Out of step: fatal flaws in the latest AAP policy report on neonatal circumcision

J Steven Svoboda,1 Robert S Van Howe2

INTRODUCTION

The American Academy of Pediatrics (AAP) has recently released a policy statement and technical report on circumcision,1 in both of which the venerable child health organisation-cum-doctors’ trade association suggests that the health benefits conferred by the surgical removal of the foreskin in infancy definitively outweigh the risks and complications associated with the procedure. This long awaited pronouncement from the AAP’s Task Force on Circumcision breaks the organisation’s silence on the topic, which extended for just over one and a third decades.2 And while these new documents do not positively recommend neonatal circumcision, they do paradoxically conclude that its purported benefits ‘justify access to this procedure for families who choose it,’ claiming that whenever and for whatever reason it is performed, it should be covered by government health insurance. The policy statement and technical report suffer from several troubling deficiencies, ultimately undermining their credibility. These deficiencies include the exclusion of important topics and discussions, an incomplete and apparently partisan excursion through the medical literature, improper analysis of the available information, poorly documented and often inaccurate presentation of relevant findings, and conclusions that are not supported by the evidence given.

CONSPICUOUS OMISSIONS

The policy statement and the accompanying technical report may be most notable for what they do not address. The documents fail to engage with several critical issues: (1) the anatomy or function of the foreskin and the harm caused by its removal, (2) basic principles of biomedical ethics and how they bear upon the permissibility of the procedure in the first place and (3) fundamental issues in human and children’s rights and their relevance to the surgical infringement of bodily integrity. Any one of these omissions would, by itself, seriously compromise the integrity of the policy statement and the technical report; considered together, however, they might be taken to call into question the AAP’s diligence in carrying out its medical and ethical responsibilities in this area toward its constituent members and their child patients.

The AAP documents steadfastly omit any description, let alone evaluation, of the body part actually at stake in this discussion: the foreskin. The foreskin is of course mentioned—as the structure that is removed by circumcision—but that is all. Yet the anatomy, histology, physiology and pathophysiology of the foreskin are all well described in the medical literature. The foreskin is a complex, erogenous, specialised junctional structure that has important sexual, immunological and protective functions for the intact male as well as for his female sexual partner.5,6 Despite the recent appearance of a timely and important study demonstrating the significant deleterious impact of male circumcision on sexuality7 the documents

ABSTRACT

The American Academy of Pediatrics recently released a policy statement and technical report on circumcision, in both of which the organisation suggests that the health benefits conferred by the surgical removal of the foreskin in infancy definitively outweigh the risks and complications associated with the procedure. While these new documents do not positively recommend neonatal circumcision, they do paradoxically conclude that its purported benefits ‘justify access to this procedure for families who choose it,’ claiming that whenever and for whatever reason it is performed, it should be covered by government health insurance. The policy statement and technical report suffer from several troubling deficiencies, ultimately undermining their credibility. These deficiencies include the exclusion of important topics and discussions, an incomplete and apparently partisan excursion through the medical literature, improper analysis of the available information, poorly documented and often inaccurate presentation of relevant findings, and conclusions that are not supported by the evidence given.
neglect to address these and other negative effects of foreskin removal.

Studies showing pain and changes in infant behaviour after circumcision are not so much as mentioned. Yet, circumcision adversely affects the developing infant brain by causing trauma-grade increases in heart rate, blood pressure and stress hormone levels. Some infants do not cry because they go into shock. Mother-infant bonding and feeding is disrupted, as are infant sleep patterns. Circumcised infants become more irritable and less consolable than their intact peers.

The documents also fail to mention foundational principles from biomedical ethics. Seemingly, such notions as respect for autonomy, the child’s right to an open future, and the normally high bar set for surgical interventions on minors would be at least worth alluding to in a serious discussion of the moral permissibility of male circumcision. Yet the AAP’s repeated, unsupported, alternative suggestion that, ‘In most situations, parents are granted wide latitude in terms of the decisions they make on behalf of their children’ constitutes their entire ethical argument. This assertion badly misstates the law. The powerful ethico-legal precedent set by the United States Supreme Court in 1944 in Prince v Massachusetts and subsequently reaffirmed by countless courts holds: ‘Parents may be free to become martyrs themselves. But it does not follow they are free, in identical circumstances, to make martyrs of their children before they have reached the age of full and legal discretion when they can make that choice for themselves.

As we have argued elsewhere, non-therapeutic circumcision of neonate males is incompatible with widely accepted ground rules for surgical intervention in minors. A proposed non-therapeutic procedure must satisfy a stringent set of criteria: there must be a substantial danger to public health; the condition must have serious consequences if transmitted; the intervention’s effectiveness must be well established; the intervention must be the most appropriate, least invasive, and most conservative way of achieving the desired public health objective; and the individual must be provided with appreciable benefit not dependent on speculation about his or her hypothetical future behaviour. For procedures to be performed on children unable to give consent, heightened scrutiny of any such measures is required.

Given, however, that a healthy foreskin (as opposed to a diseased one) poses no threat either to personal or to public health, it follows that any form of ‘treatment’—apart from being simply illogical—is ethically impermissible as well, since parents lack the authority to grant permission for such a practice.

Furthermore, the AAP’s circumcision recommendations contradict its own bioethics policy statement. This statement affirms that parental wishes cannot justify unnecessary surgery and that ‘providers have legal and ethical duties to their child patients to render competent medical care based on what the patient needs, not what someone else expresses.’ According to this same bioethics policy statement, a ‘pediatrician’s responsibilities to his or her patient exist independent of parental desires or proxy consent.

The AAP ignores a child’s well-established human and legal rights. These include—as confirmed by the June 2012 landmark ruling of a regional court of Cologne, Germany—the right of a child to decide for himself upon reaching an appropriate age whether he wants to part with his foreskin. The foreskin is, after all, a functional component of his own sexual anatomy, and one enjoyed without serious issue by a majority of the world’s men. Instead, the AAP suggests—with more honesty than ethics—that the common reluctance of an older child or adult to be circumcised justifies parents forcing a genital operation upon him at an age when he is too small to effectively resist.

With the exception of a recent law passed in Germany to protect circumcision considered specifically as a religious rite—which may in any event be vulnerable to being overturned on constitutional grounds—the discussion in Europe has moved away from whether infant circumcision is potentially justifiable, to whether circumcision is in fact a violation of the infant’s basic rights. Increasingly, national medical organisations in countries such as Sweden, Finland and The Netherlands, are calling for an outright ban on infant circumcision, whether performed for religious or cultural reasons.

Most recently, Germany’s official Paediatric Association, the Berufsverband der Kinder und Jugendärzte (BVJK), vehemently opposed the German bill that later became law, supporting instead an alternative that upheld boys’ right to bodily integrity. The BVJK prominently cited a commentary that forms a portion of this article and strongly criticised the technical report and policy statement.

Under US law, human rights documents form part of the supreme law of the land. Among the many human rights violated by male circumcision are the rights to privacy, to liberty, to security of person and to physical integrity. For example, the Universal Declaration of Human Rights (UDHR) guarantees the right to privacy (Article 12) and provides that ‘everyone has the right to life, liberty and security of the person’ (Article 3). Articles 9 and 17 of the International Covenant on Civil and Political Rights (ICCPR) and article 16 of the Convention on the Rights of the Child (CRC) contain parallel safeguards. Circumcision entails an impermissible disruption of privacy insofar as a child’s genitals are altered without his consent and without valid medical justification. Circumcision also needlessly endangers the right to life guaranteed by these same human rights documents in UDHR Article 3, ICCPR Article 6, and CRC Article 6.

The AAP neither mentions nor addresses well-known counter-arguments demonstrating that parental authority is limited and does not extend to decisions of this sort.


Furthermore, the word ‘condom’ is entirely absent from the thirty-page technical report. Omitting to mention more effective, safer, and less invasive alternative interventions (such as condom use or the administration of vaccines and antibiotics) undermines any type of informed decision-making with respect to circumcision.

**Law, ethics and medicine**

Male circumcision also contravenes numerous civil and criminal laws. Malpractice awards are mounting up, including a June 2012 US$700 000 settlement reported in the Massachusetts Lawyers Weekly.25 The technical report mentions the Mogen clamp. The AAP is evidently unaware that this device was produced by a company that went out of business after a lawsuit on behalf of an infant who lost his penis resulted in a US$10.8 million award.26

FAULTY EVIDENCE

In addition to the troubling omissions just discussed, the AAP report suffers from being two-and-a-half years out of date at the time of its publication. The last literature search was performed in April 2010 for a report published in August 2012. Moreover, the AAP documents evidence a highly biased literature review. The AAP arbitrarily—and indefensibly—excludes from consideration case reports, case series, ecological studies, reviews and opinions. By doing so, it failed to consider the most serious complications associated with the procedure, such as partial and complete amputation of the glans of the penis, which are typically described in (virtually innumerable) case reports and case series.27–61

Studies that suggest benefits for circumcision appear in the technical report, while at least 100 studies that fail to support a benefit, or that find detrimental effects of circumcision are omitted. The exclusionary policy also has an odd geographic element to it. Conspicuously absent are studies from North America of sexually transmitted infections, including HIV, which have consistently failed to find an association between sexually transmitted infections and circumcision status. The AAP imports data from another continent (see below) as the infal laws. Malpractice awards are mounting up, including a June 2012 US$700 000 settlement reported in the Massachusetts Lawyers Weekly.25 The technical report mentions the Mogen clamp. The AAP is evidently unaware that this device was produced by a company that went out of business after a lawsuit on behalf of an infant who lost his penis resulted in a US$10.8 million award.26

The AAP also cherry-picks information from within the articles it cites. For example, the AAP selects bits of language out of context that lend support to its position while completely ignoring contradictory data. The AAP cites a study that determined that male circumcision removes the most sensitive part of the penis, but fails to cite this finding.62–64 The AAP also mentions a study suggesting that circumcising men increases the risk of HIV transmission to female sexual partners, while ignoring that presumably unccongenial finding.65 The AAP even cites a study showing that smoking and a narrow foreskin, not a normal one, contribute to penile cancer, then suggests that circumcision of normal foreskins can help prevent penile cancer.66

LOGICAL LEAPS

One puzzling aspect of the AAP policy statement is a contradictory dance performed on the question of how strong the alleged benefits of the procedure are. On the one hand, it is described as an ‘elective procedure’, and moreover, one for which the ‘health benefits are not great enough to recommend routine circumcision of all male newborns.’ The AAP admits that ‘the true incidence of complications after newborn circumcision is unknown,’ stating also, ‘Based on the data reviewed, it is difficult, if not impossible, to adequately assess the total impact of complications, because the data are scant and inconsistent regarding the severity of complications.’ Yet despite the purported lack of complication data the AAP somehow manages to conclude that ‘...current evidence indicates that the health benefits of newborn male circumcision outweigh the risks’. Since they concede that they are missing the denominator to their equation, one wonders how they performed this calculation.

Furthermore, the AAP concludes, without performing any recognised form of analysis, that the purported benefits of circumcision are ‘sufficient’ to ‘justify access to this procedure for families choosing it’ and to ‘warrant third-party payment for circumcision of male newborns’ if and when it does occur. This conclusion, without the proper foundation, comes out of nowhere. It is not a result of the literature search, biased though it is; nor does it follow from a cost analysis of benefits versus risks, because no such analysis took place.26 While a noted circumcision proponent has published a cost analysis that found that circumcision did not save money,80 this was not mentioned. The AAP also failed to cite that cost-effective analyses have found that circumcision was much more costly than condoms or antiretroviral therapy to prevent a case of HIV infection in Africa,81 or several cost-utility analyses have found that circumcision neither saved money nor preserved quality-adjusted life-years.82–85 As argued in the commentary by Earp cited earlier, ‘The AAP cannot plausibly justify “third party payments” for a procedure that is more perilous, more ethically problematic, less effective and less cost effective than available alternatives. The government dime is clearly better spent elsewhere.’9 Indeed, the AAP calls circumcision an ‘elective procedure,’ but families are typically not allowed to choose elective procedures, such as purely cosmetic surgery, for their children. Also, third parties are not willing to pay for elective procedures. The AAP wants physicians to get paid for unnecessary surgery, but if the AAP were to call it necessary surgery and recommend it, then it would potentially bear responsibility for any complications or harm resulting from the surgery.89 Thus, presumably, the attempt to walk a fine line.

OUT OF AFRICA: CIRCUMCISION AND HIV

The AAP maintains—as previously asserted in its 1999 policy statement—that the ‘health benefits (of circumcision) are not great enough to recommend routine circumcision of all male newborns.’ Yet without any genuine justification, the AAP has, nevertheless, adjusted its position toward greater tolerance of...
just such an outcome.\textsuperscript{vii} In an attempt to explain its evolving position, the AAP makes much ado about three ‘randomised-controlled’ clinical trials conducted in Africa between 2005 and 2007, resting its case for ‘new’ health benefits almost entirely on the back of these studies.\textsuperscript{98–100}

Problematically, however, the African studies were closer to a lowest common denominator than the ‘gold standard’ suggested by the New York Times,\textsuperscript{101} suffering from numerous critical flaws including selection bias, randomisation bias, experimenter bias, inadequate blinding, participant expectation bias, lack of placebo control, inadequate equipoise, excessive attrition of subjects, failure to investigate non-sexual HIV transmission, lead-time bias, and time-out discrepancy.\textsuperscript{102–107} Additionally, the ‘60\%’ figure typically cited as the reduction-of-risk outcome shown by the studies refers to relative risk and seems calculated to deliberately mislead; the absolute risk reduction was only a negligible 1.3\%. With such a small absolute risk reduction, it is difficult to know if this finding is valid, given the background noise produced by the numerous sources of bias.

Furthermore, the US has both the highest rate of circumcision and the highest rates of HIV and sexually transmitted infections in the industrialised world, so a claim that the first can prevent the other two seems highly implausible. The AAP admits as much by saying that ‘key studies to date have been performed in African populations with HIV burdens that are epidemiologically different from HIV (burdens) in the United States.’ The epidemiological differences are in fact vast; in Africa, one of the ‘best’ places to become infected with HIV is at a health clinic through iatrogenic exposure,\textsuperscript{108,109} whereas in the developed world, HIV is primarily transmitted by injecting drug users and by gay men. The dramatic differences between the African and American medical and epidemiological settings could hardly be more stark.\textsuperscript{viii}

It must also be emphasised that the findings in Africa—even if we were to accept them on their face—apply only to adult males. There are no studies that have found an association between infant circumcision and risk for heterosexually transmitted HIV. Infants, unless they are sexually molested, are not at risk for sexually transmitted HIV. Removing functional tissue from an infant, therefore, based on speculation about his sexual behaviour decades later makes very little sense. At best, the African studies could be used to justify suggesting to an adult male that circumcision might help reduce his risk of becoming infected with HIV—assuming, of course, that he refused to wear condoms and took little care in selecting his sexual partners.\textsuperscript{viii}

\textsuperscript{vii}So ambiguous and contradictory is the AAP’s language that several media reports concluded that they had, in fact, recommended routine circumcision: for example, ‘Routine circumcision of boys advisable: U.S. Study’ in the Vancouver Sun, available at http://www.vancouversun.com/health/Routine+circumcision+of+boys+advisable+study/7154611/story.html

\textsuperscript{viii}North American data, inexplicably ignored by the AAP demonstrates the lack of relevance of the African RCTs.\textsuperscript{110–113} Only one of these studies demonstrated any difference in rates of HIV and AIDS, but only in a select sub-population and not for the entire population seeking care at the STD clinic.\textsuperscript{114} Moreover, a recent study from Puerto Rico showed that circumcised men had higher risks relative to intact men for both HIV and for a number of other conditions including genital warts.\textsuperscript{115} It is alarming that the AAP ignored studies conducted in the US.

\textsuperscript{viii}Paradoxically, the AAP also contradicts its statement about epidemiological differences by stating that it ‘recommends additional studies to better understand… [t]he impact of male circumcision on transmission of HIV and other STIs in the United States.’

\textsuperscript{OTHER RED HERRINGS: HUMAN PAPILLOMA VIRUS, syphilis, penile cancer and urinary tract infections}

Studies on other sexually transmitted infections are not appreciably different from what was seen in 1999. The only ‘new’ finding is an association shown in some studies between human papilloma virus (HPV) infection and circumcision status. Embarrassingly, the findings in these highly publicised studies can be completely attributed to sampling bias and lead-time bias.\textsuperscript{116–118} Studies of HPV that have used proper sampling techniques have failed to find an association between these infections and circumcision.\textsuperscript{119–125} If the AAP had evaluated these trials properly, rather than repeat their results without exploring them for fatal flaws, it would have reached a different conclusion. Of course, if it had bothered to mention the existence of an effective HPV vaccine anywhere in their technical report, it could have skipped the circumcision-prevents-HPV discussion altogether.

The AAP’s discussion regarding penile cancer risk, the AAP report gets the numbers completely wrong. It incorrectly alleges that 909 circumcisions would need to be performed to prevent one case of penile cancer. This estimate is inconsistent with the known epidemiology in the USA, where the age-adjusted rate of penile cancer is approximately 0.8 per 100 000 person-years.\textsuperscript{133,134} This translates into a lifetime risk of 0.000576 or 1 in 1736. If as claimed, circumcision reduces the risk by a factor of 2.5, the lifetime risk for a circumcised male would be 0.0002304. The absolute risk reduction would be the difference, or 0.0003456. The number needed to treat would be the inverse of the absolute risk reduction or 2894, which is triple the AAP’s number. What remains unexplained is that the rates of penile cancer in the USA exceed those in Denmark, Norway, Finland and Japan, where infant circumcision is rare.\textsuperscript{135–138}

As the BVJK also noted, the only possible benefit of circumcision in infancy (as opposed to waiting until the age of consent) is a reduction in the risk of contracting a urinary tract infection. These infections are rare (approximately 1%), limited primarily to the first 6 months of life, are easily and effectively treated with oral antibiotics, and very rarely result in hypertension or long-term kidney disease. The report fabricates the number needed to treat as 100, while a population-based cohort study estimated the number needed to treat at 195.\textsuperscript{139} If 195 circumcisions are needed to prevent one urinary tract infection, and the cost of circumcision is US$200, then US$39 000 will be spent to prevent one urinary tract infection. The cost to diagnose a urinary tract infection is about US$200, and the cost of treatment via antibiotics is about US$18. Already, the senselessness of the pre-emptive surgical course is clear. But what about the costs related to harm and complications? The cost of a meatalotomy (a corrective procedure in which meatal stenosis, or circumcision-induced constriction of the urethral opening, is
repaired) is between US$1000 and US$1500. With one case of
meatal stenosis occurring as a result of every 5–20 circumcisions
performed,\textsuperscript{18} the cost of this corrective surgery in a population
of 195 males would be between US$9750 and US$58 500. So,
between US$48 750 and US$97 500 would have to be spent to
save approximately US$218. Either through incompetence or
design, the AAP fails to make these straightforward calculations.

Moreover, and critically, even if male circumcision were
proven to confer a level of protection against HIV/AIDS and/or
other STDs, infants nevertheless cannot be ethically subjected to
the procedure. Because of the demonstrable availability of a less
expensive, less invasive, more cost-effective alternative—that is,
voluntary condom use by sexually active adults—the genital
cutting of a young child toward the same supposed end cannot
plausibly be reconciled with the dictates of medical ethics.
Certainly, given that a more effective alternative exists, as the
Cologne Court correctly held, medical ethics requires that the
child must in such cases be allowed to make his own decision
upon reaching an appropriate age.

CULTURAL CONSIDERATIONS

Regarding cultural and religious considerations, the AAP fanci-
fully claims several points, using slightly different language, ‘It is
reasonable to take these non-medical benefits and harms for an
individual into consideration when making a decision about cir-
cumcision.’ In fact, few things are less reasonable and more
unprecedented than physicians making medical decisions based
on non-medical factors and vagaries of their infant patients’
parents’ culture and religion as central to whether to do a proce-
dure. Doctors are not cultural brokers. Their business is safeguard-
ing patients’ health, not promoting practices that lack a sound
foundation in evidence-based medicine and in medical ethics.

Moreover, a huge logical hole appears when the policy state-
ment suggests that, ‘Parents should weigh the 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.’ One cannot
coherently argue that circumcision is elective and of variable
value at the individual level, yet decisively important in a larger
public health context.

This is not the first time in recent years that the AAP has issued
an ill-advised position statement relating to a form of genital
cutting. The AAP released a policy statement in 2010 in Pediatrics
defending certain forms of female circumcision if performed for
‘cultural’ reasons.\textsuperscript{140} Physicians who had followed the AAP’s
suggestion at that time would have thereby violated federal law
protecting females from such procedures. After numerous organisa-
tions opposing genital cutting pointed out the errors, the AAP
quickly issued a terse retraction of its previous statement.\textsuperscript{141, 142} At
least the AAP has been consistent: that report also failed to acknow-
ledge children’s right to bodily integrity.

CONCLUSION

The AAP appears to be forking off even further in an inelici-
able departure from the views of the rest of the medical estab-
ishment on the morality and science of childhood circumcision.
Even the American Medical Association agrees that there is
insufficient justification for performing the procedure on
newborns absent specific medical indications.\textsuperscript{143} Unlike the AAP
its peer organisations in Europe and also in Australia, the UK
and Canada\textsuperscript{144–146} recognise that medical considerations must
be considered in conjunction with ethical and legal considera-
tions, and that under such an analysis, it should be neither
recommended to parents nor funded by government insurance
systems. The Finnish Union of Medical Doctors (Suomen Lääkäriliitto) is opposed to non-medical circumcision on the
grounds that it involves risks, inflicts pain and injury, and viol-
ates the child’s right to decide about his body,\textsuperscript{20} and the Royal
Dutch Medical Association (KNMG) has gone so far as to dis-
courage its membership from participating in the procedure as it
carries risks without countervailing benefits.\textsuperscript{21} The Swedish
Paediatric Society has called infant male circumcision an ‘assault
on boys.’\textsuperscript{19} As discussed above, the German BVKJ also strongly
opposes the procedure.\textsuperscript{22}

Over 100 boys die each year from this needless procedure, even
when performed under optimal conditions in a medical setting, yet
the AAP fails to attach much significance to the deaths stemming
from the practice.\textsuperscript{147} Rather than objectively evaluating all available
evidence, the AAP selectively quotes and references highly con-
tested and controversial studies to attempt to justify an entrenched,
yet outmoded, cultural—not medical—practice.

The lack of attention to detail and depth of discussion suggests
that the AAP was not concerned about the medical quality of their
product. Other policy statements by the AAP are typically
extremely well written, well researched, with in-depth discussion.

We question why the AAP is championing public funding for an
unnecessary surgery at a time when the US faces a crisis in
not being able to provide even necessary care for all its children.
As was just demonstrated in a report by the Institute for
Medicine, an astonishing US$750 billion is wasted on healthcare
each year in the USA.\textsuperscript{148} In these days of rising medical costs and
scarce resources, we simply cannot afford to continue to carry out such a harmful and outmoded practice.

Even in the far from definite case that benefits do exist, as the
KNMG notes, ‘it is reasonable to put off circumcision until the
age at which such a risk is relevant and the boy himself can
decide about his body,’\textsuperscript{20} and the Royal

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