



# The Ethical Course Is To Recommend Infant Male Circumcision — Arguments Disparaging American Academy of Pediatrics Affirmative Policy Do Not Withstand Scrutiny

Brian J. Morris, John N. Krieger, Jeffrey D. Klausner, and Beth E. Rivin

**W**e critically evaluate an article published in the *Journal of Law, Medicine & Ethics* by Svoboda, Adler and Van Howe<sup>1</sup> challenging the validity of the American Academy of Pediatrics (AAP) 2012 affirmative policy statement on infant male circumcision (MC).<sup>2</sup> The serious errors in their arguments and claims deserve a detailed response. To assist readers, our critique will follow the section headings of their article.

## I. The Facts

### A. Normal Bodies and Customary Medical Practice

Our human forebears would have seen foreskin problems — phimosis, paraphimosis and balanitis — so could have adopted MC for prophylaxis. Over time MC might have been subsumed by cultural tradi-

tions. Today, 38% of the world's adult male population is circumcised.<sup>3</sup> Preventive medicine is a, “*norm of medical practice*,” as recognized in AAP and CDC MC policies.

### B. Origins: Barbarism and Medical Quackery

They cite opinion pieces and selectively refer to Victorian misunderstandings about MC, but not benefits recognized in the Victorian era, namely protection against sexually transmitted infections (STIs), penile cancer, phimosis, balanitis and inferior hygiene.<sup>4</sup> Their claim of “*medical quackery*,” is an example of the genetic fallacy — a fallacy of irrelevance where a conclusion is suggested based solely on someone's or something's history, origin, or source rather than its current meaning or context.

**Brian J. Morris, D.Sc. Ph.D.**, is Professor Emeritus in the School of Medical Sciences of Sydney Medical School at University of Sydney. He is engaged in full-time medical and public health research in the fields of hypertension, healthy aging, longevity, disease prevention and male circumcision, with extensive publications in each of these. His patented test for HPV detection, the earliest globally, has led to more effective cervical screening and it was this work that drew him to the field of male circumcision, initially for cervical cancer prevention. **Jeffrey D. Klausner, M.D., M.P.H.**, is Professor of Medicine in the Division of Infectious Diseases and the Program in Global Health at UCLA. His research interests are in applied epidemiology and the prevention and control of infectious diseases of public health importance such as HIV, STIs and TB. He was Branch Chief for HIV and TB at the Centers for Disease Control (CDC) in Pretoria, South Africa, and is a frequent advisor to the CDC, NIH and WHO. He has a particular interest in the use of technology — information, digital, and laboratory—to facilitate access to treatment for disadvantaged populations. **John N. Krieger, M.D.**, is Professor in the Department of Urology and the Department of Global Health at Washington University School of Medicine. He is one of very few practicing surgeons who also completed training in infectious diseases. Dr. Krieger has conducted studies in genitourinary tract infections, HIV, sexually transmitted infections (STIs), reproductive health and implementation science in the U.S., Asian and African settings for more than 30 years. These studies have included pioneering research on mechanisms of disease, prostate disorders, urinary tract infections and STIs, as well as comparative studies of vasectomy techniques and of male circumcision to prevent HIV in both Asian and African settings. **Beth E. Rivin, M.D., M.P.H.**, is Clinical Associate Professor in the Department of Global Health in the Schools of Medicine and Public Health and an Affiliate Associate Professor in the School of Law at University of Washington. She also maintains appointments in the Schools of Medicine and Public Health in the Departments of Global Health and Bioethics and Humanities. As a pediatrician trained in public health and preventive medicine, she has focused on global health for over 30 years. During the last 15 years, she has been actively engaged in the academic and practice area of global health and justice. She has expertise in health and human rights, including child rights.

### C. The Foreskin

A case is made, without evidence, for special properties and functions of the foreskin. The AAP and CDC statements explain that MC, especially in infancy, partly or completely protects against many STIs, urinary tract infections (UTIs), phimosis, paraphimosis, balanitis, smegma, candidiasis, penile cancer, prostate cancer, and cervical cancer.

Although the surface area of both the inner and outer layers of the foreskin averages, “30–50 cm<sup>2</sup>”, the range in each study that has measured it was very wide: 7–100 cm<sup>2</sup> (n=965)<sup>5</sup> and 18–68 cm<sup>2</sup> (n=8).<sup>6</sup> Darwin noted, “An organ, when rendered useless, may well be variable, for its variations cannot be checked by natural selection,”<sup>7</sup> consistent with the foreskin being a vestigial structure.

MC does not remove, “the vast majority of the penis’s specialized erotogenic nerve endings.” Erotogenic nerve endings reside in the glans, not the foreskin.<sup>8</sup> MC has no adverse effect on sexual function, sensitivity or sensation.<sup>9</sup> Sensitivity to vibration — the only stimulus known to correlate with sexual response — is similar in uncircumcised and circumcised men.<sup>10</sup>

### D. The “Cons”

#### 1. TRAUMA AND PAIN

Since MC without anesthesia is painful, the AAP and CDC advocate pain control by local anesthesia (general anesthesia being unnecessary and presents unnecessary risk).<sup>11</sup> Although pain response to vaccination 6 months after MC without anesthesia was greater than in those circumcised with local anesthetic cream and lowest in an uncircumcised group,<sup>12</sup> there was no long-term follow-up. By inference boys whose first post-partum encounter with pain is vaccine injection should also show a stronger pain response to subsequent MC. Contrary to Svoboda *et al.* no adverse psychological aftermath of MC has been demonstrated.<sup>13</sup> Longitudinal studies of boys from birth to age 26 in the UK,<sup>14</sup> to age 13 in New Zealand<sup>15</sup> and Sweden<sup>16</sup> found no difference in developmental, medical, psychological, intellectual and behavioral indices between circumcised and uncircumcised males. Claimed long-term psychological, emotional, and sexual impediments from infant MC are anecdotal<sup>17</sup> and can be discounted. Painful experiences are common before, during and after birth.<sup>18</sup> Cortisol, heart rate and respiration increase during and shortly after MC.<sup>19</sup> Taddio *et al.* recommend local anesthesia for MC<sup>20</sup> and vaccination.<sup>21</sup>

After citing irrelevant references Svoboda *et al.* refer to a Danish study claiming, “circumcision pain,” causes autism spectrum disorder (ASD).<sup>22</sup> That study has been criticized.<sup>23</sup> It reported ASD in 6.3% of circum-

cised boys, but another study reported ASD in 7.2% of *uncircumcised* Danish boys, leading to a suggestion of confounding in Frisch and Simonsen’s study.<sup>24</sup> Another ASD study cited by Svoboda *et al.* was actually a study of possible adverse effect of acetaminophen (paracetamol) (used for post-MC pain relief) on neural development and thus ASD.<sup>25</sup> Importantly, Frisch and Simonsen noted ASD in boys aged 0–4, but not in boys aged 5–9 (born before 1999 when guidelines to use analgesic medication post-MC were introduced).<sup>26</sup>

In the first week post-partum, neonatal/infant pain score (NIPS, range 0–7) during MC is close to zero using local anesthesia, but later gradually increases to 2.2–4.7.<sup>27</sup> The authors, “assumed that a newborn who is asleep or indifferent during a potentially painful experience such as circumcision is unlikely to be experiencing pain (i.e. NIPS <2)” and that “all newborns cry with minimal stimulation such as nappy change, hunger, change of clothing ... and this can be as high as 3 on the NIPS scale.”<sup>28</sup> NIPS for other painful procedures such as heel prick and central venous access scored 3.0 and 3.4, respectively, in randomized trials despite analgesia.<sup>29</sup> Infant MC should be done before the onset of mini-puberty of infancy, which starts at 4 weeks and ends at 3 months,<sup>30</sup> since, “During this time the foreskin gradually becomes larger, thicker and has much better blood supply which increases the risk of bleeding [and pain] during circumcision.”<sup>31</sup> Clearly, the first week, using local anesthesia, seems the optimum time for infant MC. MC can be pain-free when local anesthetic cream is applied 2 hours prior.<sup>32</sup>

Telephone surveys found parents’ perception of level of discomfort from infant MC was mild in 84%, moderate in 11% and severe in 5% in one,<sup>33</sup> and, “no pain (29%),” “minimal pain (15%),” or “acceptable pain (53%),” with only a minority reporting pain that was, “more than acceptable (1.5%),” or, “much more pain (0.9%),” in another.<sup>34</sup>

In men, large randomized controlled trials (RCTs) found severe pain in only 0.8%,<sup>35</sup> 0.3%,<sup>36</sup> and 0.2%<sup>37</sup> of subjects.

#### 2. RISKS

Severe complications are extremely rare for medical circumcisions performed by well-trained operators. As for any medical intervention negligence can lead to litigation and compensation, being the *raison d’être* of Svoboda and Adler’s anti-MC organization, “Attorneys for the Rights of the Child.” A Danish study in which, “5.1% had significant complications.”<sup>38</sup> involved “ritual circumcisions,” the complications were not particularly serious overall, and were related to inferior technique.

Their 20% prevalence of meatal stenosis 5–10 years after newborn MC<sup>39</sup> was for 27 boys presenting with other problems at a pediatric clinic in Iran. In all cases the meatal stenosis was asymptomatic. There was no control (uncircumcised) group. Svoboda *et al.* did not refer to a study of meatal stenosis by Van Howe<sup>40</sup> that contained serious methodological flaws.<sup>41</sup> In circumcised boys the meatal opening is visible, but is often invisible in uncircumcised boys. Svoboda *et al.* fail to cite a high-quality CDC study of adverse events from 1.4 million circumcisions in the US in which meatal stricture (that includes meatal stenosis) was 0.01% in circumcised and uncircumcised boys 180 days postpartum.<sup>42</sup> They also fail to cite a U.K. study that found meatal stricture in 7/66,519 (0.01%) boys,<sup>43</sup> or large Iranian studies that reported prevalence to be 0.55%<sup>44</sup> and 0.9%.<sup>45</sup>

The claim by Svoboda *et al.* that, “*Complications may be greater with circumcisions done neonatally*” is contradicted by the CDC study, which found adverse events in 0.4% of newborn boys, 9% of boys aged 1–9 and 5% of those aged over 10 years.<sup>46</sup> In the U.K. study of boys circumcised at age 0–15 years (only 1.4% during infancy) adverse event frequency was 1.2%.<sup>47</sup>

Although the CDC found total adverse events were 2–4 times higher in circumcised than uncircumcised males, incidence of infections, surgical procedures, pneumothorax, penile disorders and gangrene were higher in uncircumcised males.<sup>48</sup>

**To support their claims of harm they selectively cite opinion pieces, non-peer-reviewed web documents, book chapters by MC opponents, a conference abstract never published in full, and small, weak studies, some of which have been criticized and rated as low quality in systematic reviews.**

Svoboda *et al.* state, “7.4% of all visits to pediatric urologists at Massachusetts General Hospital over a 5-year period were attributed to circumcision.”<sup>49</sup> But overall prevalence of MC-related visits to this hospital was 4.7%. The figures cannot be used to conclude complications from newborn MC are common because (i) this is a referral hospital, so includes cases in which MC was performed elsewhere and (ii) reflects the fact that newborn MC is a very common pediatric procedure in U.S. males.

Svoboda *et al.* cite magazine articles, websites and other weak, as well as outdated, sources. Their claim of, “*more than 100 deaths per year in the United States alone [from infant male MC]*”<sup>50</sup> is based on the false<sup>51</sup> assumption that the well-known sex difference in infant mortality is entirely a consequence of infant MC. Deaths from medical MC are exceedingly rare.<sup>52</sup>

Contrary to the claim by Svoboda *et al.*, the CDC study *did* document, “*how often circumcision results in serious injury.*” It showed that the adverse event rate in *uncircumcised* newborns was 5 times higher for, “*surgical procedures,*” 1.7 times higher for “*disorders,*” 2.8 times higher for “*pneumothorax,*” 1.3 times higher for “*infections*” and 3-times higher for “*gangrene, death, and decay of body tissue.*”<sup>53</sup> The higher risk of adverse events at older ages, highlighted newborn MC as a safer time for MC.

The CDC’s finding of 0.4% for infant MC adverse events supports the AAP’s assertion, based on older data, that adverse event rates are less than 0.5%. Accusations against the AAP that, “*its main conclusion was based not on science but rather on a feeling*” cannot be sustained. Svoboda *et al.*’s comments on complications and, “*risk/benefit structure*” are repudiated later.

### 3. HARM

To support their claims of harm they selectively cite opinion pieces, non-peer-reviewed web documents, book chapters by MC opponents, a conference abstract never published in full, and small, weak studies, some of which have been criticized and rated as low quality in systematic reviews. As discussed below, high quality systematic reviews, large well-designed RCTs, meta-analyses and large case studies reach diametrically opposite conclusions from those offered by Svoboda *et al.*

*a. Physical Harm.* They claim that, “*Medical associations outside the United States agree that circumcision harms all boys and men,*” citing the Royal Australasian College of Physicians (RACP)’s 2010 policy.<sup>54</sup> The RACP and the other bodies they refer to do not, however, have evidence-based policies.<sup>55</sup> Svoboda *et al.* then sidetrack to discuss a failed attempt by the AAP to ameliorate the danger posed by female genital cutting/mutilation (FGM). Yet, harms from MC are infrequent and uncommon.

*b. Sexual Harm to Men.* They appeal to “*common sense,*” while ignoring the scientific evidence (discussed above) contradicting their contention that, “*circum-*



*cision impair[s] men's sex lives.*" Danish research<sup>56</sup> undermines the claims by Frisch with mostly Danish and northern "European physicians" who criticized the AAP's policy.<sup>57</sup> Their claims in a 1994 article about functions of the foreskin during sexual intercourse<sup>58</sup> are highly speculative. They cite a conference abstract from Greece, a country with a strong bias against MC, which found 35% of 123 men circumcised for medical indications reported a worse sex life after MC compared with 16% who reported an improvement.<sup>59</sup> There was no control group. They do not reveal that 54% of those men reported their female partner's "sexual life" improved or did not differ after their circumcision. Flaws undermine that study.

Svoboda *et al.* quote from a 2011 study by Frisch *et al.*,<sup>60</sup> which was rated as low quality (grade C) by Danish researchers,<sup>61</sup> and as SIGN<sup>62</sup> level 2– in a systematic review<sup>63</sup> because: (i) correction for multiple statistical testing would have negated the finding, (ii) only half of those invited accepted, (iii) 85% of the circumcised men underwent MC later in life, most likely for a medical reason (which may be independently associated with sexual dysfunction and psychologically-based behavioral aversion to penetrative sex, as found in an Australian study),<sup>64</sup> (iv) in Denmark medical circumcisions, mostly for phimosis, tend to involve a dorsal slit, rather than foreskin removal, and (v) one might expect that individuals having a strong opinion would be more likely to participate, representing a potential bias.<sup>65</sup> The AAP also criticized the Danish study.<sup>66</sup>

To clarify other studies, in the Portuguese telephone survey of 109 men, 3 months to 1 year after MC, the authors suggested the sexual dysfunctions seen in their small survey, were related to diabetes, older age and/or psychological factors. Phimosis was present in 89% of men in the study, 50% of whom experienced pain during intercourse *prior to* MC, falling to 6.5% *after* MC.<sup>67</sup> The Belgian survey reporting lower sexual sensation in circumcised men<sup>68</sup> was rated as low quality (2–) in a systematic review<sup>69</sup> because (i) it reported the percentage of uncircumcised, but *not circumcised*, men who rated sexual pleasure and orgasm intensity as "mild" to "very strong"; (ii) the statistical analyses did not correct for multiple testing, (iii) it was doubtful that statistically significant differences of 1–11% for all but one item (37%) identified in uncorrected statistical tests would be *biologically* meaningful, (iv) it seemed unlikely that a man could accurately know whether orgasm intensity was greater for stimulating, say, the lateral shaft of his penis by itself, (v) the n values for each of the 42 measurements made in each group were not stated, (vi) while some differences of 1% or 2% (favoring the uncircumcised) were highly significant, a difference of 39% showing

higher, "unusual sensations intensity" of the lateral penile shaft of *uncircumcised* men was not significant.<sup>70</sup> The questionnaire used included questions on the foreskin, but unlike co-author Schober's 2009 study,<sup>71</sup> Bronselaer *et al.* did not present foreskin data or whether the latter differed from other sites on the penis in uncircumcised men. The proportion of men who were circumcised (23%) and the proportion who were homosexual (12.1%) was much higher than prevalences in Europe generally, consistent with bias in the self-selected convenience sample surveyed.<sup>72</sup> In Europe circumcision for non-religious reasons is usually for treatment of a medical problem, such as balanitis, lichen sclerosis or phimosis, conditions that can have long-lasting adverse effects on sexual function. MC for a medical reason could explain the findings.<sup>74</sup>

They refer to criticisms by Frisch of questionnaires used in the large RCTs that found no adverse effect of MC on sexual function, sensitivity and satisfaction. But Frisch provided little detail about his concerns. He directed an inappropriate, emotive personal attack on a critic and seemed unaware of the right of others to criticize his research. An RCT reported difficulty with penetration 6 months after MC in 1.4% of circumcised men vs. 0.6% in uncircumcised men, and pain on intercourse (dyspareunia) was 0.6% vs. 1.2%, respectively, but at 24 months there was no significant difference.<sup>75</sup> A meta-analysis of 6 dyspareunia studies<sup>76</sup> concluded MC made no difference (OR=1.05).<sup>77</sup>

*c. Sexual Harm to Women.* Frisch *et al.* reported, "sexual function difficulties overall" for 31% vs. 22% of women during sexual intercourse with a circumcised vs. uncircumcised spouse, respectively.<sup>78</sup> This included 8 of 68 (12%) reporting frequent dyspareunia with a circumcised spouse compared with 56 of 1683 (3%) with an uncircumcised spouse and 13 (19%) vs. 246 (14%) who reported frequent "orgasm difficulties" with each. There was no difference in "lubrication insufficiency" (14% vs. 12%). Frisch nevertheless acknowledged that, "Thorough examination of these matters in areas where [MC] is more common is warranted." Frisch also acknowledged that dyspareunia could be psychological, as is likely in Denmark where 95% of the men are uncircumcised and women are unused to a circumcised penis.<sup>79</sup> Prevalence risk ratio should have been used to express associations rather than odds ratio (OR).<sup>80</sup> For example, "frequent sexual function difficulties" in women with circumcised partners (31%) compared with uncircumcised partners (22%), yields a prevalence risk ratio of 1.41, but an OR of 3.26.

Other studies Svoboda *et al.* cite are small and have been shown to contain serious flaws in data interpretation.<sup>81</sup> Claims that the foreskin confers a "gliding"

action and, “reduces friction and vaginal dryness in women” are speculative and contradicted by RCT data that found the wives of men circumcised in the trial reported either no change (57%) or improved (40%) sexual satisfaction after their male partner’s circumcision.<sup>82</sup> One reason was improved genital hygiene. The trial authors concluded that MC has no deleterious effect on female sexual satisfaction and might have social benefits in addition to health benefits. The claims by Svoboda *et al.* are also at odds with a Mexican survey of women before and two months after their male partner’s MC.<sup>83</sup> That study found no difference in sexual satisfaction, pain during vaginal penetration, desire and vaginal orgasm. Most women prefer their male partner to be circumcised.<sup>84</sup> Reasons included: esthetics, better hygiene, reduced risk of infection, easier and less traumatic vaginal (or anal) penetration during intercourse, and greater overall sexual pleasure.<sup>85</sup>

*d. Psychological Harm.* Instead of evidence, Svoboda *et al.* cite several opinion pieces claiming MC might cause psychological harm. These include an article criticizing the AAP over its infant MC policy statement, an article by MC opponent, Goldman, in a 1999 issue of *BJU International* which invited articles opposing MC, a book by Goldman, a 1999 opinion piece in an obscure journal claiming neonatal MC causes post-traumatic stress disorder, and claims in a book, a book chapter and in another article in the one-sided *BJU International* issue of 1999 about, “*unhappiness at having been circumcised.*”

There is a, “*disparity between the mythology and medical reality of circumcision regarding male sexuality.*”<sup>86</sup> A psychopathology term that fits the sexual obsession with the foreskin is termed “*partialism,*” defined as, “*exclusive focus on part of the body.*”<sup>87</sup> It is a form of paraphilia in the sexual and gender identity disorders section of the American Psychiatric Association’s DSM-5.<sup>88</sup> Diagnosis is merited if, “*the behavior, sexual urges, or fantasies cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.*” A detailed professional analysis of psychiatric aspects in 8 patients seeking prepuce restoration noted several psychological disorders.<sup>89</sup> These included narcissistic and exhibitionistic body image, depression, major defects in early mothering and ego pathology. Such men have a preoccupation with their absent foreskin and represented a subgroup within the community of men who have sex with men.<sup>90</sup>

Thus, strong scientific data show that MC has no adverse effect on sexual function, sensitivity or pleasure. Unsubstantiated claims that MC may impair

sexual function or pleasure can produce adverse psychological outcomes and physical harm in believers.

### *E. The “Pros”*

#### I. URINARY TRACT INFECTIONS

Contradicting Svoboda *et al.*, UTIs are common in infancy.<sup>91</sup> UTIs present with severe pain and fever and can cause significant morbidity.<sup>92</sup> Renal injury and scarring can result, especially in infancy when the kidney is still growing.<sup>93</sup> UTIs are not, as Svoboda *et al.* claim, “*limited to the first six months of life.*” By the age of 7 years, 2% of boys have definitely had a UTI and another 5% have probably had at least one.<sup>94</sup> A recent meta-analysis found that, over the lifetime, 32.1% of uncircumcised males experience a UTI compared with 8.8% of circumcised males.<sup>95</sup> It found relative risk of UTI in uncircumcised males was 9.91 for age 0–1 year, 6.56 for age 1–16 years and 3.41 for 16 years and over. Thus, given that risk of complications from infant MC is 1 in 250,<sup>96</sup> risk of UTI in an uncircumcised boy vastly exceeds risk of adverse events, refuting the 1992 claim by Chessare<sup>97</sup> and “*European experts,*”<sup>98</sup> used by Svoboda *et al.* to support their argument.

Svoboda *et al.* misrepresent a Cochrane analysis that confined their inclusion criteria to just RCTs,<sup>99</sup> while ignoring the more than 20 case-control, cohort and retrospective studies, some involving tens of thousands of boys. The Cochrane authors missed a published RCT that showed MC reduced UTI 7-fold in boys aged 3 months to 10 years.<sup>100</sup> Given the overwhelming evidence of strong protection against UTI, today it would be deemed unethical to perform a RCT of MC and UTI.

Svoboda *et al.* state that UTIs, “*can be easily and effectively treated with antibiotics.*” In reality, “*a baby with UTI presents with fever, often leading to blood draws, a spinal tap, and, when UTI is diagnosed, hospitalization and intravenous antibiotics.*”<sup>101</sup> There has been an alarming increase in bacterial resistance to commonly used antibiotics for treatment of UTI in children.<sup>102</sup> Swabs taken from under the foreskin of boys aged 7 days to 11 years identified 50 bacterial isolates, most of which were multi-drug-resistant strains.<sup>103</sup> Methicillin-resistant *Staphylococcus aureus* is increasing in prevalence in children in the U.S. by 10% per year, being higher in infants aged less than 90 days (44 per 100,000) compared with older infants (11 per 100,000) and children (1–3 per 100,000).<sup>104</sup> Patients of all ages with uncomplicated UTIs will increasingly require treatment with intravenous rather than oral antibiotics.<sup>105</sup> Concerns have been raised about the future availability of effective antibiotics to treat UTI.<sup>106</sup> Maternal antibiotic use during pregnancy

increases the risk of resistant pathogens causing neonatal UTI.<sup>107</sup>

Svoboda *et al.* cite, “evidence from Israel ... that UTIs may be caused by circumcision.” In one study UTI prevalence was 6.7/1000 after neonatal MC.<sup>108</sup> The authors stated that the higher prevalence than U.S. figures of 1–2/1000 was contributed by the 2.8-times higher UTI prevalence after MC performed by a religious authority rather than by a physician. The explanation was, “urinary retention caused by gauze pressure” from “the haemostasis technique and duration of shaft wrapping” adopted in the religious MC. The other study involved only boys (circumcised on day 8) presenting with fever,<sup>109</sup> so did not document UTI prevalence in Israeli boys overall. Neither study included a control group of uncircumcised boys. Traditional orthodox Jewish circumcision does not involve sterile technique, thus contradicting the AAP’s recommendations for infant MC.

## 2. PENILE CANCER

This devastating cancer is not “rare”, but is uncommon. The AAP quoted a figure of 1 in 909 from a study of *lifetime* risk of penile cancer for an uncircumcised man.<sup>110</sup> This is 13 times higher than the lifetime risk of being, “struck by lightning” of 1 in 12,000,<sup>111</sup> thus contradicting Svoboda *et al.* They fail to appreciate that the 1 in 322,000 figure from another (weaker) study referred to by the AAP was an upper estimate of the number of newborn MCs required to prevent one case of penile cancer *per year*. Although penile cancer is extremely rare in boys, MC performed during the neonatal period, but not later in life, confers a high degree of protection against invasive squamous cell carcinoma of the penis in older men.<sup>112</sup> This may in part be because MC reduces risk of oncogenic types of HPV that may be acquired once a male begins sexual activity.

A meta-analysis of 14 studies up until 2007 (5 in the USA, 2 in Mexico, 2 in Australia, and one each in South Korea, Denmark, England, Kenya and a multinational study involving Brazil, Spain, Thailand and The Philippines), involving 5,880 circumcised and 4,257 uncircumcised men, found being uncircumcised was associated with increased penile HPV (OR 2.9).<sup>113</sup> Meta-analyses found the biggest risk factor for penile cancer is phimosis (OR=12.1), followed by balanitis (OR=3.82) and smegma (OR=3.04).<sup>114</sup> Each of these conditions is common in uncircumcised, but not circumcised, men.

There is no scientific evidence that improved penile hygiene can reduce the risk of penile cancer in an uncircumcised man.<sup>115</sup> A case-control study in California found no correlation between penile cancer and

frequency of bathing or method of cleaning the anogenital area before or after sexual intercourse.<sup>116</sup> Etiological routes to penile cancer include sexual transmission of oncogenic HPV in younger men and causes unrelated to HPV in older men (reviewed in Micali *et al.*<sup>117</sup>). In each case, lack of MC represents an important pre-condition and major risk factor.

Svoboda *et al.*’s use of inter-country comparisons is misleading, as the similar incidence of penile cancer in the U.S., where MC prevalence is high, and Denmark, where MC prevalence is low, is because in the U.S. penile cancer varies 30-fold among ethnic groups, being highest in those in which MC is uncommon, and whose risk factors for penile cancer may be higher than in Denmark.<sup>118</sup> In Israel, where MC is virtually universal, penile cancer is 10-fold lower than in Denmark and Germany.<sup>119</sup>

They fail to mention prostate cancer, for which MC prior to sexual debut reduces prevalence by 15–50%.<sup>120</sup> The significant protective effect was confirmed in a recent meta-analysis.<sup>121</sup> In countries globally in which MC prevalence is greater than 80%, prostate cancer-related mortality, corrected for potential confounding factors, is half that of other countries.<sup>122</sup>

## 3. CERVICAL CANCER

Svoboda *et al.* cite a chapter in a book by MC opponents to falsely claim that, of 16 studies, only one reported a statistically significant association of MC with reduction in cervical cancer. They do not cite a well-performed ecological analysis of data from 118 developing countries that revealed a cervical cancer incidence of 35 per 100,000 women per year in 51 countries with a low (<20%) MC prevalence, compared with 20 per 100,000 in 52 countries with a high (>80%) MC prevalence ( $P<0.001$ ).<sup>123</sup> A large, well-designed study of mostly developed countries found that the single risk factor of lack of MC increased cervical cancer risk by 5.6-fold.<sup>124</sup> OR for the association between MC and cervical cancer in monogamous women whose male partner was high-risk (6 or more previous sexual partners and commencement of sexual activity prior to age 17) was 0.18. If their male partner had an intermediate sexual behavior risk index OR was 0.50. Penile HPV infection was associated with a 4-fold increase in risk of cervical HPV infection, and cervical HPV infection was associated with a 77-fold increase in the risk of cervical cancer. RCT data indicated 28% lower oncogenic HPV rates in female partners of circumcised men.<sup>125</sup> In the U.S., for 2008–2012 HPV caused 19,200 new cancers in females and 11,600 in men.<sup>126</sup>

#### 4. OUT OF AFRICA

In their HIV subsection Svoboda *et al.* repeat arguments by MC opponents, while ignoring the strong evidence that MC reduces risk of HIV infection from heterosexual intercourse. Fallacies in their reasoning have been explained in detail previously.<sup>127</sup> Public health authorities accept and promote MC as one of the most effective ways to protect men against HIV acquisition during heterosexual intercourse with an infected woman in both developing countries and the U.S.<sup>128</sup>

## II. Is Non-Therapeutic Circumcision Ethical?

A physician fully informed of the benefits of infant MC and low risks when performed by an experienced med-

#### 2. NON-MALEFICENCE (“DO NO HARM”)

Svoboda *et al.* cite a statement by pediatric bioethicist, Douglas Diekema, but his statement was not about MC. As a member of the AAP Task Force, Diekema clearly supports infant MC. He was, moreover, an author of an article criticizing Adler’s attempt to discredit the legal, ethical and scientific aspects of the CDC’s MC policy.<sup>130</sup>

Svoboda *et al.* misconstrue the Hippocratic Oath, which states, “*I will prevent disease whenever I can, for prevention is preferable to cure.*”<sup>131</sup> Disease prevention is central to affirmative infant MC policy recommendations. Given the immediate and lifelong protections and very low risk of adverse events, failure to recommend infant MC or to suggest that MC should

**The AAP’s Committee on Bioethics recognizes that parents, not the child, take responsibility for vaccinating their children. Similarly, the AAP’s infant MC policy recognizes that benefits of MC substantially exceed risks and that MC benefits accrue from an early age. Based on these observations and an understanding that parents make decisions based on the best interests of their child, the AAP policy recommends that parents should be informed and provided with an opportunity to consent to MC.**

ical professional is just as likely to discourage MC as he or she would advise against childhood vaccination.

### A. The Cardinal Ethical Rules

#### 1. AUTONOMY

Here Svoboda *et al.* cite a web-based Tasmanian Law Reform Institute (TLRI) report, written by a graduate student with guidance from a U.K. lawyer opposed to infant MC, Paul Mason, who moved to Tasmania as Commissioner for Children. Svoboda *et al.* ignore a detailed critique of the TLRI report by a lawyer, ethicist and medical experts.<sup>129</sup>

The AAP’s Committee on Bioethics recognizes that parents, not the child, take responsibility for vaccinating their children. Similarly, the AAP’s infant MC policy recognizes that benefits of MC substantially exceed risks and that MC benefits accrue from an early age. Based on these observations and an understanding that parents make decisions based on the best interests of their child, the AAP policy recommends that parents should be informed and provided with an opportunity to consent to MC.

be delayed would seem unethical as it would expose the boy to substantial harms. Since MC later in life is no longer a simple surgical procedure, is higher risk, is more expensive, and presents psychological and organizational barriers, means exposing the boy to adverse medical conditions earlier in his life,<sup>132</sup> failure to circumcise might be considered unethical.

Thus, because the benefits of infant MC greatly exceed the risks of adverse events, infant MC does not violate the principle of non-maleficence. The physician is putting the best interests of the child first by ensuring routine, accurate, unbiased education of parents while facilitating access to infant MC by a competent experienced operator for parents who request it.

#### 3. BENEFICENCE (“DO GOOD”)

Here Svoboda *et al.* again quote Diekema. But since Diekema (as others, especially members of the AAP Task Force) regard the benefits of infant MC to exceed harms from the procedure, the argument by Svoboda *et al.* falls flat. In the current era of preventive medicine an intervention such as MC, just as vaccination, should be applied as early as possible. MC in the newborn period using local anesthesia is safer, simpler, cheaper, quicker, more convenient and involves faster



healing time than MC later in childhood, in adolescence or in adulthood, and the benefits accrue immediately.<sup>133</sup> MC has at least as great a, “*prospect of benefiting the health of each boy and man*” as vaccination. MC passes the test of beneficence.

#### 4. JUSTICE

Foreskin removal in infancy confers medical, health and cosmetic benefits. A recent survey found that 29% of uncircumcised men wished they had been circumcised, compared with only 10% of circumcised men who wished they had not been.<sup>134</sup> A reason some circumcised men might be unhappy that their parents ensured they were circumcised after birth may be exposure to misleading “intactivist” propaganda on the Internet. The latter presents claims that appear in the article by Svoboda *et al.*

#### B. Specific Ethical Rules

##### 1. NO UNNECESSARY SURGERY

Svoboda *et al.* falsely state that the American Medical Association (AMA) prohibits MC. If this statement were true, then MC would not be seen in 91% of white, 76% of black and 44% of Hispanic men in the U.S.<sup>135</sup>

##### 2. EQUALITY

Svoboda *et al.* equate MC with FGM. These arguments are scientifically, anatomically and ethically flawed. If they were valid the AMA would likely be opposed to infant MC.

##### 3. A PHYSICIAN’S DUTY IS TO THE PATIENT

Based on its review of the scientific evidence and ethical issues, the AAP policy recommends that parents be accurately informed of the benefits and risks of infant MC. They advise that this information should be provided early in a pregnancy to allow parents time to make an informed decision should they have a boy. Having done their duty to advise, the AAP recognized that some parents might not choose MC for their newborn boys, just as some parents may choose to not have their newborns vaccinated. The AAP noted that for some families, religion, culture or personal factors might play a more important role than medical advice in deciding whether or not to have a boy circumcised. That is why the AAP did not recommend mandatory infant MC, even though routine MC would be a logical evidence-based position.

##### 4. ETHICAL PREVENTIVE MEDICINE

Here they cite a 2002 article by Hodges and Van Howe that ignored the prophylactic benefits of infant MC. If indeed, “*any other part of the body*” had a 1 in 2 chance of “*fall[ing] prey to disease*” it would be logical to have

it removed if it serves no function. Given the simplicity of infant MC and its enormous lifetime benefits, MC should be a simple decision for parents.

Svoboda *et al.* argue that the, “*risk/benefit calculation used by the AAP*” was flawed. They cite an article by Darby that has been severely criticized.<sup>136</sup> The AAP did not perform a risk-benefit analysis, whereas the CDC’s policy stated, “*In a comprehensive risk-benefit analysis of [infant MC] 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.*”

Parents have a legal right and ethical duty to authorize MC for their sons, given the scientific data.<sup>137</sup> If MC were illegal, then successful lawsuits would be common, especially in the U.S. However, this is not the case. Even Svoboda has previously acknowledged that, “*Most circumcision lawsuits go nowhere.*”<sup>138</sup> Any resentment later in life by the boy or man for having been circumcised is likely to stem from gullible acceptance of “intactivist” propaganda that permeates the Internet. Perpetrators of these fallacies exhibit unethical behavior since their objectives undermine public health and individual wellbeing.

Thus, contrary to Svoboda *et al.*, neonatal MC does not violate any of the, “*four cardinal ethical rules.*”

### III. Is Non-Therapeutic Circumcision Already Unlawful?

#### A. Recent International Recognition of the Unlawfulness of Circumcision

In Europe, there is widespread opposition to MC. This may reflect lack of familiarity, anti-Semitism, anti-Islamic sentiment, or anti-American attitudes. Most likely this view reflects ignorance about the wide-ranging benefits and low risks from MC. MC of boys nevertheless remains legal in all European countries.

##### 1. MEDICAL ASSOCIATIONS

Svoboda *et al.* rely on opinions posted on websites of the German pediatric society, the Dutch medical association, and articles in online news media and “*Intact News*” (mostly by anonymous authors) to support a claim their views reflect official views of South African, Swedish, Danish and Finish medical associations. The South African Medical Association has strongly denied that it opposes MC.<sup>139</sup> In comparison to policy statements by the AAP and CDC, whose recommendations followed an exhaustive, thorough evaluation of the scientific evidence, who should one believe?

##### 2. LEGISLATIVE AND JUDICIAL BODIES

The evidence does not support their statement that outside the U.S. a, “*consensus is emerging ... that circumcision violates the rights of the child.*” The



Queensland Law Reform Commission (QLRC)'s Circumcision of Infant Males Research Paper of 1993 states that, "because of the fairly widespread community acceptance of the procedure it is unlikely, at this time, that a prohibition on routine neonatal male circumcision would be universally supported. It is also unlikely at this time that a medical practitioner acting in good faith and with due care and skill would be prosecuted for assault for performing a circumcision on a male infant."<sup>140</sup> While the QLRC recognized the cultural and religious benefit to some children, in 1993 the medical benefits of MC were less clear. Referring to the QLRC, a lawyer of the Queensland Supreme Court stated in 2012: "Today medical policy holds that it is a decision for parents and has benefits."<sup>141</sup> The lawyer went on to state, "applying the same reasoning today would thus make prophylactic circumcision acceptable. ... Circumcision in the neonatal period with informed parental consent, just as childhood vaccination, is permissible at law and there is no need for those unqualified to practice law to give contrary advice."

Svoboda *et al.* again cite the TLRI issues paper in 2009 while ignoring the critique of that report.<sup>142</sup> The TLRI report, "ignored the extensive scientific evidence supporting infant circumcision" [and also ignored] "a very respectable legal opinion ... by a High Court Judge (and former Governor General of Australia), Sir William Patrick Dean, who stated that circumcision for perceived hygienic — or even religious — reasons ... plainly lies within the authority of parents of an incapable child to authorize surgery on the basis of medical advice."<sup>143</sup> The TLRI report has failed to gain traction or political consideration.

Next, Svoboda *et al.* refer to what they call, "a landmark criminal case" by a regional court in Cologne, Germany. They fail to mention prior obfuscation of the judgment in that case<sup>144</sup> was exposed.<sup>145</sup> This court lacked authority to set precedent in Germany, and that this case has been widely misconstrued in the English-speaking news media. The court actually held that the defendant (the circumciser) was not guilty of a criminal act because the legality or illegality of circumcision is unclear, being among the "...questions of law ... not answered unanimously within the literature, especially in cases in which the legal position is unclear as a whole," going on to say "This is the case here. The question whether circumcision for religious reasons at the request of the parents is lawful is not answered uniformly in the case law and literature"<sup>146</sup> The court did not declare that infant MC might be considered a human rights violation. In response, the German Parliament passed a bill legalizing the circumcision of boys.<sup>147</sup> The German ethics council lent its support.<sup>148</sup>

Svoboda *et al.* ignore this and merely cite an opinion piece posted on the "Attorneys for the Rights of the Child" website.

We agree that the United Nations (UN) would oppose tribal MC, as would the AAP and CDC. Given the wide-ranging protections, some have argued that it would be unethical for boys to not receive medical MC.<sup>149</sup> Article 24(3) of the UN Convention on the Rights of the Child (CRC)<sup>150</sup> refers to the elimination of traditional practices that are prejudicial to a child's health, which indirectly supports MC, since not circumcising boys is prejudicial to their health.<sup>151</sup> The CRC Articles in support of the child's health include 3(1) and 24(1). Denial of MC would deprive the child of the highest attainable standard of health, so violating the CRC, as opposed to the opposite position. CRC Articles 14(2) and 18(1) support parental rights and responsibilities towards children, which in turn support infant MC.

Svoboda *et al.* cite several online news media reports, draft legal proposals and isolated court cases that reflect the general opposition to MC in Europe. No European country has banned MC. Nor would any country be likely to do so.

## B. Children's Legal Rights in the United States

### 1. EQUAL PROTECTION?

Their attempt to equate infant MC with FGM contradicts 18 US Code § 116 Female genital mutilation,<sup>152</sup> which applies only to female genital anatomy. Since infant MC is highly beneficial, but FGM is not, that argument is flawed.<sup>153</sup> They mention that, "male circumcision is also potentially fatal," but not the extreme rarity of deaths. The same could also be said about childhood vaccination. Any medical intervention carries a degree of risk. Society accepts medical interventions when doing nothing will pose greater risks than the intervention.

### 2. PERSONAL SECURITY

They claim that every individual has an, "inalienable right ... to bodily integrity, of which genital integrity is a subset." The right to health is arguably more important to uphold than the right to foreskin integrity. They fail to cite a single case in which a male recovered damages for parent-approved MC and no major complications. Attempts to ban infant MC in the U.S. have failed for very good reasons.<sup>154</sup> The trend in favor of MC is evident in the AAP's infant MC policy.

### 3. AUTONOMY

They quote legal cases that were not about MC. Authorities on ethics have presented sound reasons refuting their "right to autonomy" opinion.<sup>155</sup> It has

been argued that being circumcised boosts autonomy more than constraining it.<sup>156</sup>

#### 4. FREEDOM OF RELIGION

Here they refer to reasoning by the court in Cologne. But a court decision in Germany cannot be used to support a claim about freedom of religion in the U.S. Any interpretation of U.S. constitutional law should refer to U.S. cases. The first amendment to the U.S. Constitution states, “*Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof.*” No religion in the world rejects converts who are circumcised. Svoboda *et al.* misconstrue a FGM case in the U.K.<sup>157</sup> The Judgment distinguished the cultural, health and medical benefits of MC (see clauses 62, 63, 72 and 73). They cite another U.K. case, which was more about a child custody dispute.<sup>158</sup> The court order cited Section 2(7) of the Children Act 1989 that can require, “*the consent of more than one parent in matters affecting the child.*”

#### 5. CHILDREN’S HUMAN RIGHTS

They claim that MC of boys violates various international treaties. The most relevant is the U.N. CRC.<sup>159</sup> But, the CRC is not governing law in the U.S. In any case, the CRC supports the, “*best interests of the child*” standard, as well as parental rights. The U.S. has not ratified the CRC. One of the main reasons is robust, civil society opposition, founded in a strong American belief, that parental rights are supreme. U.S. government agencies do not look to international human rights law for U.S. public health policy. Contrary to Svoboda *et al.*, international treaties are not, “*the supreme law of the land.*” Nor is the U.S., “*subject to the CRC based on customary [international] law,*” which is complex and debated.<sup>160</sup> Its theoretical reach contrasts with practice and is not legally enforced in the U.S. (For more see Rivin *et al.*)<sup>161</sup>

Svoboda *et al.* then refer to the UN Universal Declaration of Human Rights (UDHR; Articles 2, 3, 12 and 29),<sup>162</sup> the International Covenant on Civil and Political Rights (ICCPR; Articles 6, 9, 17 and 24.1),<sup>163</sup> and the International NGO Council on Violence Against Children.<sup>164</sup> Claims that the UDHR are violated are not substantiated by evidence. Since MC is a safe procedure, especially in newborns, prevents disease and is in the best interests of the child, there is no evidence for violations of Article 2, Article 3 (“*right to life, liberty and security of person*”), Article 12 (“*arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation*”) or Article 29 (“*exercise of his rights and freedoms, everyone shall be subject only to such limitations as are determined by law...*”).<sup>165</sup>

We agree that the U.S. is obligated to uphold the International Covenant on Civil and Political Rights (ICCPR), monitored by the Human Rights Committee.<sup>166</sup> The U.S. is not in violation of the ICCPR with regards to MC. Current medical and bioethics standards and procedures for MC mean MC does not cause harm to infants and children and would not violate the ICCPR article’s intent on freedoms from arbitrarily depriving life (Article 6), liberty and security of person, such as unlawful arrest and detention (Article 9), arbitrary or unlawful interference with his privacy, family, home or correspondence (Article 17) or protections as are required by status as a minor (Article 24.1). The International NGO Council on Violence Against Children<sup>167</sup> supports the CRC. The CRC supports MC because it is in the best interests of the child. However, the report, “*Violating Children’s Rights: Harmful Practices Based on Tradition, Culture, Religion or Superstition*” includes a section on MC and refers to many of the same arguments refuted in our paper.

A UCLA Law School article stated, “*a violations-only approach to human rights advocacy is unduly limiting; indeed it overlooks the duty of states affirmatively to create conditions necessary for the fulfillment of rights*” and refers to MC as, “*an important tool for realizing good health.*”<sup>168</sup> It follows that health benefits mean the state should make MC available.

#### C. Parents’ Legal Obligations

##### 1. NO RELIGIOUS RIGHT TO CIRCUMCISE

They again refer to the Cologne case while ignoring Federal legislation ensuring the rights of parents in Germany to have their sons circumcised. As further flimsy support for their claim they cite a 1944 case that was not about MC, but rather distribution of religious literature or articles of merchandise on the streets by minors.<sup>169</sup> As evidence that the *Prince v. Massachusetts* case is irrelevant, infant MC continues to be one of the most common surgical procedures in the U.S.<sup>170</sup> The 1878 Utah case they cite was about polygamy as part of religious beliefs,<sup>171</sup> not MC.

##### 2. PARENTAL “CONSENT” TO UNNECESSARY CIRCUMCISION IS INVALID

Here they cite a 1997 AAP statement on bioethics, but that document did not prohibit MC, nor any other medical procedure (such as vaccination) that provides healthy boys with preventive benefits against infection and disease. MC, “*is clearly in the child’s best interests.*” Just as vaccination, MC “*can be deferred,*” although in the intervening period the child will be at heightened risk of UTI, penile inflammatory conditions, phimosis, paraphimosis and other problems. The physician and family do not have to, “*wait until the child’s consent is*

obtained.” Responsible parents will consider the best interests of the child in ensuring they are vaccinated, educated, fed, clothed, housed and otherwise cared for. A male child’s best interests would include MC. Moreover, as pointed out in an extensive review on MC, “a parent or legal guardian is bound to make countless other decisions for their growing child over the years ... many of which will likely have a more profound effect on them than the presence or absence of a foreskin.”<sup>172</sup>

#### D. Physicians’ and the AAP’s Legal Obligations

It is patently absurd that physicians, “risk being held liable for every non-therapeutic circumcision.”

#### 1. PHYSICIANS CANNOT TAKE ORDERS FROM PARENTS

While physicians have a duty to children they treat, they are legally entitled to circumcise a boy after parents have consented. The AAP policy recognizes that parental consent is required.

**In an apparent attempt to intimidate, they assert that, “the AAP is advocating breaking the law” by recommending third party coverage for cost of parent-approved prophylactic MC. They base this on the false statement that, “circumcision has not been proven effective in preventing any disease.” The scientific evidence cited by the AAP in its policy, and evidence that has accumulated subsequently, clearly shows the opposite to be true.**

#### 2. PHYSICIANS CANNOT OPERATE ON HEALTHY CHILDREN

Healthy children are operated on even when, unlike MC, doing so has no health benefit, e.g., cosmetic orthodontia, correction of harelip, surgery for tongue-tie, treatment of dwarfism by growth hormone injections, and surgery for removal of supernumerary digits.<sup>173</sup> Svoboda *et al.* cite as support an irrelevant case of a woman who had surgery for a blocked sinus and where there was a disagreement about whether the surgery was necessary.<sup>174</sup>

#### 3. LIABILITY FOR MISLEADING PARENTS

They refer to the case of an anesthesia-related death of a boy operated on for a blocked urethra and whose

earlier MC failed to heal.<sup>175</sup> The AAP policy states that parents should be advised that newborn MC carries risks, which, although usually minor, on rare occasions can be serious. Similarly, doctors are required to inform parents of the risks, some serious, associated with vaccination of their child. Informing parents is part of the consent process. Using the same logic as Svoboda *et al.*, a doctor may be liable for misleading parents if he or she does not accurately inform parents of the benefits of MC and the boy goes on to develop a serious medical condition that could have been prevented by MC in infancy.

It is insulting to suggest, without evidence, that the AAP’s guidelines, “exaggerated the benefits of circumcision while understating the risks, and perhaps let monetary incentives determine its recommendation” and function as a “sales pitch.” Medical bodies are required to develop policies based on evidence. The failure of medical bodies in other countries to do so should more appropriately be regarded as negligent, given the consequences to the health of individuals and the community.

It is untrue that, “circumcision is unlikely to benefit most boys and men.” The CDC policy stated that benefits exceed risks by “100:1”, citing a risk-benefit analysis that found, over their lifetime, 1 in 2 uncircumcised males will experience an adverse medical condition caused by retention of their foreskin.<sup>176</sup> Svoboda *et al.* suggest that MC, “eliminates any sexual function involving manipulation of the foreskin.” By this, perhaps they are referring to “docking” or the use of the foreskin for other sexual activities engaged in by men who have sex with men? And their subsequent claim about, “eliminat[ing] sexual pleasure obtained from the stimulation of the foreskin itself” is contradicted by scientific research.<sup>177</sup> Since the neuroreceptors involved in sexual pleasure reside in the head of the penis, not the foreskin,<sup>178</sup> their claims about removal of erogenous tissue are false. There is no scientific evidence for psychological harm. Rather, there is evidence of various psychological disorders<sup>179</sup> in men preoccupied with their absent foreskin.<sup>180</sup> They fail to state that risk of adverse events from newborn MC is low.<sup>181</sup>

#### 4. UNLAWFUL CLAIMS FOR MEDICAID REIMBURSEMENT

In an apparent attempt to intimidate, they assert that, “the AAP is advocating breaking the law” by recommending third party coverage for cost of parent-



approved prophylactic MC. They base this on the false statement that, “*circumcision has not been proven effective in preventing any disease.*” The scientific evidence cited by the AAP in its policy, and evidence that has accumulated subsequently, clearly shows the opposite to be true. Although the neutral infant MC policies preceding the AAP’s 2012 policy statement did lead 18 U.S. States to withdraw Medicaid coverage for elective MC, “*lack of Medicaid coverage for circumcision may translate into future health disparities for children born to poor families covered by Medicaid.*”<sup>182</sup> Medicaid coverage for infant MC has been considered a, “*health parity right of the poor.*”<sup>183</sup> Florida’s withdrawal of Medicaid coverage in 2003 resulted in a 6-fold increase in medical costs for publicly-funded MCs for medical need.<sup>184</sup> So Florida restored Medicaid coverage in 2014. The other 17 states have begun to follow suit.

#### IV. Conclusion

We have highlighted the flaws in claims by Svoboda *et al.* and have argued that parent approved MC of boys is legal, ethical and in the best interests of the health of the male child. In order to maximize benefits and minimize risks the optimal time for MC is the newborn period.<sup>185</sup> The Hippocratic Oath contains the statement, “*I will prevent disease whenever I can, for prevention is preferable to cure.*”<sup>186</sup> Disease prevention is central to the affirmative policy recommendations of the AAP and the CDC. These policies have now raised the bar, meaning that medical organizations elsewhere can no longer rely on opinions, but must henceforth consider the extensive high quality scientific evidence as an integral part of developing MC policies. The arguments made by MC opponents disagreeing with AAP and CDC policies have been consistently rebutted. Unless, as seems unlikely, any new opposing argument emerges it would appear the time has now come for the infant MC critics to desist.

#### Note

Dr. Morris is a member of the Circumcision Academy of Australia, a not-for-profit, government registered, medical association that provides evidence-based information on MC and a list of doctors who perform MC in Australia and New Zealand on its website.

#### References

- J. S. Svoboda, P. W. Adler, and R. S. Van Howe, “Circumcision Is Unethical and Unlawful,” *Journal of Law, Medicine & Ethics* 44, no. 2 (2016): 263-282.
- American Academy of Pediatrics. Task Force on Circumcision, “Circumcision Policy Statement,” *Pediatrics* 130, no. 3 (2012): e756- e785.
- B. J. Morris, R. G. Wamai, E. B. Henebeng, A. A. R. Tobian, J. D. Klausner, J. Banerjee, et al., “Estimation of Country-specific and Global Prevalence of Male Circumcision,” *Population Health Metrics* 14, article 4 (2016): 1-13.
- B. J. Morris, R. G. Wamai, J. N. Krieger, J. Banerjee, and J. D. Klausner, “Male Circumcision to Prevent Syphilis in 1855 and HIV in 1986 is Supported by the Accumulated Scientific Evidence to 2015: Response to Darby,” *Global Public Health* 12, no. 10 (2017): 1315-1333.
- G. Kigozi, M. Wawer, A. Ssettuba, J. Kagaayi, F. Nalugoda, S. Watya, et al., “Foreskin Surface Area and HIV Acquisition in Rakai, Uganda (size matters),” *AIDS* 23 (2009): 2209-2213.
- P. M. Werker, A. S. Terng, and M. Kon, “The Prepuce Free Flap: Dissection Feasibility Study and Clinical Application of a Super-thin New Flap,” *Plastic and Reconstructive Surgery* 102, no. 4 (1998): 1075-1082.
- C. Darwin. *The Origin of Species by Means of Natural Selection* (London, UK: John Murray, 1859).
- G. Cox, J. N. Krieger, and B. J. Morris, “Histological Correlates of Penile Sexual Sensation: Does Circumcision Make a Difference? (Systematic review),” *Sexual Medicine* 3 (2015): 76-85.
- B. J. Morris, and J. N. Krieger, “Does Male Circumcision Affect Sexual Function, Sensitivity, or Satisfaction? A Systematic Review,” *Journal of Sexual Medicine* 10 (2013): 2644-2657; Y. Tian, W. Liu, J. Z. Wang, R. Wazir, X. Yue, and K. J. Wang, “Effects of Circumcision on Male Sexual Functions: A Systematic Review and Meta-Analysis,” *Asian Journal of Andrology* 15, no. 5 (2013): 662-666; V. Homfray, C. Tanton, K. R. Mitchell, R. F. Miller, N. Field, W. Macdowall, et al., “Examining the Association Between Male Circumcision and Sexual Function: Evidence From a British Probability Survey,” *AIDS* 29, no. 11 (2015): 1411-1416.20; D. M. Shabanzadeh, S. During, and C. Frimont-Moller, “Male Circumcision Does Not Result in Inferior Perceived Male Sexual Function — A Systematic Review,” *Danish Medical Journal* 63 (2016): A5245.
- See Cox et al., *supra* note 8.
- B. Rappaport, R. D. Mellon, A. Simone, and J. Woodcock, “Defining Safe Use of Anesthesia in Children,” *New England Journal of Medicine* 364, no. 15 (2011): 1387-1390.
- A. Taddio, J. Katz, A. L. Herisch, and K. G., “Effect of Neonatal Circumcision on Pain Response During Subsequent Routine Vaccination,” *Lancet* 349 (1997): 599-603.
- N. M. Schlosberger, R. A. Turner, and C. E. Irwin, Jr., “Early Adolescent Knowledge and Attitudes About Circumcision: Methods and Implications for Research,” *Journal of Adolescent Health* 13 (1992): 293-297.
- M. Calnan, J. W. B. Douglas, and H. Goldstein, “Tonsillectomy and Circumcision: Comparison of two Cohorts,” *International Journal of Epidemiology* 7 (1978): 79.
- D. M. Fergusson, J. M. Boden, and L. J. Horwood, “Neonatal circumcision: Effects on Breastfeeding and Outcomes Associated with Breastfeeding,” *Journal of Paediatrics and Child Health* 44 (2008): 44-49.
- A. Stenram, G. Malmfors, and L. Okmian, “Circumcision for Phimosis — Indications and Results,” *Acta Paediatrica Scandinavica* 75 (1986): 321-323.
- N. Williams and L. Kapila, “Complications of Circumcision,” *British Journal of Surgery* 80, no. 3 4 (1993): 1231-1236; S. Moses, R. C. Bailey, and A. R. Ronald, “Male Circumcision: Assessment of Health Benefits and Risks,” *Sexually Transmitted Infections* 74 (1998): 368-373.
- N. McIntosh, “Pain in the Newborn, A Possible New Starting Point,” *European Journal of Pediatrics* 156 (1997): 173-177.
- Taddio et al., *supra* note 12; A. Taddio, B. Stevens, K. Craig, P. Rastogi, S. Bendavid, A. Shennan, et al., “Efficacy and Safety of Lidocaine-Prilocaine Cream for Pain During Circumcision,” *New England Journal of Medicine* 336 (1997): 1197-1201.
- A. Taddio, N. Pollock, C. Gilbert-Macleod, K. Ohlsson, and G. Koren, “Combined Analgesia and Local Anesthesia to Minimize Pain During Circumcision,” *Archives of Pediatrics and Adolescent Medicine* 154 (2000): 620-623.



21. A. Taddio, C. T. Chambers, S. A. Halperin, M. Ipp, D. Lockett, M. J. Rieder, et al., "Inadequate Pain Management During Routine Childhood Immunizations: The Nerve of It," *Clinical Therapeutics* 31, Suppl 2 (2009): S152-S167; A. Taddio, M. G. Gurguis, and G. Koren, "Lidocaine-prilocaine Cream Versus Tetracaine Gel for Procedural Pain in Children," *Annals of Pharmacotherapy* 36 (2002): 687-692.
22. M. Frisch, and J. Simonsen, "Ritual Circumcision and Risk of Autism Spectrum Disorder in 0- to 9-Year-Old Boys: National Cohort Study in Denmark," *Journal of the Royal Society of Medicine* 108, no. 7 (2015): 266-279.
23. B. J. Morris, and T. E. Wiswell, "Circumcision Pain: Unlikely to Cause Autism," *Journal of the Royal Society of Medicine* 108, no. 8 (2015): 297; I. Sneppen, and J. Thorup, "Fore-skin Morbidity in Uncircumcised Males," *Pediatrics* 137, no. 5 (2016): e20154340; A. Z. Bauer. PubMed Commons, Comment (2015), available at <<http://www.ncbi.nlm.nih.gov/pubmed/25573114>> (last visited November 27, 2017).
24. See Sneppen and Thorup, *supra* note 23.
25. A. Z. Bauer, and D. Kriebel, "Prenatal and Perinatal Analgesic Exposure and Autism: An Ecological Link," *Environmental Health* 12 (2013): 41.
26. See Bauer et al., *supra* note 25.
27. B. Baniieghbal, "Optimal Time for Neonatal Circumcision: An Observation-Based Study," *Journal of Pediatric Urology* 5, no. 5 (2009): 359-362.
28. See Baniieghbal et al., *supra* note 27.
29. C. Overgaard, and A. Knudsen, "Pain-Relieving Effect of Sucrose in Newborns During Heel Prick," *Biology of the Neonate* 75, no. 5 (1999): 279-284; P. Lago, C. Tiozzo, G. Boccuzzo, A. Allegro, and F. Zaccello, "Remifentanyl for Percutaneous Intravenous Central Catheter Placement in Preterm Infant: A Randomized Controlled Trial," *Paediatric Anaesthesia* 18, no. 8 (2008): 736-744.
30. D. A. Damassa, and J. M. Cates, "Sex Hormone-Binding Globulin and Male Sexual Development," *Neuroscience & Biobehavioral Reviews* 19, no. 2 (1995): 165-175.
31. See Baniieghbal, *supra* note 27.
32. C. T. Russell, and J. Chaseling, "Topical Anaesthesia in Neonatal Circumcision: A Study of 208 Consecutive Cases," *Australian Family Physician* 25, suppl 1 (1996): 30-34.
33. C. Smith, and D. P. Smith, "Office Pediatric Urologic Procedures From a Parental Perspective," *Urology* 55, no. 2 (2000): 272-276.
34. J. J. Freeman, A. U. Spencer, R. A. Drongowski, C. J. Vandeven, B. Apgar, and D. H. Teitelbaum, "Newborn Circumcision Outcomes: Are Parents Satisfied With the Results?" *Pediatric Surgery International* 30, no. 3 (2014): 333-338.
35. B. Auvert, D. Taljaard, E. Lagarde, J. Sobngwi-Tambekou, R. Sitta, and A. Puren, "Randomized, Controlled Intervention Trial of Male Circumcision for Reduction of HIV Infection Risk: The ANRS 1265 Trial," *PLoS Medicine* 2, article e298 (2005): 1112-1122.
36. R. H. Gray, G. Kigozi, D. Serwadda, F. Makumbi, S. Watya, F. Nalugoda, et al., "Male Circumcision for HIV Prevention in Men in Rakai, Uganda: A Randomised Trial," *Lancet* 369 (2007): 657-666.
37. R. C. Bailey, S. Moses, C. B. Parker, K. Agot, I. Maclean, J. N. Krieger, et al., "Male Circumcision for HIV Prevention in Young Men in Kisumu, Kenya: A Randomised Controlled Trial," *Lancet* 369 (2007): 643-656.
38. J. Thorup, S. C. Thorup, and I. B. Ifaoui, "Complication Rate After Circumcision in a Paediatric Surgical Setting Should Not be Neglected," *Danish Medical Journal* 60, no. 8 (2013): A4681.
39. M. Joudi, M. Fathi, and M. Hiradfar, "Incidence of Asymptomatic Meatal Stenosis in Children Following Neonatal Circumcision," *Journal of Pediatric Urology* 7, no. 5 (2011): 526-528.
40. R. S. Van Howe, "Incidence of Meatal Stenosis Following Neonatal Circumcision in a Primary Care Setting," *Clinical Pediatrics (Philadelphia)* 45 (2006): 49-55.
41. E. J. Schoen, "Critique of Van Howe RS. Incidence of Meatal Stenosis Following Neonatal Circumcision in a Primary Care Setting," *Clinical Pediatrics (Phila)* 45 (2006):49-54; *Clinical Paediatrics* 46 (2007): 86.
42. C. El Bcheraoui, X. Zhang, C. S. Cooper, C. E. Rose, P. H. Kilmarx, and R. T. Chen, "Rates of Adverse Events Associated with Male Circumcision in US Medical Settings, 2001 to 2010," *JAMA Pediatrics* 168, no. 7 (2014): 625-634.
43. P. Cathcart, M. Nuttall, J. van der Meulen, M. Emberton, and S. E. Kenny, "Trends in Paediatric Circumcision and its Complications in England Between 1997 and 2003," *British Journal of Surgery* 93 (2006): 885-890.
44. N. Simforoosh, A. Tabibi, S. A. Khalili, M. H. Soltani, A. Afjehi, F. Aalami, et al., "Neonatal Circumcision Reduces the Incidence of Asymptomatic Urinary Tract Infection: A Large Prospective Study with Long-term Follow Up Using Plastibell," *Journal of Pediatric Urology* 8 (2012): 320-323.
45. R. A. Yegane, A. R. Kheirollahi, N. A. Salehi, M. Basha-shati, J. A. Khoshdel, and M. Ahmadi, "Late Complications of Circumcision in Iran," *Pediatric Surgery International* 22 (2006): 442-445.
46. See El Bcheraoui et al., *supra* note 42.
47. See Cathcart et al., *supra* note 43.
48. See El Bcheraoui et al., *supra* note 42.
49. R. V. Pieretti, A. M. Goldstein, and R. Pieretti-Vanmarcke, "Late Complications of Newborn Circumcision: A Common and Avoidable Problem," *Pediatric Surgery International* 26, no. 5 (2010): 515-518.
50. D. Bollinger, "Lost Boys: An Estimate of U.S. Circumcision-Related Infant Deaths," *Thymos: Journal of Boyhood Studies* 4 (2010): 78-90.
51. B. J. Morris, R. C. Bailey, J. D. Klausner, A. Leibowitz, R. G. Wamai, J. H. Waskett, et al., "Review: A Critical Evaluation of Arguments Opposing Male Circumcision for HIV Prevention in Developed Countries," *AIDS Care* 24 (2012): 1565-1575.
52. See El Bcheraoui et al., *supra* note 42.
53. See El Bcheraoui et al., *supra* note 42.
54. Royal Australasian College of Physicians, Paediatrics & Child Health Division, Circumcision of infant males, 2010, available at <<http://www.racp.edu.au/index.cfm?objectid=65118B16-F145-8B74-236C86100E4E3E8E>> (last visited November 27, 2017).
55. B. J. Morris, A. D. Wodak, A. Mindel, L. Schrieber, K. A. Duggan, A. Dilly, et al., "The 2010 Royal Australasian College of Physicians Policy Statement 'Circumcision of Infant Males' is Not Evidence Based," *Internal Medicine Journal* 42, no. 7 (2012): 822-828.
56. See Shabanzadeh et al., *supra* note 9.
57. M. Frisch, Y. Aigrain, V. Barauskas, R. Bjarnason, S.-A. Boddy, P. Czauderna, et al., "Cultural Bias in the AAP's 2012 Technical Report and Policy Statement on Male Circumcision," *Pediatrics* 131 (2013): 796-800.
58. J. P. Warren, and J. Bigelow, "The Case Against Circumcision," *British Journal of Sexual Medicine* 21, no. 5 (1994): 6-8.
59. I. Solinis, and A. Yiannaki, "Does Circumcision Improve Couple's Sex Life?" *5th Biennial World Congress on Men's Health & Gender, Journal of Men's Health & Gender* 4, no. 3 (2007): 361.
60. M. Frisch, M. Lindholm, and M. Grønbeck, "Male Circumcision and Sexual Function in Men and Women: A Survey-Based-Cross-Sectional Study in Denmark," *International Journal of Epidemiology* 40 (2011): 1367-1381.
61. See Shabanzadeh et al., *supra* note 9.
62. R. Harbour, and J. Miller, "A New System for Grading Recommendations in Evidence Based Guidelines," *BMJ* 323, no. 7308 (2001): 334-336.
63. See Morris et al., *supra* note 9.
64. L. M. Mao, D. J. Templeton, J. Crawford, J. Imrie, G. P. Prestage, A. E. Grulich, et al., "Does Circumcision Make a Difference to the Sexual Experience of Gay Men? Findings

- from the Health in Men (HIM) Cohort," *Journal of Sexual Medicine* 5 (2008): 2557-2561.
65. B. J. Morris, J. H. Waskett, and R. H. Gray, "Does Sexual Function Survey in Denmark Offer Any Support for Male Circumcision Having an Adverse Effect?" *International Journal of Epidemiology* 41 (2012): 310-312.
  66. Task Force on Circumcision. "Cultural Bias and Circumcision: The AAP Task Force on Circumcision Responds," *Pediatrics* 131 (2013): 801-804.
  67. J. Dias, R. Freitas, R. Amorim, P. Espiridiao, L. Xambre, and L. Ferraz, "Adult Circumcision and Male Sexual Health: A Retrospective Analysis," *Andrologia* 46, no. 5 (2014): 459-464.
  68. G. A. Bronselaer, J. M. Schober, H. F. Meyer-Bahlburg, G. T'sjoen, R. Vlietinck, and P. B. Hoebeke, "Male Circumcision Decreases Penile Sensitivity as Measured in a Large Cohort," *BJU International* 111 (2013): 820-827.
  69. See Morris et al., *supra* note 9.
  70. B. J. Morris, J. N. Krieger, and G. Kigozi, "Male Circumcision Decreases Penile Sensitivity as Measured in a Large Cohort. [Critique of Bronselaer et al. *BJU International* 111 (2013): 820-827]; *BJU International* 111 (2013): E269-E270.
  71. J. M. Schober, H. F. Meyer-Bahlburg, and C. Dolezal, "Self-Ratings of Genital Anatomy, Sexual Sensitivity and Function in Men Using the 'Self-Assessment of Genital Anatomy and Sexual Function, Male' Questionnaire," *BJU International* 103 (2009): 1096-1103.
  72. See Tian et al., *supra* note 9.
  73. See Mao et al., *supra* note 64.
  74. P. K. Hegarty, "Male Circumcision Decreases Penile Sensitivity as Measured in a large Cohort, (Editorial)," *BJU Int.* 111 (2013): 695-696; Y. Tian, R. Wazir, and K. Wang, "Letter re: 'Male Circumcision Decreases Penile Sensitivity as Measured in a Large Cohort,'" *BJU International* 112, no. 1 (2013): E2-E3.
  75. J. N. Krieger, S. D. Mehta, R. C. Bailey, K. Agot, J. O. Ndinya-Achola, C. Parker, et al., "Adult Male Circumcision: Effects on Sexual Function and Sexual Satisfaction in Kisumu, Kenya," *Journal of Sexual Medicine* 5 (2008): 2610-2622.
  76. See Frisch et al., *supra* note 60; Mao et al., *supra* note 64; Krieger et al., *supra* note 75; J. Richters, A. M. Smith, R. O. de Visser, A. E. Grulich, and C. E. Rissel, "Circumcision in Australia: Prevalence and Effects on Sexual Health," *International Journal of STDs and AIDS* 17 (2006): 547-554; G. Kigozi, S. Watya, C. B. Polis, D. Buwembo, V. Kiggundu, M. J. Wawer, et al., "The Effect of Male Circumcision on Sexual Satisfaction and Function, Results from a Randomized Trial of Male Circumcision for Human Immunodeficiency Virus Prevention, Rakai, Uganda," *BJU International* 101 (2008): 65-70; E. O. Laumann, C. M. Masi, and E. W. Zuckerman, "Circumcision in the United States. Prevalence, Prophylactic Effects, and Sexual Practice," *JAMA* 277 (1997): 1052-1057.
  77. See Tian et al., *supra* note 9.
  78. See Frisch et al., *supra* note 60.
  79. See Morris et al., *supra* note 70.
  80. A. J. Barros, and V. N. Hirakata, "Alternatives for Logistic Regression in Cross-Sectional Studies: An Empirical Comparison of Models that Directly Estimate the Prevalence Ratio," *BMC Medical Research Methodology* 3 (2003): 21; A. Savu, Q. Liu, and Y. Yasui, "Estimation of Relative Risk and Prevalence Ratio," *Statistics in Medicine* 29 (2010): 2269-2281.
  81. See Morris et al., *supra* note 9.
  82. G. Kigozi, I. Lukabwe, J. Kagaayi, M. J. Wawer, B. Nantume, G. Kigozi, et al., "Sexual Satisfaction of Women Partners of Circumcised Men in a Randomized Trial of Male Circumcision in Rakai, Uganda," *BJU International* 104, no. 11 (2009): 1698-1701.
  83. J. R. Cortés-González, J. A. Arratia-Maqueo, and L. S. Gómez-Guerra, "[Does Circumcision Has an Effect on Female's Perception of Sexual Satisfaction?] (Article in Spanish)," *Revista de Investigacion Clinica* 60 (2008): 227-230.
  84. See Kigozi et al., *supra* note 82; Cortés-González et al., *supra* note 83; M. L. Williamson, and P. S. Williamson, "Women's Preferences for Penile Circumcision in Sexual Partners," *Journal of Sex Education and Therapy* 14 (1988): 8-12; J. Badger, "Circumcision. What You Think," *Australian Forum* 2, no. 11 (1989): 10-29; J. Badger, "The Great Circumcision Report Part 2," *Australian Forum* 2, no. 12 (1989): 4-13; R. C. Bailey, R. Muga, R. Poulussen, and H. Abicht, "The Acceptability of Male Circumcision to Reduce HIV Infections in Nyanza Province, Kenya," *AIDS Care* 14, no. 1 (2002): 27-40; J. R. Cortés-González, J. A. Arratia-Maqueo, R. Martínez-Montelongo, and S. Gómez-Guerra, "[Does Circumcision Affect Male's Perception of Sexual Satisfaction?]. [Article in Spanish]," *Archivos Espanoles Urologia* 62 (2009): 733-736; Adam & Eve, AdamAndEve.com Asks Women: Do You Prefer a Circumcised or Uncircumcised Penis? *available at* <<http://www.prnewswire.com/news-releases/adamandevecom-asks-women-do-you-prefer-a-circumcised-or-uncircumcised-penis-246386151.html>>. *Adam & Eve*. Hillsborough, North Carolina, USA (2014).
  85. See Laumann et al., *supra* note 76; Kigozi et al., *supra* note 82; Cortés-González et al., *supra* note 83; Williamson and Williamson, *supra* note 84.
  86. S. Collins, J. Upshaw, S. Rutchik, C. Ohannessian, J. Ortenberg, and P. Albertsen, "Effects of Circumcision on Male Sexual Function: Debunking a Myth?" *Journal of Urology* 167, no. 5 (2002): 2111-2112.
  87. M. P. Kafka, "The DSM diagnostic criteria for paraphilia not otherwise specified," *Archives of Sexual Behavior* 39, no. 2 (2010): 373-376.
  88. American Psychiatric Association. "Diagnostic & Statistical Manual 5th Revision (DSM-5), available at <<http://www.dsm5.org/Pages/Default.aspx>> (2013) (last accessed Jul 30, 2016).
  89. P. C. Mohl, R. Adams, D. M. Grier, and K. A. Sheley, "Prepuce Restoration Seekers: Psychiatric Aspects," *Archives of Sexual Behavior* 10 (1981): 383-393.
  90. D. Schultheiss, M. C. Truss, C. G. Stief, and U. Jonas, "Uncircumcision: A Historical Review of Preputial Restoration," *Plastic and Reconstructive Surgery* 101 (1998): 1990-1998.
  91. M. A. Koyle, A. Barqawi, J. Wild, M. Passamaneck, and P. D. Furness, 3rd, "Pediatric Urinary Tract Infections: The Role of Fluoroquinolones," *Pediatric Infectious Diseases Journal* 22, no. 12 (2003): 1133-1137; T. To, M. Agha, P. T. Dick, and W. Feldman, "Cohort Study on Circumcision of Newborn Boys and Subsequent Risk of Urinary Tract Infection," *Lancet* 352 (1998): 1813-1816.
  92. C. H. Chon, F. C. Lai, and L. M. Shortliffe, "Pediatric Urinary Tract Infections," *Pediatric Clinics of North America* 48 (2001): 1441-1459.
  93. H. G. Rushton, and M. Majd, "Pyelonephritis in Male Infants: How Important is the Foreskin?," *Journal of Urology* 148 (1992): 733-736; T. L. Stull, and J. J. LiPuma, "Epidemiology and Natural History of Urinary Tract Infections in Children." *Medical Clinics of North America* 75 (1991): 287-297.
  94. P. Sureshkumar, M. Jones, R. G. Cumming, and J. C. Craig, "Risk Factors for Urinary Tract Infection in Children: A Population-Based Study of 2856 Children," *Journal of Paediatrics and Child Health* 45 (2009): 87-97.
  95. B. J. Morris, and T. E. Wiswell, "Circumcision and Lifetime Risk of Urinary Tract Infection: A Systematic Review and Meta-Analysis," *Journal of Urology* 189, no. 6 (2013): 2118-2124.
  96. See El Bcheraoui et al., *supra* note 42.
  97. J. B. Chessare, "Circumcision: Is the Risk of Urinary Tract Infection Really the Pivotal Issue?" *Clinical Pediatrics (Philadelphia)*. 31, no. 2 (1992): 100-104.
  98. See Frisch et al., *supra* note 57.

99. V. A. Jagannath, Z. Fedorowicz, V. Sud, A. K. Verma, and S. Hajebrahimi, "Routine Neonatal Circumcision for the Prevention of Urinary Tract Infections in Infancy," *Cochrane Database Systematic Reviews* 11 (2012): CD009129.
100. A. Nayir, "Circumcision for the Prevention of Significant Bacteriuria in Boys," *Pediatric Nephrology* 16 (2001): 1129-1134.
101. B. J. Morris and A. A. Tobian, "Legal Threat to Infant Male Circumcision," *JAMA Pediatrics* 167, no. 10 (2013): 890-891.
102. A. Bryce, A. D. Hay, I. F. Lane, H. V. Thornton, M. Wootton, and C. Costelloe, "Global Prevalence of Antibiotic Resistance in Paediatric Urinary Tract Infections Caused by *Escherichia coli* and Association with Routine Use of Antibiotics in Primary Care: Systematic Review and Meta-Analysis," *BMJ* 352 (2016): i939.
103. L. J. Anyanwu, E. Kashibu, C. P. Edwin, and A. M. Mohammad, "Microbiology of Smegma in Boys in Kano, Nigeria," *The Journal of Surgical Research* 173, no. 1 (2012): 21-25.
104. M. Iwamoto, Y. Mu, R. Lynfield, S. N. Bulens, J. Nadle, D. Aragon, et al., "Trends in Invasive Methicillin-Resistant *Staphylococcus aureus* Infections," *Pediatrics* 132, no. 4 (2013): e817-e824.
105. D. F. M. Looke, T. Thomas Gottlieb, C. A. Jones, and D. L. Paterson, "Gram-Negative Resistance: Can We Combat the Coming of a New 'Red Plague'?" *Medical Journal of Australia* 198 (2013): 243-244.
106. A. Pallett and K. Hand, "Complicated Urinary Tract Infection: Practical Solutions for the Treatment of Multiresistant Gram-Negative Bacteria," *The Journal of Antimicrobial Chemotherapy* 65, Supplement 3 (2010): iii25-iii33.
107. M. Arshad, and P. C. Seed, "Urinary Tract Infections in the Infant," *Clinics in Perinatology* 42, no. 1 (2015): 17-28, vii.
108. D. Prais, R. Shoov-Furman, and J. Amir, "Is Ritual Circumcision a Risk Factor for Neonatal Urinary Tract Infections?" *Archives of Diseases in Childhood* 94 (2009): 191-194.
109. O. Toker, S. Schwartz, G. Segal, N. Godovitch, Y. Schlesinger, and D. Raveh, "A Costly Covenant: Ritual Circumcision and Urinary Tract Infection," *Israel Medical Association Journal* 12, no. 5 (2010): 262-265.
110. D. A. Christakis, E. Harvey, D. M. Zerr, C. Feudtner, J. A. Wright, and F. A. Connell, "A Trade-off Analysis of Routine Newborn Circumcision," *Pediatrics* 105 (2000): 246-249.
111. National Weather Service, National Oceanic and Atmospheric Administration, US Department of Commerce, "How dangerous is lightning?" available at <<http://www.lightningsafety.noaa.gov/odds.shtml>> (last visited November 27, 2017).
112. R. S. Malek, J. R. Goellner, T. F. Smith, M. J. Espy, and M. R. Cupp, "Human Papillomavirus Infection and Intraepithelial, *In Situ*, and Invasive Carcinoma of Penis," *Urology* 42, no. 2 (1993): 159-170; E. J. Schoen, "The Relationship Between Circumcision and Cancer of the Penis," *CA: A Cancer Journal for Clinicians* 41 (1991): 306-309; E. J. Schoen, "Neonatal Circumcision and Penile Cancer. Evidence That Circumcision is Protective is Overwhelming," *BMJ* 46 (1996): 313; E. J. Schoen, M. Oehrli, C. J. Colby, and G. Machin, "The Highly Protective Effect of Newborn Circumcision Against Invasive Penile Cancer," *Pediatrics* 105, article e36 (2000): 1-4; N. L. Larke, S. L. Thomas, I. Dos Santos Silva, and H. A. Weiss, "Male Circumcision and Penile Cancer: A Systematic Review and Meta-Analysis," *Cancer Causes Control* 22 (2011): 1097-1110; J. R. Daling, M. M. Madeleine, L. G. Johnson, S. M. Schwartz, K. A. Shera, L. A. Wurscher, et al., "Penile Cancer: Importance of Circumcision, Human Papillomavirus and Smoking in *In Situ* and Invasive Disease," *International Journal of Cancer* 116 (2005): 606-616.
113. F. X. Bosch, G. Albero, and X. Castellsagué, "Male Circumcision, Human Papillomavirus and Cervical Cancer: From Evidence to Intervention," *Journal of Family Planning and Reproductive Health Care* 35 (2009): 5-7.
114. B. J. Morris, R. H. Gray, X. Castellsagué, F. X. Bosch, D. T. Halperin, J. H. Waskett, et al., "The Strong Protection Afforded by Circumcision Against Cancer of the Penis," *Advances in Urology* Article ID 812368 (2011): 1-21.
115. See Moses et al., *supra* note 17.
116. H. F. Tsen, H. Morgenstern, T. Mack, and R. K. Peters, "Risk Factors for Penile Cancer: Results of a Population-Based Case-Control Study in Los Angeles County (United States)," *Cancer Causes & Control* 12 (2001): 267-277.
117. G. Micali, M. R. Nasca, D. Innocenzi, and R. A. Schwartz, "Penile Cancer," *Journal of the American Academy of Dermatology* 54 (2006): 369-391.
118. M. Kochen, and S. McCurdy, "Circumcision and Risk of Cancer of the Penis. A Life-Table Analysis," *American Journal of Diseases of Childhood* 134 (1980): 484-486.
119. See Schoen et al. (2000), *supra* note 112.
120. B. J. Morris, A. Mindel, A. A. R. Tobian, C. A. Hankins, R. H. Gray, R. C. Bailey, et al., "Should Male Circumcision be Advocated for Genital Cancer Prevention?" *Asian Pacific Journal of Cancer Prevention* 13 (2012): 4839-4842; B. J. Morris, and J. H. Waskett, "Circumcision Reduces Prostate Cancer Risk," *Asian Journal of Andrology* 14 (2012): 661-662; J. L. Wright, D. W. Lin, and J. L. Stanford, "Circumcision and the Risk of Prostate Cancer," *Cancer* 118 (2012): 4437-4443; A. R. Spence, M. C. Rousseau, P. I. Karakiewicz, and M. E. Parent, "Circumcision and Prostate Cancer: A Population-Based Case-Control Study in Montreal, Canada," *BJU International* 114, no. 6b (2014): E90-98.
121. N. Pabalan, E. Singian, H. Jarjanazi, and A. Paganini-Hill, "Association of Male Circumcision with Risk of Prostate Cancer: A Meta-Analysis," *Prostate Cancer and Prostatic Diseases* 18, no. 4 (2015): 352-357.
122. M. S. Wachtel, S. Yang, and B. J. Morris, "Countries with High Circumcision Prevalence Have Lower Prostate Cancer Mortality," *Asian Journal of Andrology* 18 (2016): 39-42.
123. P. K. Drain, D. T. Halperin, J. P. Hughes, J. D. Klausner, and R. C. Bailey, "Male Circumcision, Religion, and Infectious Diseases: An Ecologic Analysis of 118 Developing Countries," *BMC Infectious Diseases* 6 (2006): article 172: 171-110.
124. X. Castellsagué, F. X. Bosch, N. Munoz, C. J. Meijer, K. V. Shah, S. de Sanjose, et al., "Male Circumcision, Penile Human Papillomavirus Infection, and Cervical Cancer in Female Partners," *New England Journal of Medicine* 346, no. 15 (2002): 1105-1112.
125. M. J. Wawer, A. A. R. Tobian, G. Kigozi, X. Kong, P. E. Gravitt, D. Serwadda, et al., "Effect of Circumcision of HIV-Negative Men on Transmission of Human Papillomavirus to HIV-Negative Women: A Randomised Trial in Rakai, Uganda," *Lancet* 377 (2011): 209-218.
126. L. J. Viens, S. J. Henley, M. Watson, L. E. Markowitz, C. C. Thomas, T. D. Thompson, et al., "Human Papillomavirus-Associated Cancers — United States, 2008-2012," *MMWR Morbidity and Mortality Weekly Report* 65, no. 26 (2016): 661-666.
127. Morris et al., *supra* note 4; Morris et al., *supra* note 51; S. Moses, N. J. D. Nagelkerke, and J. F. Blanchard, "Commentary: Analysis of the Scientific Literature on Male Circumcision and Risk for HIV infection," *International Journal of STDs & AIDS* 10 (1999): 626-628; N. O'Farrell, and M. Egger, "Circumcision in Men and the Prevention of HIV Infection: a 'Meta-Analysis' Revisited," *International Journal of STDs & AIDS* 11 (2000): 137-142; B. J. Morris, "Boyle and Hill's Circumcision 'Phallusies,'" *BJU International* 110 (2012): E153-E154; B. J. Morris, "Scientific Evidence Disperses False Claims About Circumcision," *Canadian Urological Association Journal* 8, no. 11-12 (2014): 396-397; B. J. Morris, "Commentary on Article by Earp Entitled: Do the Benefits of Male Circumcision Outweigh the Risks? A Critique of the Proposed CDC Guidelines," *Frontiers in Pediatrics* 3 (2015): 88; B. J. Morris, G. Barboza, R. G. Wamai, and J. N. Krieger, "Circumcision is a Primary Preventive Against HIV Infection: Critique of a Contrary Meta-Regression Analysis by Van Howe," *Global Public Health* (2016): 1-11 (Epub ahead of print Apr 4); B. J. Morris, C. A. Hankins, A. A.



- Tobian, J. N. Krieger, and J. D. Klausner, "Does Male Circumcision Protect Against Sexually Transmitted Infections? Arguments and Meta-Analyses to the Contrary Fail to Withstand Scrutiny," *ISRN Urology* 2014 (2014): article 684706, 684701-684723; B. J. Morris, A. A. R. Tobian, C. A. Hankins, J. D. Klausner, J. Banerjee, S. A. Bailis, et al., "Veracity and Rhetoric in Pediatric Medicine: A Critique of Svoboda and Van Howe's Response to the AAP Policy on Infant Male Circumcision," *Journal of Medical Ethics* 40 (2013): 463-470; B. J. Morris and J. N. Krieger, "The Literature Supports Policies Promoting Neonatal Male Circumcision in North America," *Journal of Sexual Medicine* 12, no. 5 (2015): 1305; B. J. Morris, J. H. Waskett, R. H. Gray, D. T. Halperin, R. Wamai, B. Auvert, et al., "Exposé of Misleading Claims that Male Circumcision will Increase HIV Infections in Africa," *Journal of Public Health in Africa*. 2 e281 (2011): 117-122; R. Wamai, and B. J. Morris, "How to Contain Generalized HIV Epidemics' Article Misconstrues the Evidence," *International Journal of STD & AIDS* 22 (2011): 415-416; R. G. Wamai, B. J. Morris, R. C. Bailey, J. D. Klausner, and M. N. Boedicker, "Male Circumcision for Protection Against HIV infection in Sub-Saharan Africa: The Evidence in Favour Justifies the Implementation now in Progress," *Global Public Health* 10, no. 5-6 (2015): 639-666; R. G. Wamai, B. J. Morris, R. C. Bailey, J. D. Klausner, and M. N. Boedicker, "Debating Male Circumcision for HIV Prevention: A One-sided Argument Does not Represent a Legitimate 'Controversy' Analysis—Reply to de Camargo et al.," *Global Public Health*. 10, no. 5-6 (2015): 672-678; R. G. Wamai, B. J. Morris, J. H. Waskett, E. C. Green, J. Banerjee, R. C. Bailey, et al., "Criticisms of African Trials Fail to Withstand Scrutiny: Male Circumcision does prevent HIV Infection," *Journal of Law & Medicine* 20, no. 1 (2012): 93-123; R. G. Wamai, H. A. Weiss, C. Hankins, K. Agot, Q. A. Karim, O. Shisana, et al., "Male Circumcision is an Efficacious, Lasting and Cost-effective Strategy for Combating HIV in High-prevalence AIDS Epidemics: Time to Move beyond Debating the Science," *Future HIV Therapy* 2 (2008): 399-405; J. Banerjee, J. D. Klausner, D. T. Halperin, R. Wamai, E. J. Schoen, S. Moses, et al., "Circumcision Denialism Unfounded and Unscientific [Critique of Green et al., "Male Circumcision and HIV Prevention: Insufficient Evidence and Neglected External Validity"]," *American Journal of Preventive Medicine* 40 (2011): e11-e12; M. J. Bates, J. B. Ziegler, S. E. Kennedy, A. Mindel, A. D. Wodak, L. S. Zoloth, et al., "Recommendation by a Law Body to ban Infant Male Circumcision has Serious Worldwide Implications for Pediatric Practice and Human Rights," *BMC Pediatrics* 13 Article 136 (2013): 1-9; B. J. Morris, J. N. Krieger, and J. D. Klausner, "Critical Evaluation of Unscientific Arguments Disparaging Affirmative Infant Male Circumcision Policy," *World Journal of Clinical Pediatrics* 5, no. 3 (2016): 251-261.
128. See Morris et al., *supra* note 51; S. L. Sansom, V. S. Prabhu, A. B. Hutchinson, Q. An, H. I. Hall, R. K. Shrestha, et al., "Cost-Effectiveness of Newborn Circumcision in Reducing Lifetime HIV Risk Among U.S. Males," *PLoS One* 5 (2010): e8723; L. Warner, K. G. Ghanem, D. R. Newman, M. Macaluso, P. S. Sullivan, and E. J. Erbelding, "Male Circumcision and Risk of HIV Infection Among Heterosexual African American Men Attending Baltimore Sexually Transmitted Disease Clinics," *Journal of Infectious Diseases* 199 (2009): 59-65; D. Chemtob, E. Op de Coul, A. Van Sighem, Z. Mor, F. Cazein, and C. Semaille, "Impact of Male Circumcision Among Heterosexual HIV Cases: Comparison Between Three Low Prevalence Countries," *Israel Journal of Health Policy Research* 4, article 36 (2015): 31-38.
129. See Bates et al., *supra* note 127.
130. B. E. Rivin, D. E. Diekema, A. C. Mastroianni, J. N. Krieger, J. D. Klausner, and B. J. Morris, "Critical Evaluation of Adler's Challenge to the CDC's Male Circumcision Recommendations," *International Journal of Children's Rights* 24 (2016): 265-303.
131. R. Kelishadi, "To the Readers," *International Journal of Preventive Medicine*. 1, no. 1 (2010): I; Johns Hopkins University, "Hippocratic Oath," Modern version, available at <<http://guides.library.jhu.edu/c.php?g=202502&p=1335759>> (last visited November 27, 2017).
132. B. J. Morris, J. H. Waskett, J. Banerjee, R. G. Wamai, A. A. R. Tobian, R. H. Gray, et al., "A 'Snip' in Time: What is the Best Age to Circumcise?" *BMC Pediatrics* 12, article20 (2012): 1-15.
133. See Morris et al. (2016), *supra* note 132.
134. YouGov US. Young Americans Less Supportive of Circumcision at Birth, available at <<https://today.yougov.com/news/2015/02/03/younger-americans-circumcision/>> (last visited November 27, 2017).
135. C. E. Introcaso, F. Xu, P. H. Kilmarx, A. Zaidi, and L. E. Markowitz, "Prevalence of Circumcision Among Men and Boys Aged 14 to 59 Years in the United States, National Health and Nutrition Examination Surveys 2005-2010," *Sexually Transmitted Diseases* 40, no. 7 (2013): 521-525.
136. See Morris et al. (2016), *supra* note 127.
137. See Rivin et al., *supra* note 130.
138. J. S. Svoboda. "A Treatise From the Trenches: Why are Circumcision Lawsuits so Hard to Win?" in G. Denniston, et al., ed. *Circumcision and Human Rights*, (Berlin, Germany: Springer; 2009): 201-217.
139. N. Geffen. SAMA's Position on Circumcision, Quackdown, available at <<http://www.quackdown.info/article/getting-circumcision-science-right-media/>> (last visited November 27, 2017); Real Facts about Male Circumcision, available at <<http://circfacts.org/sloppylogic/#slog22>> (last visited December 5, 2017).
140. Queensland Law Reform Commission (QLRC), Circumcision of Male Infants Research Paper, Brisbane, 1993, available at <<http://www.cirp.org/library/legal/QLRC/09.html>> (last visited November 27, 2017).
141. B. Bates, and B. J. Morris, "Legal Arguments Opposing Infant Male Circumcision Are Flawed," *Internal Medicine Journal* 42 (2012): 1281-1282.
142. See Bates et al. (2013), *supra* note 127.
143. *Department of Health and Community Services v JWB and SMB (Marion's Case)* [1992] HCA 15; 175 CLR 218 96, May 1992. High Court of Australia, available at <[http://www.austlii.edu.au/cgi-bin/sinodisp/au/cases/cth/high\\_ct/175clr218.html?stem=0&synonyms=0&query=title](http://www.austlii.edu.au/cgi-bin/sinodisp/au/cases/cth/high_ct/175clr218.html?stem=0&synonyms=0&query=title)> (last visited November 27, 2017).
144. J. S. Svoboda, and R. S. Van Howe, "Out of step: fatal flaws in the latest AAP policy report on neonatal circumcision," *Journal of Medical Ethics* 39 (2013): 434-441; P. W. Adler, "The Draft CDC Circumcision Recommendations: Medical, Ethical, Legal, and Procedural Concerns," *International Journal of Children's Rights* 24 (2016): 237-262.
145. See Morris et al. (2013), *supra* note 127; Rivin et al., *supra* note 130.
146. Cologne Regional Court, "Decision of May 7, 2012, Docket No. Az. 151 Ns 169/11, Landgericht Köln Cologne," available at <<http://adam1cor.files.wordpress.com/2012/06/151-ns-169-11-bescheidung.pdf>> [in German] [English translation, Durham University, U.K.: <<http://www.dur.ac.uk/resources/ilm/CircumcisionJudgmentLGCologne7May2012.pdf>>] (last visited November 27, 2017).
147. Deutscher Bundestag, "Drucksache 17/11295. Gesetzentwurf der Bundesregierung. Entwurf eines Gesetzes über den Umfang der Personensorge bei einer Beschneidung des männlichen Kindes," available at <<http://dipbt.bundestag.de/dip21/btd/17/112/1711295.pdf>> (last visited November 27, 2017). The right of parents to consent to a medically not indicated circumcision of a minor who cannot consent himself has been inserted into the family law section of the German Civil Code, § 1631d. (2012) (last visited November 27, 2017); DW news-service, Circumcision Remains Legal in Germany, available at <<http://www.dw.de/circumcision-remains-legal-in-germany/a-16399336>> (last visited Novem-



- ber 27, 2017).; M. Chambers, "Circumcision Ban Overturned in Germany," Germany, *available at* <<http://www.theglobeandmail.com/news/world/circumcision-ban-overturned-in-germany/article6288050/>> (last visited November 27, 2017).
148. N. Stafford, "German Ethics Council Backs Religious Circumcision if Specific Conditions Met," *BMJ* 345 (2012): e5789.
  149. See Bates et al. (2013), *supra* note 127; Rivin et al., *supra* note 130; A. J. Jacobs, "The Ethics of Circumcision of Male Infants," *Israel Medical Association Journal* 15 (2013): 60-65.
  150. United Nations Human Rights Office of the High Commissioner for Human Rights, Convention on the Rights of the Child. 44/25 20 November 1989, *available at* <<http://www.ohchr.org/en/professionalinterest/pages/crc.aspx>> (last visited November 27, 2017).
  151. See Bates et al.; Rivin et al.; Jacobs et al., *supra* note 149.
  152. Cornell University Law School, Legal Information Institute, "18 U.S. Code 116 — Female Genital Mutilation, *available at* <<https://www.law.cornell.edu/uscode/text/18/116>> (last visited November 27, 2017).
  153. See Rivin et al., *supra* note 130.
  154. See Morris and Tobian, *supra* note 101; Rivin et al., *supra* note 130.
  155. See Jacobs, *supra* note 149; D. Benatar, and M. Benatar, "How Not to Argue About Circumcision," *American Journal of Bioethics* 3 (2003): W1-W9; P. A. Clark, J. Eisenman, and S. Szapor, "Mandatory Neonatal Male Circumcision in Sub-Saharan Africa: Medical and Ethical Analysis," *Medical Science Monitor* 13, no. 12 (2007): RA205-213; D. Benatar, "Evaluations of Circumcision Should be Circumscribed by the Evidence," *Journal of Medical Ethics*. 39, no. 7 (2013): 431-432; J. Mazor, "The Child's Interests and the Case for the Permissibility of Male Infant Circumcision," *Journal of Medical Ethics* 39 (2013): 421-428; A. J. Jacobs, and K. S. Arora, "Ritual Male Infant Circumcision and Human Rights," *American Journal of Bioethics* 15, no. 2 (2015): 30-39; J. C. Bester, "Ritual Male Infant Circumcision: The Consequences and the Principles Say Yes," *American Journal of Bioethics* 15, no. 2 (2015): 56-58.
  156. M. Brusa, and Y. M. Barilan, "Cultural Circumcision in EU Public Hospitals — An Ethical Discussion," *Bioethics* 23, no. 8 (2009): 470-482.
  157. Royal Courts of Justice, Sir James Mumby, "In the matter of B and G (Children) (No 2), Neutral Citation number: [2015] EWFC 3, Case Number LJ13C00295, 14 January 2015, *available at* <[https://www.judiciary.gov.uk/wp-content/uploads/2015/01/BandG\\_2\\_.pdf](https://www.judiciary.gov.uk/wp-content/uploads/2015/01/BandG_2_.pdf)> (last visited November 27, 2017).
  158. High Court of Justice, Family Division, "Re L and B (children), Neutral Citation Number: [2016] EWHC 849 (Fam), 5 April 2016, Mrs Justice Roberts, *available at* <<http://www.bailii.org/ew/cases/EWHC/Fam/2016/849.html>> (last visited November 27, 2017).
  159. See U.N. CRC, *supra* note 150.
  160. D. P. Fidler, "Challenging the Classical Concept of Custom: Perspectives on the Future of Customary International Law," *German Lawbook of International Law* 39 (1996): 198; J. L. Goldsmith, and E. A. Posner, "A Theory of Customary International Law," *University of Chicago Law Review* 66 (1999): 1113; M. A. Chinen, "Game Theory and Customary International Law: A Response to Professors Goldsmith and Posner," *Michigan Journal of International Law* 23 (2001): 143, 178; J. L. Goldsmith, and E. A. Posner, "Understanding the Resemblance Between Modern and Traditional Customary International Law," *Virginia Journal of International Law* 40 (2000): 639-640; P. Kelly, "The Twilight of Customary International Law 40," *Virginia Journal of International Law* 40 (2000): 449-450; A. Y. Guzman, "Saving Customary International Law," *Michigan Journal of International Law* 115 (2005-2006): 27; E. Kadens and E. A. Young, "How Customary is customary International Law?" *William & Mary Law Review* 54 (2012-2013): 885.
  161. See Rivin et al., *supra* note 130.
  162. United Nations, "The Universal Declaration of Human Rights, *available at* <<http://www.un.org/en/universal-declaration-human-rights/>> (last visited November 27, 2017).
  163. United Nations, Human Rights, Office of the High Commissioner, Human Rights Committee, "Monitoring Civil and Political Rights., *available at* <<http://www.ohchr.org/EN/HRBodies/CCPR/Pages/CCPRIndex.aspx>> (last visited November 27, 2017).
  164. International NGO Council on Violence Against Children, *available at* <<https://www.crin.org/en/home/what-we-do/working-partnership/working-others/international-ngo-council-violence-against>> (last visited November 27, 2017).
  165. See United Nations, *supra* note 162.
  166. See United Nations, *supra* note 163.
  167. See International NGO, *supra* note 164.
  168. L. Stemple, "Health and Human Rights in Today's Fight Against HIV/AIDS," *AIDS* 22, Supplement 2 (2008): S113-S121.
  169. *Prince vs. Massachusetts*, 321 U.S. 158, 169 (1944), *available at* <<https://supreme.justia.com/cases/federal/us/321/158/case.html>> (last visited November 27, 2017).
  170. See Introcaso et al., *supra* note 135; Centers for Disease Control and Prevention, "Trends in In-Hospital Newborn Male Circumcision — United States, 1999-2010" *Morbidity and Mortality Weekly Report (MMWR)* 60 (2011): 1167-1168.
  171. *Reynolds v. United States*, "98 U.S. 145 (1878), at 166-167, *available at* <<https://supreme.justia.com/cases/federal/us/98/145/case.html>> (last visited November 27, 2017).
  172. M. C. Alanis, and R. S. Lucidi, "Neonatal Circumcision: A Review of the World's Oldest and Most Controversial Operation," *Obstetrical and Gynecological Survey* 59 (2004): 379-395.
  173. See Jacobs, *supra* note 149.
  174. *Tortorella v. Castra*, "140 Cal.App.4th 1, 43 Cal.Rptr.3d 853, Cal.App. 2 Dist (2006), *available at* <<http://www.lawlink.com/research/CaseLevel3/83392>> (last visited November 27, 2017).
  175. M. R. Giannetti, "Circumcision and the American Academy of Pediatrics: Should Scientific Misconduct Result in Trade Association Liability," *Iowa Law Review* 85, no. 4 (2000): 1507-1568.
  176. B. J. Morris, S. A. Bailis, and T. E. Wiswell, "Circumcision Rates in the United States: Rising or Falling? What Effect Might the New Affirmative Pediatric Policy Statement Have?" *Mayo Clinic Proceedings* 89, no. 5 (2014): 677-686.
  177. See Cox et al., *supra* note 8; Morris and Krieger, *supra* note 9; Shabanzadeh et al., *supra* note 9; Tian et al., *supra* note 9; Homfray et al., *supra* note 9.
  178. See Cox et al., *supra* note 8.
  179. See Kafka et al., *supra* note 87; American Psychiatric Association, *supra* note 88.
  180. See Mohl et al., *supra* note 89.
  181. See El Bcheraoui et al., *supra* note 42.
  182. A. A. Leibowitz, K. Desmond, and T. Belin, "Determinants and Policy Implications of Male Circumcision in the United States," *American Journal of Public Health* 99, no. 1 (2009): 138-145.
  183. B. J. Morris, S. A. Bailis, J. H. Waskett, T. E. Wiswell, and D. T. Halperin, "Medicaid Coverage of Newborn Circumcision: A Health Parity Right of the Poor," *American Journal of Public Health* 99 (2009): 969-971.
  184. L. G. Gutwein, J. F. Alvarez, J. L. Gutwein, D. W. Kays, and S. Islam, "Allocation of Healthcare Dollars: Analysis of Non-neonatal Circumcisions in Florida," *The American Surgeon* 79, no. 9 (2013): 865-869.
  185. See Morris et al., *supra* note 132.
  186. See Kelishadi, *supra* note 131.