males, and circumcision reduces risk of balanitis, which is twice as common in uncircumcised males (Morris *et al.*, 2014). Although steroid creams can be used to treat phimosis, these are not always effective, require twice-daily application for many weeks and do not reduce the risks of other conditions as IMC does. Achieving penile hygiene with ‘antibiotics’ is not advisable.

2 **Unbiased and Ethically Justified?**

2.1 *Biased?*

Adler refers to comments on the Doctors Opposing Circumcision website rather than a peer reviewed journal. He also inaccurately characterises Van Howe’s comments on the CDC’s website inviting public comments as having undergone, ‘peer review’. In all, 3,234 comments were posted. Adler refers to a claim by Van Howe that, ‘no group opposing circumcision was allowed any input’ at the CDC’s consultation with stakeholders in 2007 in Atlanta. But Adler fails to state that the CDC invited Van Howe to participate in that meeting to present his views opposed to circumcision and names him in a list of 50 “external consultants” at the end of its subsequent report on that meeting (Smith *et al.*, 2010).

In addition to the online comments posted by Van Howe, “European medical associations [?!]” and, “by the public in thousands of official [?!] comments”, Adler refers to criticisms of the draft CDC recommendations published by an ethicist (Earp, 2015), but not the withering critique undermining the validity of those claims (Morris, 2015). He also cites criticisms by Svoboda and Van Howe of the AAP’s IMC policy (Svoboda and Van Howe, 2013), but not the article exposing the fallacies in those claims (Morris *et al.*, 2013).

2.2 *No Serious Ethical Discussion?*

The ethics of IMC has been debated extensively. Scholarly assessments suggest that circumcision of male minors is ethical (Benatar and Benatar, 2003a;

Benatar and Benatar, 2003b; Bates *et al.*, 2013; Benatar, 2013; Jacobs, 2013; Bester, 2015; Jacobs and Arora, 2015). Given the wide-ranging protection against multiple medical conditions and infections in infancy and childhood, including STIs in boys who become sexually active, some have argued that it would be unethical to leave boys uncircumcised (Bates *et al.*, 2013; Jacobs, 2013), and Article 24(3) of the United Nations (UN) Convention on the Rights of the Child (CRC) might be interpreted as mandating circumcision, since not circumcising boys has been deemed as prejudicial to their health (Jacobs, 2013).

The benefits of IMC continue throughout the lifetime. In addition, as stated above, IMC equips the male with later protection against not just STIs, but also penile and prostate cancers. Male circumcision also reduces the risk of various STIs and cervical cancer in the female sexual partners of a man (Castellsague *et al.*, 2002; Cherpes *et al.*, 2003; Morris and Castellsague, 2011; Tobian and Gray, 2011; American, 2012a; Centers, 2014; Morris *et al.*, 2014).

Nevertheless, the AAP's policy states that, 'parents should weigh health benefits and risks in light of their own religious, cultural, and personal preferences, as the medical benefits alone may not outweigh these other considerations for individual families' (American, 2012a).

2.3 *Unnecessary Surgery is Unethical?*

Procedures and practice of medical professionals are regulated to ensure ethical guidelines are followed. It is offensive to suggest that a physician might only be performing circumcisions for 'financial benefit', as this would apply to everything a doctor does as part of his professional duties.

All evidence-based policy statements support IMC on medical grounds (American, 2012a; American, 2012b; Morris *et al.*, 2012e; Centers, 2014). Thus IMC is not, 'unnecessary surgery'. MC does, 'place the patient's best interests first'. IMC cannot be regarded as a medical decision that is, 'not essential to their wellbeing', nor one that, 'can be deferred, such as elective surgery', as Adler suggests.

2.4 *Circumcision Violates many other Ethics Rules?*

In deference to Adler, the Hippocratic Oath actually contains the quote, 'I will prevent disease whenever I can, for prevention is preferable to cure' (Kelishadi, 2010; Johns, 2015). Disease prevention is central to affirmative policy recommendations. Based on the issues Adler raises of 'non-maleficence', 'beneficence', and 'the rule of justice', IMC is in fact supported. In the current era of preventive medicine, IMC fits the adage, "prevention is better than cure".

Adler fails to recognise that, as with childhood vaccination, parental consent is required for IMC. Childhood vaccination and IMC and are just two interventions requiring informed decision-making by parents who care for the health and well-being of their children.

Adler's statement about, 'the autonomy of the patient' follows the line espoused by other opponents that IMC should be banned, discouraged or at least delayed until the boy is old enough to decide for himself (Merkel and Putzke, 2013; Svoboda, 2013; Van Howe, 2013). Ethics authorities have presented sound reasons refuting this opinion (Benatar and Benatar, 2003a; Clark *et al.*, 2007; Benatar, 2013; Jacobs, 2013; Mazor, 2013; Bester, 2015; Jacobs and Arora, 2015). It has been argued that being circumcised boosts autonomy more than constraining it (Brusa and Barilan, 2009). The AAP recommends that prior to or early in a pregnancy the medical practitioner should provide parents with unbiased education about risks and benefits of IMC so they have adequate opportunity to choose what is in their child's best interests should they have a boy (American, 2012a).

Adler's assertion that, 'increasing numbers of men are angry to have been circumcised without their consent' reflects the success of anti-circumcision organisations who have duped certain men into believing their propaganda about IMC (NotYoursToCut, 2014). A recent survey found 29 per cent of uncircumcised men wished they had been circumcised, compared with only 10 per cent of circumcised men who wished that they had not been (YouGov, 2015). Another oddity is Adler's comparison of MC with genital cutting of girls, while failing to state that the latter has no health benefits, but multiple harms (Toubia, 1994).

3 Legally Justified

3.1 *Unlawful to Charge Medicaid for Circumcision?*

Following a line he espoused in 2011 (Adler, 2011), Adler argues that, 'Medicaid only covers services' that are, 'medically necessary', failing to recognise that this should include preventive interventions to reduce or eliminate adverse medical conditions, infections and disease. Thus it applies to IMC and childhood vaccination. A study by Leibowitz *et al.* concluded, 'lack of Medicaid coverage for circumcision may translate into future health disparities for children born to poor families covered by Medicaid' (Leibowitz *et al.*, 2009). Medicaid coverage for IMC can be considered a, 'health parity right of the poor' (Morris *et al.*, 2009). In response to a study that found Florida's withdrawal of Medicaid coverage for IMC in 2003 had resulted in a six-fold increase in medical costs for publicly-funded circumcisions for medical need, because later circumcisions are substantially more expensive than IMC (Gutwein *et al.*, 2013), Florida restored Medicaid coverage in 2014.

Adler quotes a 2004 brochure by the Canadian Paediatrics Society in claiming IMC is, 'non-therapeutic', and thus should not be covered by Medicaid. But Canadian Paediatrics Society policy has become more affirmative recently (Sorokan *et al.*, 2015), as discussed earlier.

The CDC and AAP do not state that IMC should be mandatory. Rather, just as other interventions in childhood, parental consent is required. Adler states that, 'physicians who charge Medicaid for circumcision as the CDC recommends commit Medicaid abuse and Medicaid fraud, violate federal and state False Claims Acts, and risk penalties and multiple damages for every circumcision that they perform'. But his only cited support is, 'New Hampshire Criminal Statute, RSA 167:61-a' that has nothing to do with IMC and is unlikely to hold up in court if it were to be used in a case involving IMC.

3.2 *Unlawful to allow Circumcision for Reasons having Nothing to do with Medicine*

Contrary to Adler's claims, the CDC's recommendations *are*, 'scientifically objective and justified by medical evidence'. Adler does not approve of the CDC taking, 'non-medical factors [such as religion and culture] into consideration in making the circumcision decision'. He claims that doing so violates the, 'CDC's mandate and pledge prohibit[ing] it from recommending that parents make decisions about circumcision for reasons having nothing to do with medicine'. Whilst the CDC clearly conveys the medical benefits of IMC, the CDC cannot but realise that the circumcision of boys is expected in the Jewish and Islamic religions. Is it really true that such recognition means that the CDC, 'violates the Constitutional separation of Church and State' as Adler states? And does this mean the CDC is, 'disfavouring Catholicism'? Adler cites a decree of 'Pope Eugene IV', who died in 1447, in claiming Catholic 'doctrine provides that anyone who circumcises another person will be eternally damned'. The Catholic Church, 'currently maintains a neutral position on the practice of non-religious circumcision' (Catholic, 2015). Adler repeats the claim that, 'ethical considerations prohibit non-therapeutic circumcision' and that, 'physicians are only licensed to perform medical procedures after diagnosis and recommendation'. He does not recognise that such an argument would also prohibit, 'non-therapeutic vaccination', which is strongly encouraged as a public health measure in infants and children and supported by US law.

3.3 *Lack of Fully Informed Parental Consent?*

Adler suggests that, 'if physicians follow the draft CDC guidelines, parents will not be giving fully informed consent to circumcision as law requires'.

Adler bases this claim on a litany of false dogma espoused by MC opponents. Physicians are highly unlikely to, ‘take advantage of largely uninformed and trusting parents’. Instead, the AAP recommendations state that, ‘parents are entitled to factually correct, nonbiased information about circumcision and should receive this information from clinicians before conception or early in pregnancy, which is when parents typically make circumcision decisions’. Taking the doctrine of informed consent seriously obligates a physician to do exactly what the AAP recommends: Provide an unbiased and data-based presentation of the risks and benefits of IMC. Adler’s position seems to deny that there are any benefits – a stance that simply is not justified by the data.

3.4 *Violation of Boys’ Rights?*

3.4.1 Equal Protection?

In this section Adler again attempts to equate IMC with genital cutting of girls. He claims, ‘the Equal Protection clause of the U.S. Constitution also applies to the federal government and thus to the CDC through the Due Process Clause of the Fifth Amendment’. But the federal law on which he bases his claim, 18 US Code § 116 “Female genital mutilation” (Cornell, 2013), applies only to *female* genital anatomy. Since IMC is highly beneficial, whereas female genital cutting is not, that argument is flawed. Adler says that, ‘the CDC concedes that circumcision risks injury and death’, but ignores the extreme rarity of such events. The same could be said about childhood vaccination. Any medical intervention carries some degree of risk. Society accepts medical interventions when doing nothing will pose greater risks than the intervention. As noted above, the CDC found that benefits of IMC exceed risks by ‘100:1’.

3.4.2 The Right to Safety and Personal Security?

Adler claims that every individual has an, ‘inalienable right ... to bodily integrity, of which genital integrity is a subset’. But that so-called ‘right’ pales into insignificance when compared to the right to health. Adler fails to cite any American court decision to support his assertion that a boy’s, ‘right to ... genital integrity’ supersedes a parent’s right to choose IMC on his behalf. He fails, moreover, to cite a single case in which a male recovered damages from his parents or a trained professional who performed his IMC with parental consent and no major complications.

3.4.3 The Right to Liberty (Autonomy and Privacy)?

It should be noted that Adler cites only one case to justify a claim based on a constitutional right to liberty – a case in which the Montana Supreme Court,

whose jurisdictional authority extends only to the state of Montana, interpreted a state constitutional provision. It is not a federal court, nor does it interpret the federal constitution. More importantly, the case is an abortion case, a case about whether the *State* can restrict a woman's right to choose an abortion. It says *nothing* about a parent's authority to make decisions regarding their children. The court in fact stated:

Having thus resolved the standing issue, we also conclude that in the context of this case, Article II, Section 10 of the Montana Constitution broadly guarantees each individual the right to make medical judgments affecting her or his bodily integrity and health in partnership with a chosen health care provider free from government interference. More narrowly, we conclude that Article II, Section 10, protects a woman's right of procreative autonomy—i.e., here, the right to seek and to obtain a specific lawful medical procedure, a pre-viability abortion, from a health care provider of her choice

FINDLAW, 1999

In other words, that case is about whether the government can interfere with medical decisions made between a patient and her physician. It is not relevant to the question of what limits are placed on parents in making decisions on behalf of their children.

In fact, all of Adler's legal and ethical arguments ignore the legal right of parents to make medical decisions on behalf of their children, a fundamental right recognised by the US Constitution as well as many state constitutions and statutes (see for example, *Parham v. J.R.* (US, 1979)). The right encompasses decisions regarding treatment and prevention interventions and even decisions about some interventions that could be characterised as non-therapeutic (Ouellette, 2010). Recognition of this right presumes that parents will make decisions that are in the best interest of the child, and those decisions cannot be overridden by the government without compelling justifications that rise to the level of child neglect or abuse or a significant threat to public health. Additional statutory exceptions to parental decision-making found in many states are designed to encourage access by adolescents to medical care in narrowly defined areas, particularly those touching on mental health and treatment for substance abuse, as well as reproductive autonomy, such as abortion, pregnancy and treatment of STIs. None of these exceptions, or their underlying policy justifications, support overriding parental decision-making regarding IMC. Crucial to the exercise of this parental liberty right is parental understanding of the risks and benefits of, and alternatives to, IMC. As discussed above, such

an emphasis on the accuracy and thoroughness of the informed consent process is supported by the CDC policy and paediatric practice and policy.

The CDC's recommendations promote shared decision-making between providers and patients through the consent process; in no way do they interfere with parental decision-making or parental religious views by, for example, mandating IMC.

3.4.4 The Right to Freedom of Religion?

Adler's arguments about right to freedom of religion do not hold water. First of all, referring to a court decision in Germany cannot be used to support a claim about freedom of religion in the United States. Any interpretation of US constitutional law should refer to US cases, not German ones. Second, the first amendment states: 'Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof'. It prohibits the establishment of a state religion and it prohibits *Congress* from passing laws restricting the free exercise of religion. It says nothing about assuring that children can reach adulthood and choose the same religion as their parents (or not). It simply states that the *State* cannot interfere with free exercise.

Furthermore, no religion in the world rejects converts who are circumcised. Moreover, most Christian denominations tend to be neutral on circumcision.

3.4.5 A Violation of International Human Rights Law?

The most relevant international human rights law for Adler's claims about IMC is the CRC (United, 1989). It supports the, 'best interests of the child' standard, as well as parental rights. However, the CRC is not governing law in the US.

The US is an outlier in the world in not ratifying the CRC. If signed and ratified, it would be binding law, which would require aligning federal law with the CRC. All attempts at ratification have failed, however.

Regardless, Adler's claims that the CRC has been violated do not address its relevance for changing CDC recommendations on medical circumcision. US government agencies do not look to international human rights law for US public health policy. If Adler believes the CDC should make an exception for MC in infancy and childhood, the argument should be made. Unfortunately, Adler does not articulate his case. Instead, he refers to an article (Svoboda, 2013) that makes the argument that the CRC is customary international law (CIL) and, as such, is the, 'law of our land'.

CIL is complex and debated, in terms of its limitations and usefulness (Fidler, 1996; Goldsmith and Posner, 1999; Goldsmith and Posner, 2000; Kelly,

2000; Chinen, 2001; Guzman, 2005–2006; Kadens and Young, 2012–2013). None of this was addressed in Svoboda's reference to CIL in supporting his argument that MC violates the CRC. The theoretical reach of customary international law contrasts to practice and, for the purposes of the present paper, it is fair to say that the CRC is not legally enforced in the US. If it were, the USA would not have so many children who are hungry, homeless or in need of medical care.

Much of the CRC is supported by American values. One of the main reasons that the US has not ratified this human rights treaty is the robust, civil society opposition, founded in a strong American belief, that parental rights are supreme. This norm in American society – although not without some limits – is upheld in US Supreme Court decisions, such as *Meyer v. Nebraska* (US, 1923), *Pierce v. Society of Sisters* (US, 1925), and *Santosky v. Kramer* (US, 1982). Opposition to the ratification of the CRC because of concerns about parental rights was reflected as well in the introduction of identical bills in the House and Senate entitled, 'Parental Rights and Responsibilities Act of 1995' (HR, 1995; SR, 1995b). The bills were introduced days before President Clinton signed the CRC (the legal step prior to ratification) to, 'protect the fundamental right of a parent to direct the upbringing of a child' (SR, 1995a). The bills died in committee and were never reintroduced.

The issue of whether MC in childhood, and particularly IMC, is in violation of the CRC is separate from the applicability of CRC to federal agency policy. So, is the claim that MC violates the CRC true? The core concept underpinning the entire human rights treaty is, 'the best interest of the child' Adler cherry-picked the CRC articles that purported to support his claim of a treaty violation. He cited Svoboda (2013) when stating, 'Under international law, boys have the right to be free from prejudicial traditional practices such as circumcision'. In fact, the wording used in the CRC Article 24(3) is that, 'States Parties shall take all effective and appropriate measures with a view to abolishing traditional practices prejudicial to the health of children'. Given that it has been established that circumcision benefits the health of children, this is a spurious argument.

On the other hand, articles in the CRC support the practice of MC due to the beneficial aspects to the health and well-being of the child. The CRC also supports parental rights when it is in the best interest of the child, thus contradicting Adler's argument.

The CRC articles in support of the child's health include Article 3(1), which states, 'In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, *the best interests of the child shall be a primary consideration*'. CRC Article 24(1) states, 'States Parties recognize *the right of the child to the*

enjoyment of the highest attainable standard of health ... States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services'.

Together, it could be argued that a denial of MC would be depriving the child of the highest attainable standard of health, given that the procedure prevents disease. Denying MC would then be a violation of the CRC, as opposed to the opposite position, which is taken by Adler.

The CRC also supports parental rights, which in turn support MC, particularly IMC. CRC Article 14(2) states:

States Parties shall *respect the rights and duties of the parents* and, when applicable, legal guardians, to provide direction to the child in the exercise of his or her right in a manner consistent with the evolving capacities of the child

emphasis supplied

Additionally, Article 18(1) states,

... Parents or, as the case may be, legal guardians, have the primary responsibility for the upbringing and development of the child. *The best interests of the child* will be their basic concern

emphasis supplied

Contrary to Adler's claims, MC does not violate the CRC, but it is consistent with the best interests of the child and the normative content of the CRC.

Adler then cites claims taken out of context about rights to liberty, religion and international human rights. He selectively cites Svoboda, whose condemnation, co-authored by Van Howe, of the AAP's IMC policy in 2012 (Svoboda and Van Howe, 2013) was the subject of a withering critique (Morris *et al.*, 2013) undermining the claims presented. Adler cites the KNMG (Royal, 2010b), failing to reveal that this body stated its IMC policy was not evidence-based. Then Adler quotes from a 1995 document by the AAP that concerned, 'informed consent, parental permission, and assent in pediatric practice' (American, 1995). The AAP did not argue against IMC in this or any other document.

3.5 *Unlawful for Physicians to Circumcise?*

If it was, 'unlawful for physicians to circumcise', as claimed by Adler, then IMC would not be one of the most common medical procedures in the US. It was noted, moreover, in a detailed treatise by one of Adler's colleagues who is also a

member of Attorneys for the Rights of the Child – Steven Svoboda – that, ‘Most circumcision lawsuits go nowhere’ (Svoboda, 2009).

3.6 *Fraudulent?*

It is not, ‘the CDC’s draft recommendations and background materials’ that ‘are riddled with illogical, contradictory, false, and misleading medical, ethical, and legal claims and omissions’, but rather Adler’s article. When evidence-based guidelines are released by as authoritative a body as the CDC, then ‘physicians who follow the CDC recommendations’ do not ‘risk suits for actual and constructive fraud’ and are not ‘liable for making false statements that gain an unfair advantage over a person’.

Adler again refers to comments by 31 European physicians (who did not, ‘represent medical associations in Northern Europe’, as few were in a position of authority) and by Van Howe, that were each placed on the CDC’s website in response to its invitation for public comment on its recommendations. The falsities in these have been addressed above. He quotes a blog by Bundick disparaging the RCTs on MC for reduction in heterosexual HIV infection of men, but such criticisms have been disproven repeatedly (Wamai *et al.*, 2008; Wamai and Morris, 2011; Wamai *et al.*, 2011; Wamai *et al.*, 2012; Wamai *et al.*, 2015). While research shows women more often prefer the appearance of a circumcised penis (Williamson and Williamson, 1988; Badger, 1989a; b; Bailey *et al.*, 2002; Cortés-González *et al.*, 2008; Cortés-González *et al.*, 2009; Kigozi *et al.*, 2009; Adam, 2014) MC is not merely, ‘elective cosmetic surgery’, since it provides life-long public health benefits.

4 **Procedurally Valid?**

The CDC recommendations are hardly, ‘novel, controversial, or precedent setting’, since they follow numerous publications and policies, most notably that of the AAP (American, 2012a) and the World Health Organisation and UNAIDS (WHO, 2007), in supporting MC for disease prevention.

4.1 *Inadequate Opportunity for the Public to Comment?*

Adler cites criticisms by Van Howe in referring to, ‘Executive Order 13563’ that says, ‘the comment period should generally be at least 60 days’, whereas the CDC provided 45 days for public comment on its draft recommendations. Yet, in that time, Adler says, ‘the CDC has received thousands of comments’. Adler further suggests, ‘there is an obvious need for a public hearing’, which has not

been mooted by the CDC, and that peer reviewers' reports should be made available to the public.

4.2 *Guidelines for Peer Review Ignored?*

The public comments were available on the CDC's website and thus were available to peer reviewers. The CDC document stated that it would provide a summary of the public comments to peer reviewers.

4.3 *Conflicts of Interest and Bias not Disclosed?*

Adler's accusation that the CDC and AAP did not reveal a conflict of interest and bias seems unreasonable, given that each policy involved a dispassionate review of the medical scientific literature available on conventional reference retrieval services such as PubMed. As legal advisor to 'Attorneys for the Rights of the Child', Adler has gained recognition through several published articles (Attorneys, 2015). If implemented, the CDC draft recommendations could interfere with his group's ability to support attempts to sue (on behalf of angry men) physicians and medical facilities for parent-approved circumcisions.

4.4 *Lack of Required Objectivity?*

The authors of each policy statement had nothing to gain and everything to lose if they were to have released recommendations that were at odds with the medical literature. The fact is that each document was firmly grounded on the best available contemporary scientific evidence.

4.5 *No Accurate Assessment of Risk?*

Rather than, 'not know[ing] the risks', the CDC has published a detailed study documenting almost all of the adverse events arising from male circumcision (El Bcheraoui *et al.*, 2014). The study found that compared to IMC, 'the incidences of probable adverse events was approximately 20-fold and 10-fold greater for males circumcised at age 1 to 9 years and at 10 years or older, respectively'. It also found that, '

Rates of potentially serious [male circumcision adverse events] ranged from 0.76 (95 per cent CI, 0.10–5.43) per million [male circumcisions; i.e., 0.000076 per cent] for stricture of male genital organs to 703.23 (95 per cent CI, 659.22–750.18) per million [male circumcisions, i.e., 0.070 per cent] for repair of incomplete circumcision.

4.6 *Peer Reviews and Comments not Incorporated?*

Adler complains that the CDC has not 'incorporat[ed] comments received from peer reviewers and from the public'. This is unreasonable because Adler

published his article before the CDC had released its final recommendations. Undoubtedly the CDC will review all of the comments and judge which are scientifically, ethically or legally valid.

5 The Implications and Conclusion

Adler calls on the CDC to, 'withdraw its proposal and to start over with new recommendations', apparently hoping that the CDC will somehow find that the 'disadvantages of circumcision outweigh its unproven [?], weak [?], and speculative [?] potential [?] future benefits, not the reverse as the CDC wants candidates for circumcision and their parents to believe'. He then repeats erroneous claims on how infections and medical problems associated with lack of circumcision can be achieved by antibiotics, washing, condoms, abstinence, monogamy and safe sex. He ends by repeating his threat to physicians that if they follow the CDC guidelines they, 'risk being held liable on many grounds including fraud'.

Legal arguments can employ anecdotes as evidence. In contrast, anecdotes are not adequate to support medical and scientific arguments needed for evidence-based public health policy recommendations such as the CDC draft policy favouring MC, especially IMC. Adler's arguments rely on anecdotes and opinion while ignoring the strong scientific data supporting implementation of the CDC's draft recommendations favouring IMC and circumcision of older males, especially those in high-risk settings. Adler's approach is seriously flawed scientifically and is potentially detrimental to public health and individual well-being.

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