Circumcision of Facts and Evidence: A Critical Analysis of Boyle's Paper on Trauma and Harm

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The growth of scientific knowledge requires the correct reporting of relevant studies. Unfortunately ... researchers often do not read the relevant research papers. This manifests itself in two ways: First, researchers overlook relevant papers. Second, they make errors when reporting on the papers, either through incorrect referencing or incorrect quotation of the contents of the cited paper.

-Malcom Wright and J. Scott Armstrong

Dr. Gregory Boyle, an Australian psychiatrist, prepared a 10-page paper in which he asserted that the circumcision of infants and children causes significant physical, psychological, and sexual harm. This analysis will address every one of Boyle's points. Through research conducted primarily online, and including trips to local public libraries, this author studied nearly every one of the 179 footnotes in Boyle's paper.

(The text of Boyle's paper is in **black type**; his footnotes and this author's commentary are in **blue type**.)

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Circumcision of Infants and Children: Short-Term Trauma and Long-Term Psychosexual Harm

Gregory J. Boyle http://file.scirp.org/Html/3-1990071 55727.htm

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ABSTRACT

Non-therapeutic infant male circumcision is a permanent surgical alteration to the penis that may cause significant physical, sexual and psychological harm. Physical harms include unintended adverse effects of the surgery itself (e.g., complications such as ble eding, infection, excessive removal of foreskin leaving insufficient shaft skin to accommodate erections, etc.), as well as the inherent loss of healthy, functional tissue. Sexual harms that necessarily follow from circumcision include the loss of all sensation in the foreskin itself, and the loss of all sexual functions that involve the physical manipulation of the foreskin. Additional sexual harms that may follow circumcision include reduced sexual sensation in the remaining penile structures, difficulty with masturbation, increased chafing in both the circumcised man and his sexual partner, as well as reduced overall psychosexual/psychological tension relief and subjective satisfaction. Psychological harms include short-term trauma as well as the potential for long-term emotional disturbances, including sadness, frustration, distress, and anger—akin to post-traumatic stress disorder (PTSD). In this paper, the extent and severity of these various harms are considered and it is argued that they are more serious and more widespread than is commonly believed.

1. Introduction

Non-therapeutic infant male circumcision is "the most commonly performed surgery in the United States" [1]. It is most often performed for cultural or religious reasons, although it is also frequently performed in hospital settings as a routine procedure, at least in the United States (in contrast to other developed nations) [2], Newborn circumcision is near-universal in Israel; the newborn rate is about 32% in Canada. The circumcision rate is about 91% in the Philippines and 75.8% in South Korea, where the foreskin is removed during early adolescence.

where it was adopted by the medical establishment in the late 1800s as a "cure" for masturbation, along with other perceived physical and/or spiritual ailments [3] [4]. According to **Cheldelin**, the rise of circumcision in the United States "can be traced to certain events during World War I and its aftermath. During that period, American troops spent long hours in the trenches and went without bathing. As a result, many of our soldiers contracted infections, and some uncircumcised soldiers later required circumcision to remove the tight, infected foreskin from the tip of the penis. Obviously the cause of these infections was not the uncircumcised penis, but poor personal hygiene. Nevertheless, circumcision after World War I was increasingly supported on the grounds that it was a hygienic and medical necessity."

In recent decades, the circumcision of infants and other young boys in the absence of disease or deformity has increasingly been recognized as being in conflict with well-established principles of medical ethics [5]-[7] The medical benefits of circumcision were questioned by **Darby [5]** and denied by **Earp [6]** and **Ben Yami [7]**. Darby compared circumcision to deliberately creating a deaf child. Darby further compared circumcision to "smoking, eating junk food and not cleaning one's teeth because it causes long-term harm to the body and reduces its future functionality." Earp cited his own <u>blog post</u> in which he equated circumcision with female genital mutilation (FGM). Ben Yami claimed that circumcision reduces sexual pleasure, citing studies addressed below. (See comments to [116] [117] [140].) Realizing that a prohibition would be impractical and counterproductive, Ben Yami proposes laws requiring circumcision performed only in medical clinics and with local anesthesia, prohibiting the Orthodox Jewish practice of *metzitzah*, and establishing a maximum age of 6 months for non-therapeutic circumcisions of minors.

and even human rights [8]-[10]. Denying that circumcision has medical benefits, both **Svoboda** [8] and **Merkel** [10] compared the procedure to FGM. Irrespective of the fact that the U.S. has never ratified the

Convention on the Rights of the Child, Svoboda argued that the treaty is binding in the United States. He cited other international treaties, but ignored the inconvenient truth that circumcision is legal in every country on earth. **DeLaet [9]** acknowledged that unlike FGM, circumcision has "potential medical benefits" and declined to answer the question of whether the procedure is a human rights violation. Merkel argued for a legal prohibition of infant circumcision, but reluctantly envisioned a possible exception for observant Jews. Any legal scenario that would tolerate a child being subjected to a human rights violation is extraordinary, and challenges Merkel's sincerity in insisting that the procedure is "battery" and "a significant bodily harm." (An analogy would involve a pro-life advocate who professes that abortion is murder, but who would allow exceptions in cases of rape or incest.)

Absent from these papers was any consideration of several factors that weigh in favor of circumcision during the newborn period. The <u>World Health Organization</u> reports that newborn circumcision is simpler than adolescent or adult circumcision "because the penis is less developed and the foreskin is thinner and less vascular. Healing is quicker and complication rates are lower... The wound typically does not need to be sutured. The procedure is not complicated by erections, which can be problematic in adolescent boys and men. Infant male circumcision ensures that the wound will be healed before sexual activity begins; sexual activity can complicate circumcision in adolescents and adult males and can put older patients who engage in such activity before the wound has healed at higher risk... Another advantage of early infant male circumcision is the reduced risk of urinary tract infections in the first 6 months of life." In addition, a <u>University of Florida</u> study showed that circumcision costs for older boys are significantly higher than costs for newborn circumcision.

As Dekkers et al. (p. 180) [11] noted, both male and female circumcision constitute "an invasive intervention in the external genital organs" without valid medical indication. Focusing on religious views of bodily integrity, **Dekkers** reported, "Jewish and Islamic men who are circumcised for religious reasons seldom express feelings of not being 'whole' any more. None of our male interviewees seemed to feel that they lacked bodily wholeness." On the contrary, "Jewish interviewees considered circumcision a perfection of God's creation." Deckers admitted that "bodily integrity' is an ambiguous notion," and concluded that bodily integrity is not an absolute or objective principle.

<u>Mazor</u> noted that there is no absolute prohibition against violations to a child's bodily integrity, even for non-therapeutic procedures. He cited <u>unilateral incomplete cleft lip operations</u>, which are performed for cosmetic reasons and not medically required.

According to Peterson (2001, p. 285), "no person has the right to surgically inflict their religious, sexual, or cosmetic preferences on another person... Parents have a duty to protect their children from harmful practices, and no tradition should be enforced by the permanent alteration or disfigurement of the body of an individual who is legally incapable of providing informed consent." [12] Peterson presented a personal account; his perspective was based on the tragic effects of his own botched infant circumcision, during which the doctor removed far too much skin.

Indeed, as several authors have argued, such an extreme interference with a child's genitals would ordinarily be viewed as a form of child sexual abuse—Bigelow (1995, p. 97) [13]-[15]. Boyle [14] admitted that medical treatment is not assault. Boyle denied the medical benefits, while offering an exaggerated risk of harm. For example, Boyle estimated 229 annual deaths in the U.S. (The full **Bigelow [13]** and **Travis [15]** studies are not available online.)

The irreversible cutting and removal of part of a child's sexual organ is a very serious interference [16]. **Morgan** [16] disputed most of the medical benefits and stressed many of the supposed harms discussed in this analysis. He did not, however, suggest that circumcision "is a very serious interference," insisting rather that his "commentary must not be construed as a crusade against circumcision."

2. Physical Complications and Harms

Remarkably, there has been little serious research into the anatomy, physiology, and functions of the penile foreskin—however, see [17]-[19]. Cold [17] cited a 1959 Winkelmann paper to support his claim that the foreskin is "necessary for normal sexual function." Yet Winkelmann made no such claim and didn't speculate on the effect of circumcision on sexual function. Cold concluded that circumcision "clearly" changes sexual behavior. Cold [18] cited Laumann [145], who speculated that a higher frequency of oral sex and masturbation among circumcised men was based on *cultural forces* rather than physiological differences. Taylor [19] studied corpses, not sexual activity of living humans. None of these papers demonstrates that circumcision harms a man's physical or sexual functions or sexual pleasure.

As a consequence, the harmful effects of its removal, especially in comparison with female forms of circumcision (or "genital mutilation"), are incompletely known [20] [21]. Begging the question: assumes that circumcision is harmful. Hill [20] and Earp [21] cited dozens of papers addressed in this analysis.

Instead, researchers in circumcising cultures have focused almost entirely on the claimed "health benefits" of circumcision, and on new kinds of circumcision methods. Yet as Alice Dreger, a professor of Clinical Medical Humanities and Bioethics at the Feinberg School of Medicine has noted, "No one seriously thinks [that 'health benefits' are] the reason to circumcise infants. **Dreger [22]** actually wrote, "No one seriously thinks [that] **HIV risk** is the reason to circumcise infants." Dreger did not outright dismiss all health benefits.

This is... latched on to by [those] who are looking for a reason to justify a pre-existing desire to circumcise... baby boys. [The American jurist] Oliver Wendell Holmes pointed out that judges tend to know how they want to rule, and then they go on to figure out how to justify the ruling. Routine neonatal male circumcision seems to be a lot like that. People want to do it, and they fish around for a good reason." [22] "Circumstantial ad Hominem is a fallacy because a person's interests and circumstances have no bearing on the truth or falsity of the claim being made. While a person's interests will provide them with motives to support certain claims, the claims stand or fall on their own. It is also the case that a person's circumstances (religion, political affiliation, etc.) do not affect the truth or falsity of the claim."

Nevertheless, several risks and harms of circumcision have been identified, notwithstanding the (relative) lack of research into the question [23]. The <u>AAP Task Force</u> reported, "Significant acute complications are rare, occurring in approximately 1 in 500 newborn male circumcisions. Acute complications are usually minor and most commonly involve bleeding, infection, or an imperfect amount of tissue removed."

For example, a recent study in the Canadian Urological Association Journal found (p. 260) that, "Most physicians performing neonatal circumcisions in our community have received informal and unstructured training, [leading to] unsatisfactory results [being] witnessed in our pediatric urology practice. Many practitioners are not aware of the contraindications to neonatal circumcision and most non-surgeons perform the procedure without being able to handle common post-surgical complications." [24] **Demaria** identified some minor complications and *cautiously* connected them to a lack of formal training. He wrote that a "lack of formal instruction *may explain* the complications and unsatisfactory results." Responding

to the study results showing that practitioners had received informal and unstructured training, the researchers "planned and carried out a formal training course to address these issues."

Grimes (p. 126) made a similar observation as far back as 1978: "Surgical mishaps continue to occur... A partial inventory of operative accidents and their sequalae includes denuding of the penis shaft; incomplete circumcision with residual deformity; lacerated scrotum; subglanular fistula; bivalved, grooved or amputated glans; concealed penis; and cautery burns." [25] Boyle redacted a key stipulation; Grimes reported that "Surgical mishaps continue to occur, particularly in inexperienced hands."

Aside from accidental amputation of the glans during neonatal circumcision [26] [27], Gluckman [26] reported on one newborn circumcision in 1994 in California via Sheldon crushing clamp that resulted in amputation of "the distal third of the penile glans." **Newlander [27]** reported on one ritual circumcision in 1996 in Israel that resulted in amputation of the distal glans. In both cases the glans was successfully reattached. Gluckman concluded that "most circumcision injuries, including glans amputation, can be successfully managed with aggressive treatment."

included among the wide range of additional complications and harms that have been described in the literature, are bleeding and hemorrhage [28], Hiss reported on one ritual circumcision of a 6 week-old Ethiopian infant in Israel that was performed by the boy's father at home. "The preputial skin was incised with a sharp and clean razor after being pulled over the glans and the inner preputial epithelium was freed with a rudimental metallic clamp. Profuse external haemorrhage from the surgery site developed almost immediately." Twelve hours later the infant was brought to the hospital where he died 3½ hours later. "The baby's death was the result of fatal bleeding, not only because of the delay in medical assistance — which cannot be underestimated — but mainly because of the underlying blood coagulation disorder." Hiss reported that **the father lacked necessary experience** to perform the procedure. (See also comment to [64] below.) It's curious that Boyle didn't include this case among the deaths caused by circumcision.

skin bridges and adhesions [29] [30], Ponsky [29] studied 254 cases and reported that "adhesions resolve without treatment." The full **Ritchey** [30] study is not available online.

meatal stenosis (in up to 20% of cases) [31] [32], Joudi [31] recommended follow-up genital examinations for boys circumcised during the newborn period. **Upadhyay** [32] reported that meatotomy alleviated the symptoms for 50 patients treated for meatal stenosis in New Zealand. All patients were discharged after follow-up visits within one to three months. The AAP task force cited a 1997 <u>Van Howe</u> study of 214 boys that found just one with meatal stenosis (0.5%).

keloid formation [33], The full **Köksal** study is not available online.

painful neuromas [17], Cold made assertions about neuromas. A 2015 <u>Cardosa</u> study reported the case of a 22 year-old man who had been circumcised when he was 8 years old. "Surgical excision with later clinical follow-up ... portrays an excellent prognosis."

toxicity to anesthetic [34] [35], The full **Couper [34]** study is not available online. Özbek [35] reported on one case in Turkey. After treatment commenced, "the patient became symptom-free in an hour and methaemoglobin levels returned to normal" within eight hours.

botched circumcisions [36], Patel reported on six infant boys and one girl who suffered "genitourinary injuries" in the United States. Two infants suffered degloving injuries to the foreskin and penile shaft from

a Gomco clamp. Another patient suffered a ventral slit and division of the ventral urethra before placement of the Gomco clamp, requiring formal hypospadias repair. Three patients suffered injuries from a Mogen clamp. Hemorrhage from the severed glans in two was controlled with topical epinephrine.

urethral fistulas [37], Baskin reported on eight patients who suffered urethrocutaneous fistulas in the United States. "The urethrocutaneous fistula can be successfully repaired by splitting the glans and forming a neourethra from a vascularized pedicle flap of penile skin. The abnormal urethra after partial glans amputation is more difficult to repair but repositioning the urethra in a more cosmetic location has restored function."

bacterial infections [38], Ironically this citation seems to provide evidence in support of circumcision. Braun is a letter about a 1989 Wiswell study of 136,086 boys born at U.S. Army hospitals during 1980-1985. Wiswell found 8 cases of bacteremia among 100,157 circumcised boys (0.007%), compared with 32 cases of concomitant bacteremia among nearly 35,929 uncircumcised boys (0.089%). (Braun wrote that the analysis had likely missed a large majority of babies with bacteremia. Wisnell replied that Braun had misinterpreted the study, which had examined only cases of neonatal bacteremia that could be attributed either to the uncircumcised state or the circumcision procedure.)

methicillin-resistant Staphylococcal aureus [39], **Van Howe** *speculated* that circumcision may be a cause of MRSA in infant boys.

STIs [40] Gesundheit reported on eight cases of infants diagnosed with HSV-1 genital herpes. The infants had been subjected to a controversial Jewish ritual involving oral-genital contact following the procedure. Gesundheit concluded that mohels should be persuaded to use instrumental suction in order to protect an infant's health. This study does not show that circumcision causes STIs.

HIV infection [41], Brewer calculated an HIV rate of 1.8% in men who reported that they were circumcised virgins, compared with 0.0% in men who reported that they were uncircumcised virgins. "However, uncircumcised adults were more likely to be HIV positive than circumcised adults." Brewer concluded, "HIV transmission may occur through circumcision-related blood exposures in eastern and southern Africa." Reviewing Brewer, Adams cautioned that for circumcision programs in sub-Saharan Africa, "hygienic circumcision should be the goal, not just circumcision." (Brewer also compared the HIV rate among female virgins who been subjected to genital cutting with those who had not been cut.)

reduced penis size and/or buried penis [42], **Kon** reported on a 1983 case of a two year-old Moroccan boy circumcised in the Netherlands. Two months prior to hospital admittance, the boy had been circumcised "by a Moslem layman, 'specially trained' in the procedure." The condition of "buried penis" was corrected via surgery.

post-circumcision penile cancer [43], Bissada reported in 1986 on 15 cases of squamous cell carcinoma of the penis, 13 of which were from the southwestern region of Saudi Arabia. The full study is not available online.

ischemia of the glans penis [44], Aslan reported on an 11 year-old boy in Turkey suffering from severe glanular ischemia 24 hours after a circumcision. The patient "was successfully treated with pentoxifylline injection" upon which "appearances were close to normal at 5 days. The patient did not require any surgical intervention, and was discharged without sequelae." He was "in excellent health 2 months later."

denudation of the penile shaft [45], **Sotolongo** reported in 1984 on three cases "of iatrogenic phallic denudation that were managed successfully" without surgery in the United States. One of the cases involved circumcision of a 32 year-old diabetic man.

erectile dysfunction and impotence [46], Gerharz reported on an infant boy in Austria who was treated for "temporary bilateral ring ureterostomy and transurethral valve resection for classical posterior urethral valves." He was later circumcised at 11 years of age. "The procedure was completely uneventful, but the boy was highly distressed by the procedure. In addition ... his mother was diagnosed with breast cancer at the same time... He experienced gradual fading of erections and a condom-form anaesthesia of the penis as a teenager." He also complained of alternating diarrhea and constipation. "When the patient was 18 years old, his mother died of metastatic breast cancer... Three years later, he describes normal erections and has a steady sexual relationship." Gerharz concluded that the case might be one of mixed dissociative (conversion) disorder, and cautioned that attributing the temporary erectile dysfunction to circumcision "may well be an over-interpretation."

gastric rupture due to lack of anesthesia [47], Connelly reported a 1992 case in Virginia in which a 2 dayold infant was restrained on a circumcision board and cried "vigorously and steadily for half an hour, his abdomen became distended and he vomited. A nasogastric tube was passed; gastric contents, including formula, were removed. The abdomen remained distended but was soft, with normal bowel sounds. He then underwent routine unanesthetized circumcision using a Gomco bell. He cried vehemently for a total period of about 90 minutes." After treatment for a gastric rupture, "he was discharged 25 days after birth and continues to do well." Connelly concluded that the cause was aerophagia caused by "prolonged vigorous crying" and recommended that "infants spend a minimal amount of time on the restraint board and that consideration be given to the use of a penile nerve block or other anesthetics or analgesics for pain control."

ruptured bladder [48], Jee reported on a 5 year-old boy who developed interperitoneal bladder rupture after circumcision via the Plastibell method. The full study is not available online.

tachycardia and heart failure [49], Mor reported on four infants who developed acute heart failure after ritual circumcisions in Israel. The patients "were treated with digoxin and diuretics" and symptoms "disappeared in all patients within 24-72 hours. On follow up, repeated physical examination and ECG recordings yielded normal results." Mor advised "that the use of topical epinephrine after circumcision should be prohibited."

acute venous stasis and swelling of the abdomen [50], Ly reported on complications following the circumcision of a 6 day-old infant via Plastibell by his family physician in Saskatchewan. "The boy was thought to have a Plastibell ring urethral meatus obstruction leading to enlargement of the bladder, which blocked the inferior vena cava. After treatment "the infant appeared calmer and the Plastibell ring was successfully removed... Over the next 36 hours he continued to urinate, and his venous engorgement and cyanosis disappeared. His penis appeared normal. The patient had no further problems or complications."

loss of the whole penis [51] (e.g., tragic David Reimer case),^{1,2} **Bradley** discussed a case involving a 2 month-old infant who underwent an electrocautery circumcision, a rarely used procedure. The entire shaft was burned, and the remainder of the penis and testicles were removed at age 7 months. The patient was reassigned and raised as a girl.

Note 1: David Reimer committed suicide in Winnipeg on May 4, 2004, by gunshot to the head. Evidently, the destruction of his penis by an unnecessary electrocautery circumcision, his subsequent orchidectomy on the advice of John Money, and resultant unrelenting psychosexual trauma, led to the taking of his own life—see Colapinto [52]. David Reimer and his twin brother Brian were diagnosed with phimosis at age 6 months and circumcised at age 7 months in Winnipeg. The cauterization procedure burned Reimer's penis beyond repair. (Cauterization is an unusual circumcision method that appears to be rarely used today. One physician told this author that he had never heard of the procedure in 24 years as a pediatrician.) The decision was made to raise the patient as a girl, and he underwent sex reassignment surgery at 22 months. At age 14, after his parents told him what happened, Reimer decided to assume a male identity. He married and adopted his wife's three children. Brian Reimer developed schizophrenia and died following an overdose of antidepressants at age 32. Two days after David Reimer's wife informed him she wanted a separation, he committed suicide at age 34.

Note 2: Following the attempted suicide of her own teenage son as a result of his circumcision, Massie [53] reported that severe psychological distress following circumcision may be responsible for causing a number of male adolescent suicides: For example, Dontsa Lwane, 19 years, committed suicide after a botched circumcision—died January 8, 2005, Queenstown, South Africa. His brother, Wandile Lwane, 21 years, also committed suicide (after learning of Dontsa's death)—died January 9, 2005, Queenstown, South Africa. Similarly, Beasley Allen Terrebonne committed suicide as an adult after a botched circumcision and resultant depression—died Dec 23, 2008, Thibodaux, Louisiana, USA. According to Massie, her son was 20 when he attempted suicide, after which she became involved in the campaign to end circumcision. Massie reported that when her son was 7, he developed an infection that was diagnosed as phimosis. When her son withdrew consent for circumcision in the operating room, the doctors laughed and told him not to worry. Circumcision is rare in Northern Ireland (1.9% during 2001-2002,) where Massie and her son live, possibly contributing to his feelings of isolation. The three suicides that Massie reported followed botched adult circumcisions. The Lawane brothers committed suicide separately, shortly after Dontsa's circumcision was botched. Facing criminal charges for threatening to blow up the hospital where he had suffered a botched circumcision three years earlier, Terrebonne killed himself at the age of 48. None of these stories describes psychological distress following a routine infant circumcision.

At this point one might pause and reflect on Boyle's "wide range of additional complications and harms." Two infections were caused by unhygienic conditions not relevant to most U.S. circumcisions, and several others were found in countries with significantly lower health care standards. One study indicated that circumcision **lowers** the infection rate. The connection of one complication to circumcision was based on mere speculation, and another was caused when an untrained parent attempted to circumcise his own son. For seven complications, only a single case was identified. Nearly every study reviewed by this author indicated that medical intervention successfully treated the complication, leading to a full recovery. (Of the 27 studies, 5 couldn't be analyzed because they weren't found online.)

In analyzing these cases, this author isn't suggesting that complications from circumcision are nonexistent. Rather, the evidence that Boyle has presented supports the AAP Task Force <u>policy statement</u> that most complications related to circumcision can be easily treated, and "significant acute complications are rare."

and even death [54]-[57].

Bollinger [54] was thoroughly refuted. None of the other studies identified a single death caused by a circumcision performed in the United States. In 2007 the **Canadian coroner** [55] reported the death of a 5-week old infant following circumcision in a British Columbia hospital. **Thorup** [56] evaluated 315 boys in Denmark who had undergone ritual circumcision from age 3 weeks to 16 years. Thorup reported a 6.3%

complication rate, with "no major complications" and no deaths. **Williams [57]** cited three other studies: **Gaidner** reported an average 12 deaths of children under one year that were attributed to circumcision or phimosis in England and Wales from 1942-1947; **Gosden** reported in 1935 on 23 boys who contracted tetanus following circumcision in Cyprus, five of whom died; **Crowley** reported that circumcision among the Xhosa people of Southern Africa included four deaths (9% of 45 boys hospitalized.)

Moreover, as Svoboda and Van Howe (p. 2) recently stated, "circumcision adversely affects the developing infant brain by causing trauma-grade increases in heart rate, blood pressure and stress hormone levels. **Svoboda** cited **Van Howe** and **Gunnar**. Neither full paper is available online.

Some infants do not cry because they go into shock. Svoboda provided no evidence for this assertion.

Mother-infant bonding and feeding is disrupted, as are infant sleep patterns. **Svoboda** cited **Gunner** (not available online), <u>Marshall</u>, and <u>Anders</u>. **Marshall** studied a group of 27 newborns circumcised on the 2nd day and a control group of 32 newborns whose circumcisions were performed shortly before hospital discharge. Marshall reported "no major differences" in mother-child interaction. "The experimental group exhibited fewer periods of uninterrupted feeding … but *not at highly significant levels*." **Anders** studied 11 newborns during three 1-hour periods surrounding circumcision. There is no indication that infants in either study were given any pain relief.

Circumcised infants become more irritable and less consolable than their intact peers." [23] **Svoboda** cited a 1984 <u>Dixon study</u>. According to the abstract, behavioral "disruptions can be lessened by the use of local anesthesia to relieve pain and stress during the procedure." The <u>AAP task force</u> cited Dixon for the statement that a dorsal penile nerve block "is very effective in reducing the behavioral and physiologic indicators of pain caused by circumcision. Compared with control subjects who received no analgesia, neonates with DPNB cry 45% to 76% less."

While the risk of the most severe harms is often described as "low", some scholars and ethicists have argued that our tolerance for risk should be close to zero, since the surgery under consideration would be performed on a healthy child without his consent [58] [59]. Needless to say, all such risk is entirely avoidable if the child is not subjected to medically unnecessary surgery in the first place. A decision not to circumcise doesn't eliminate risk; it simply shifts the risk from circumcision-related complications to foreskin-related complications. **Sneppen** reported a 2016 study of 181 uncircumcised boys in Denmark. More than 5% of boys in the targeted region were admitted to a medical facility with foreskin-related problems. Over 35% of the admitted boys required a foreskin operation; for 29% that operation involved circumcision. At least 1.66% (about 1 in 60) required surgery with general anesthesia. The median age at the time of surgery was 11 years.

In the case of circumcisions performed on post-pubescent males, as is common in South Africa and elsewhere [60], tethered erections with insufficient shaft skin remaining to accommodate the full tumescence of the penis (sometimes resulting in painful intercourse with chafing) may also contribute to sexual function difficulties [61] —also see [62] [63]. Boyle failed to explain how circumcision of adolescent and adult males in developing nations is relevant to the circumcision of infants in the U.S.

As Williams and Kapila (1993, p. 1231) stated, "The literature abounds with reports of morbidity and even death as a result of circumcision." [57] The literature is underwhelming; see comment on [57] above.

Tragically, as noted above, avoidable deaths do occur following neonatal circumcision. For example, a recent death was reported in 2012 by Robbins [64]. Robbins reported on a baby's death in New York City. The death was not attributed to the circumcision procedure, but to a rare ultra-Orthodox Jewish ritual. (See [40] above.)

Note 3: The names of several boys who have died following circumcision-related complications are listed online at the following URL: http://www.cirp.org/library/death/ (Retrieved 24 March, 2015) The CIRP list alleges 19 circumcision-related deaths in the United States since 1950. Two of the 19 died from herpes caused by oral suction (see [40] and [64] above.) Bruce Wechsler survied a staph infection in 1957; as of 2010 he was living at a care facility for people with disabilities. Christopher Dolezal (1982) was 3 months old when he died from excessive blood loss following his circumcision. **Steven Christopher Chacon** (1986) died from an infection caused by the filth in his drug-addicted parents' roach-infested apartment that was "strewn with dirty diapers, beer cans, clothes and other items." Allan A. Ervin (1992) was nearly 5 months old when he suffered complications from anesthesia during the circumcision procedure. Demitrius Manker (1993) was 6 months old when he died from blood loss following circumcision. Jeremie Johnson died in 1995 at age 5 from complications associated with anesthesia administered during the circumcision. Jacob Christian Holliday (2005) apparently had a defective heart that required a transplant at age 2; he developed cancer and died at age 4. No independent information about the death of an unnamed infant in Creswell, Oregon in 2007 was found online. Beasley Allen Terrebonne's 2008 suicide is discussed in the comment to Note 2 above. Bradley Dorcius (2009) died at 7 months, two days after a circumcision and an operation to correct his urine flow. Born with a congenital heart defect, Joshua Haskins (2010) was ruled to have died from cardiac arrest unrelated to his circumcision. No independent information about the death of James Connor (2011) was found online. Brayden Tyler Frazier (2013) reportedly died from hemophilia unrelated to his circumcision. (Brayden's family has requested – to no avail – that circumcision opponents stop using his death to further their agenda, and instead leave the family alone to grieve.)

Boyle commenced this paper by addressing infant circumcision performed in the United States. And yet only 9 of the 67 cases on the CIRP list involve confirmed circumcision-related deaths in the United States since 1950, **just 4 of which involved circumcision of newborns**. With more than one million newborn hospital circumcisions performed each year, the newborn hospital circumcision mortality rate would be calculated at lower than 0.00000006%. (Several of the other fatalities on the CIRP list weren't caused by circumcision. For example: The coroner determined that <u>Amitai Moshe</u>'s 2007 death in Jerusalem was caused by SIDS more than 30 minutes after his ritual circumcision. Two men on the list were killed in South Africa prior to a circumcision initiation.)

According to Bollinger (2010, pp. 87-88), "thousands of boys have died since this practice was first medicalized 160 years ago. These boys died because physicians have been either complicit or duplicitous, and because parents ignorantly said 'Yes', or lacked the courage to say 'No'. Every one of these boys would have had a chance at life had he not been circumcised." [54] See comment on [54] above.

3. Psychological Considerations

What about psychological considerations? In some circumcised men, lifelong psychological maladjustment may be apparent [65]. Gaskill and Perry discussed possible lifelong psychological effects of physical, emotional, or sexual abuse or neglect on children. The authors didn't equate medical procedures with trauma and did not discuss circumcision. Nor did they discuss any other events that are limited to the newborn period.

Indeed, the trauma resulting from painful circumcision may itself contribute to long-lasting psychological vulnerability in some susceptible individuals [66]-[70]. Beggs [66] did not address circumcision. Cansever [67] studied 12 boys circumcised at ages 4-7. Researchers saw the children a month before the procedure and again 3-7 days after. Cansever didn't study long-term psychological effects of circumcision, and his findings cannot be applied to *neonatal* circumcision. Chamberlain (1989) [68] reported a few anecdotes of men who allegedly remembered their infant circumcisions. Chamberlain (1995) [69] didn't research long-lasting effects and didn't discuss the effect of pain relief to mitigate negative reactions. Paley [70] reviewed nine articles and summarized the findings for infant and early childhood trauma.

Perry's work also demonstrates the vulnerability of the infant brain to trauma and the potentially long-term adverse effects that may follow [65] [71]. **Gasgill and Perry [65]** and **Anda [71]** discussed childhood trauma, but not specifically trauma occurring during infancy. Neither paper discussed circumcision.

Hammack et al. (p. 565) [72] reported that, "Exposure to traumatic events can increase the risk for major depressive disorder (MDD) as well as post-traumatic stress disorder (PTSD)..." Menage [73] as well as Behrendt and Moritz [74] reported PTSD among women who had undergone genital cutting (female circumcision). Unlike circumcision, the harms caused by the various types of FGM are well documented.

Likewise, the trauma associated with the male circumcision experience, particularly when carried out without anesthesia [75] Begging the question: assumes that male circumcision is traumatic. Regarding anesthesia, the AAP recommends pain relief for patients undergoing circumcision.

is likely to imprint itself onto the child's still-developing central nervous system (CNS) [76]. Anand discussed the effects of "exposure to repetitive pain;" however circumcision is normally a singular event. Anand noted that "treatment of circumcision pain with a topical anesthetic decreased their responses to vaccination pain at 4-6 months of age."

PTSD is a possible complication resulting from unanesthetized circumcision—Rhinehart [77], Rhinehart claimed that several patients remembered their own circumcision, but didn't consider the possibility that the psychologist himself guided his patients to associate their problems with their infant circumcision.

as is heightened pain sensitivity at least during the several months following circumcision, which Taddio et al. (p. 602) [78] described as "an infant analogue" of PTSD. electro

In addition, Hermann et al. (p. 278) reported that, "neonatal pain experiences induce long-term alterations in pain sensitivity [79]"—also see [80] [81]. Hermann [79] and Grunau [80] studied the effects of *repeated* painful experiences, not a single experience. Page [81] cited Taddio and discussed a study in which pain responses were "ameliorated by local anesthetic application."

Gaensbauer (1995, p. 122) reported that trauma experienced by preverbal infants resulted in "symptomatology consistent with typical post-traumatic diagnostic criteria... The [adverse] developmental implications of early trauma, particularly if it is severe, appear to be significant." [82] Gaensbauer concluded that "the capacity to ... retain meaningful internal representations of the salient elements of a traumatic experience may be present as early as the second half of the first year of life." This report does not apply to newborn circumcision.

Neonates exposed to preverbal trauma (e.g., unanesthetized circumcision) may subsequently benefit

from psychotherapeutic counseling [83] [84]. The AAP recommends adequate pain relief for patients undergoing circumcision.

According to Geisheker (2013, p. 24), "Only 14% of US neonates enduring circumcision received any anesthesia... [often] a topical ointment, ineffective... and contraindicated for neonates or when applied to mucosal tissue." [85] **Geisheker** cited a <u>Garry survey</u> published in **1994**. Both the 1999 and 2012 AAP circumcision task forces recommended adequate pain relief. And a <u>2006 Yawman study</u> showed that 97% of residency programs were teaching the use of anesthesia for circumcisions by 2003.

According to Taddio et al. (p. 599), "Circumcised infants showed a stronger pain response to subsequent routine vaccination than uncircumcised infants..." [78] See comment above to [78].

Unfortunately, as Cold and Taylor (1999, p. 37) reported, "local anesthetic cream (EMLA) does not relieve the pain associated with circumcision because of the complexity of penile innervation and the multiple layers that would have to be penetrated by the topical cream in the newborn penis" [17] —also see [75] [86] Lander [86] reported that "the ring block was equally effective through all stages of the circumcision." Lenhart reported that "nerve block at the penile root most reliably and safely [eliminates] the pain of circumcision."

Research into the effects of circumcision on subsequent pain sensitivity is urgently needed given the potential adverse consequences both for the child's psychological wellbeing (e.g., the development of a sense of basic trust versus basic mistrust, the key psychosocial task during infancy—see Erik Erikson [87]) and the psychosexual wellbeing of the man he will later become [85]. Yet Boyle will reflexively dismiss the words of circumcised men who insist, "I am just fine and sex couldn't be better." (See Part 7 below.)

As Denniston (2013, p. 63) pointed out, "Circumcision is a [wounding] that happens before a baby is capable of understanding the profound pain and [one] that is forced upon him without his consent in the [most] vulnerable first days of life. Circumcision interferes with the maternal/infant bond, disrupts breastfeeding and normal sleep patterns, and undermines a male's first developmental task of establishing trust... Every sexual experience a male has after circumcision is [based] on a neuronal background of pain, even if the male does not [consciously] remember or recognize it... Hyper-reactivity, defensiveness, or the inability to cope when faced with threatening or frightening situations are evidence of early trauma caused by neonatal circumcision." [88] Denniston provided no evidence to support these assertions. (Readers can judge Denniston's credibility based on the next paragraph, in which he contended that "there is the potential for one million abortions caused by circumcision every year.")

Grimes ([25], p. 127) has offered a similar perspective: "The application of crushing clamps and excision of penile tissue... probably do little to engender a trusting, congenial, relationship with the infant's new surroundings." Grimes offered a hyperbolic description of the psychological effects of circumcision without pain relief.

(cf. Leboyer, [89], Birth Without Violence).

Both Talbert et al. [90], and Gunnar et al. [91] reported that serum cortisol levels (indicative of stressful physiological arousal) increased sharply immediately following infant circumcision and remained elevated for several days **Talbert** tested circumcision of five newborns, while **Gunner** tested eight infants 3-5 days old. Both tested only for the Gomco method, and there is no indication that pain relief was provided. Gunner reported that the procedure took between 16 and 36 minutes; yet physicians report that the

procedure takes just 5-10 minutes. Four infants received a pacifier and "use of the pacifier significantly reduced crying." Gunner reported "a rapid return to pre-circumcision state" with most infants exhibiting drowsiness or light sleep within 30 minutes. Gunner stated that multiple interpretations could account for the study results.

—see also [25]. See comment to [25] above.

Williamson and Evans [92] compared the adrenal cortical response in infants circumcised with local dorsal penile block and those circumcised without anesthesia, and reported (p. 412) that, "The adrenal cortisol response to surgery was not significantly reduced by the administration of lidocaine."

There is also evidence that infant or childhood traumatic events (which would include traumatic circumcision) may be associated with subsequent psychotic breakdown [93]-[97]. Begging the question: assumes that circumcision is traumatic.

Since the worldwide incidence of circumcision is considerably higher among males than females, and if circumcision is a causal factor in susceptible individuals, a greater proportion of males would be expected to suffer a subsequent schizophrenic episode. Indeed, based on a systematic review of the worldwide incidence of schizophrenia, McGrath [98] reported (p. 4) that, "Males have a significantly higher incidence of schizophrenia compared with females (median male to female risk ratio = 1.4)", supporting the possibility that traumatic circumcision may be a causal factor in subsequent psychotic breakdown. By this reasoning, one would expect a correlation between national circumcision rate and rate of schizophrenia. A 1998 WHO report, Schizophrenia and Public Health, doesn't lend credibility to Boyle's hypothesis. WHO reported that most surveys in various countries show "schizophrenia in adults within a quite narrow range between 0.1 and 0.4 per 1000 population ... Pockets of high prevalence have been found in small areas of central and northern Europe, in some segregated groups in North America and in some populations living on the margin of the industrialized world, such as indigenous peoples in Canada or Australia... Genetic isolation or selective outmigration of healthier individuals can explain such findings. However, it has been suggested that social disruption caused by the exposure of culturally isolated communities to western lifestyles, may have increased the risk of schizophrenia in vulnerable individuals."

Note 4: If shown to be the case, then logically, it would be instructive to investigate the circumcision status of mass murderers, rapists, child molesters (pedophiles) and other violent sexual offenders, who themselves may be victims of circumcision-induced trauma and resultant mental illness. As many jurisdictions still apply the death penalty for serious crimes, it becomes critically important that any contributory role of circumcision-induced schizophrenia be elucidated. If circumcision-induced trauma caused men to commit violent crimes, then one would expect that the rate of violent crime would be significantly higher in countries with high circumcision rates than in countries with low or negligent rates. Based on crime statistics a correlation between a nation's circumcision rate and the rate of rape, murder, or assault seems unlikely. To take one example, the circumcision and rape rates in selected nations are: Belgium (3% circumcision rate, 27.9% rape rate), the United States (56% circumcision 27.3% rape); New Zealand (1% circumcision, 25.8% rape); Israel (95% circumcision, 17.6% rape,) and the Philippines (93% circumcision, 6.3% rape.) Thus Boyle's speculation is unfounded.

Because of the lack of myelination of nerve fibers and the lack of descending inhibitory tracts in the spinal cord [99]-[101], the infant nervous system is particularly vulnerable to painful trauma such as unanesthetized infant circumcision [102]-[104]. See comment to [85] above.

Although the prefrontal cortex is immature in infants, functional differences associated with positive and negative environmental conditions are observed from the very outset [105]. Thus, infant circumcision may cause adverse changes to brain structure and function in the prefrontal cortex that impact adversely on a child's subsequent personality development. Likewise, the neurons in the brain's sexual pleasure center, denied sensory input from the free nerve endings and sensory receptors in the amputated foreskin during the critical developmental period, may atrophy and die or be reassigned to other functions. Based on Hubel and Wiesel's experiments at Harvard University into the deprivation of sensory input to the visual cortex of kittens during the critical developmental phase, similarly, neonatal circumcision might lead to an irreversible loss of perception of sexual sensation from the foreskin that would normally be received in the brain's sensory-receptive area [106]-[107]. Thus, even if sensory input from the amputated foreskin could somehow be restored later on (which it can't), the brain's sensory-receptive area could not perceive such sensation due to likely neuronal degeneration and death (and/or reassignment to other tasks).

Bossio found "minimal differences" in penile sensitivity, genital response, and sexual arousal.

Psychological research [108] demonstrates that there are wide individual differences in personality structure, constitution and the ability to cope with stress. Thus, a significant proportion of adult males who have a more susceptible personality make-up (i.e., those who are constitutionally predisposed towards higher negative mood states such as anxiety, stress, and depression) may suffer various degrees of debilitating PTSD due to ongoing unresolvable sexual frustration related to their circumcisions. Boyle failed to show that circumcision is related to sexual frustration or leads to PTSD.

This could lead to chronic elevations in negative moods and circumcision-induced learned helplessness—see Seligman's work [109]. **Seligman** discussed learned helplessness, a theory posing that an individual noticing a random relationship between his actions and resulting outcomes will respond with passivity and apathy. Boyle's use of this theory presumes that circumcision causes sexual frustration.

According to Stoynov (2014), "The removal of the foreskin causes deficiency of sexual sensation, incomplete sensual gratification during acts and emotional and sexual frustration. No matter what the circumcised do they are unable to achieve direct, complete and adequate natural satisfaction because they lack the receptors for it. The completion of gratification that they perceive is brain-generated. The sensorial deficit induces a psychological transformation or the circumcision complex that simulates the accomplishment of sexual gratification... The nervous tension that inadequate fulfilment accumulates in the psyche is inflammable... The circumcision complex makes up for an erotic insufficiency. Its compensations substitute and mask the lost pleasure." [110] **Stoynov**'s evidence for his assertions consisted of Wikipedia articles and a few anti-circumcision websites. Boyle's reliance on Stoynov is quite baffling, as the latter's allusion that "stereotypic Jewish greed" is a consequence of neonatal circumcision indicates an aberrant and unscholarly approach.

Circumcision causes irreversible physical, sexual, and neurological damage [19] [111] [112], **Taylor** [19] See comment to [19] above. **Taylor** [111] [112] merely cited Sorrells (see [126] below) and Cold.

heightened pain sensitivity at six months post-circumcision [78], See comment to [78] above.

and possible future psychosexual dysfunction [77] [113] [114]. See comment to [77] above.

Indeed, not only is the sexual satisfaction of the circumcised man likely to be adversely affected by the removal of his erotogenic foreskin, the sexual satisfaction of his female partner may be constrained also [115]-[117].

As Bensley and Boyle (2003, p. 595) pointed out, "While vaginal dryness is considered an indicator for female sexual arousal disorder, male circumcision may exacerbate female vaginal dryness during intercourse. O'Hara and O'Hara reported that women who had experienced coitus with both intact and circumcised men preferred intact partners by a ratio of 8.6 to one. Most women (85.5%) in that survey reported that they were more likely to experience orgasm with a genitally intact partner... Presence of the movable foreskin makes a difference in foreplay, being more arousing to the female. Women reported they were about twice as likely to experience orgasm if the male partner had a foreskin." [115]

Bensley [115] reported a 34% response rate, which the researchers admitted was an indication of a significant self-selection bias. Many respondents "distributed further surveys to their own friends and acquaintances," making the results even less representative of a general population. The study doesn't indicate whether a partner's age at the time of circumcision was tracked. Bensley accused circumcised men of "defensive denial of harm." In spite of all that, an equal number of women preferred that their next partner be circumcised as those who preferred that he be uncircumcised. O'Hara [116] violated standard survey methodology throughout. The survey was conducted over a period of several years. Respondents were recruited via an ad placed in an anti-circumcision newsletter. Survey questions featured prejudicial terms and were structured to elicit responses favoring uncircumcised sex. Some questions were added or reworded during the survey period. This author has written a paper that utterly refutes the validity of the O'Hara survey. The AAP Task Force reviewed Frisch [117]: "Male circumcision is rare in Denmark, rare enough that circumcised males are epidemiologic outliers, which may lead some of them to feel 'different,' leading to anxiety about sexual experiences with women who perceive a circumcised penis as abnormal. In addition, because many of the circumcised men had the procedure performed later in life, some likely for medical reasons, they are far from representative of a group of men circumcised as infants. It should be noted that the findings of the Danish survey contrast starkly to those of 2 randomized controlled trials from Africa, which are discussed in the AAP technical report."

Why might women with genitally intact partners prefer their sexual experiences? As Johmann (2003) has suggested, using colloquial language to make the point: "The basic problem for the average [circumcised] American man is that his penis has been so desensitized... that normal sexual intercourse with a female does not provide enough stimulation—hence the...man must work at it, banging away, trying to feel something." [118] Johmann failed to cite any empirical studies, and merely assumed that his own sexual experience applies to every other circumcised man. (For instance, he followed the above quote by claiming that circumcised men fantasize about anal sex.) Notably, he called circumcised men and circumcised penises (including his own) "mutilated" 50 times – including in the quoted paragraph, where Boyle concealed the emotive "M" word by substituting the "C" word.

4. Lifelong Harm and Sexual Disability

The foreskin is highly innervated erogenous tissue [17] [19] [111] [112], which following its removal, can no longer provide sensory input to the brain and/or to the autonomic nervous system [116]. Apparently [119] is misnumbered as [116]. Boyle may have failed to detect the hypocrisy of citing his own paper [119], in which he criticized Morris for citing Morris's own papers. At any rate, Boyle merely appealed to Cold and Taylor. See comments to [17] [19] [111] and [112].

The foreskin also provides cumulative erotogenic sensations via its gliding mechanism to stimulate the glans, and vice versa [120]. Without offering any evidence, **Scott** claimed that circumcision hinders the capacity of a penis to enter and glide inside a vagina.

Any sexual activity involving the physical manipulation of the foreskin is necessarily lost to circumcision [60] [121]. Earp [121] stated that circumcision eliminates any sensation and sexually-relevant functions associated with the foreskin. Earp failed to consider the possibility that skin uncovered by circumcision provides as much sexual sensation as the foreskin that is removed.

To claim then, as Morris and Krieger (2013, p. 2644) have, that "male circumcision has no adverse effect on sexual function, sensitivity, sexual sensation, or satisfaction" [122] defies logic and lacks common sense. Indeed, such a claim rests upon artificially narrow definitions of each of those terms [123] Notwithstanding Boyle and Earp's assertion that his claim "defies logic and lacks common sense," Morris finds support from Bossio, who reported "no significant differences ... with respect to genital response."

and contradicts the biological synergy of structure and function.⁵

Note 5 See Bossio et al. [124] for further critique of the Morris and Krieger opinion piece. In addition, Bossio et al. [179] stated that "Based on the Statement of Authorship in Morris and Krieger, it appears that the two authors alone composed the group who rated the articles in their review. According to the SIGN criteria that Morris and Krieger utilize, would their entire review in question not warrant a rating of 'low quality' based on the 'high risk of bias' introduced by the authors' well documented, unconditional support of the practice of circumcision?" **Bossio [124]** did criticize Morris: "Morris and Krieger do not report the results of this review collapsed across study quality. The conclusion they draw—that circumcision has no impact on sexual functioning, sensitivity, or sexual satisfaction—does not necessarily line up with the information presented in their review, which is mixed." Yet Bossio cautioned, "However, it is important to note that their article is a review of the literature and not a meta-analysis, thus, no statistical analyses of the data have been performed; instead, the article presents the authors' interpretation of trends."

Bossio [179] criticized Morris for misunderstanding the range and goal of her review. In her statement quoted in Note 5, Bossio observed that Morris graded studies as low quality with a "high risk of bias" based on a researcher's well-documented opposition to circumcision. She noted that the same standard could be used to grade Morris's study as low quality (based on his well-documented *support* for circumcision.) Clearly Bossio herself did not use that standard, as she confirmed several of the points Morris raised. And she agreed with his closing statement (specifying that a circumcision decision should be based on *parental choice* following *unbiased* education) and stated that "the current body of literature suggest that there are many benefits to circumcision." Bossio's response was quite supportive of Morris, contrary to Boyle's characterization.

In an online survey (N = 1369), Bronselaer et al. (2013, p. 820) reported that, "For the glans penis, circumcised men reported decreased sexual pleasure and lower orgasm intensity [compared to intact men]. They also stated more effort was required to achieve orgasm, and a higher percentage of them experienced unusual sensations (burning, prickling, itching, or tingling and numbness of the glans penis). For the penile shaft a higher percentage of circumcised men described discomfort and pain, numbness and unusual sensations." [125]

Bronselaer et al. (p. 820) concluded that, "This study confirms the importance of the foreskin for penile sensitivity, overall sexual satisfaction, and penile functioning. Furthermore, this study shows that a higher percentage of circumcised men experience discomfort or pain and unusual sensations as compared with the uncircumcised population. Before circumcision without medical indication, adult men, and parents considering circumcision of their sons, should be informed of the importance of the foreskin in male sexuality." Bronselaer conducted an unscientific online survey that recruited men via leaflets left at train

stations in various locations throughout Belgium. The 1,369 Belgian subjects included 310 circumcised and 1,059 uncircumcised men. The survey likely suffered from self-selection bias. Most circumcisions in Belgium would be performed for medical reasons. As the AAP Task Force concluded regarding a similar study in Denmark, the subjects likely would not be representative of a group of men circumcised as infants. Bronselaer admitted that "the sample is not representative of the general male population, but biased towards highly educated men." Furthermore, "many participants in their self-evaluation survey could not identify correctly whether or not they were circumcised."

Note 6: In a letter to the editor, Morris et al. [127] sought to criticize this study; however their analysis was subsequently rebutted by the author of the original research; see Bronselaer [128]. Rebutted? Morris noted that the self-selection bias of respondents "is highly likely to over-enroll opponents of male circumcision or men with sexual problems," a point that **Bronsalaer** completely ignored. Bronsalaer also ignored Morris's point contesting his assertion that Sorrells had "found a clear link between tactile penile sensitivity and sexual pleasure." In response to Morris's point that the proportion of circumcised respondents (22.6%) "greatly exceeds the proportion of men in European countries who are circumcised," Bronsalaer cited a WHO quote of the circumcision rates of "non-religious groups in the UK (15.8%) and the USA (12.8%.)" But the **actual** rate of non-religious circumcision in the United States is over 50%.

In an empirical study (N = 163) of fine-touch penile pressure thresholds in circumcised versus genitally intact men, Sorrells et al. (2007, p. 865) reported that, "The fine-touch sensitivity of 19 locations on the penis was measured using Semmes-Weinstein monofilament touch-test sensory evaluators…to create a penile sensitivity map." [126]

Sorrells et al. (p. 869) found that, "circumcision removes the most sensitive parts of the penis and decreases the fine-touch pressure sensitivity of the glans penis. The most sensitive regions in the uncircumcised penis are those parts ablated by circumcision. When compared to the most sensitive area of the circumcised penis, several locations on the uncircumcised penis (the rim of the preputial orifice, dorsal and ventral, the frenulum near the ridged band, and the frenulum at the muco-cutaneous junction) that are missing from the circumcised penis were significantly more sensitive." [126] Sorrells admitted that the study was subject to self-selection bias and demographic differences; the 50 uncircumcised men were younger than the 150 circumcised men and were from different ethnic backgrounds. Sorrells measured monofilament stimulus, not the dynamic stimulus that occurs during sexual activity. These findings contrast with Bossio, who found no significant difference in penile sensitivity or sexual response to stimuli.

Note 7: Likewise, Morris and co-authors attempted to criticize the findings of Sorrells et al. [126]. Again, they were rebutted in a response by Young [129]. The misnumbering of [126] (the Sorrells study) is another apparent error, as the **Waskett-Morris** letter is not among the footnotes. It appears that **Young** [129] misunderstood Waskett's point about the flawed Sorrells recruitment process, which produced a sample that was likely unrepresentative of the target population. Young criticized the use of a Williamson study for "a usable response rate of only 54%," after touting an O'Hara study with a 48.9% response rate. Regarding the effect of mechanical stimulation on sexual pleasure, Young again pointed to the deeply flawed O'Hara study. (See comment to [116] above.)

As Frisch (2012, p. 313) has noted in response to similar criticism of his own findings regarding adverse sexual effects of circumcision: "[As] in critical letters to the editor following other recent studies that failed to support their agenda, Morris et al. air a series of harsh criticisms against our study. As seen, however, the points raised are not well founded. It seems that the main purpose, as with prior letters, is to be able

in future writings to refer to our study as an 'outlier study' or one that has been 'debunked', 'rejected by credible researchers' or 'shown wrong in subsequent proper statistical analysis'.... As these critics repeatedly refer to Morris's pro-circumcision manifesto as their source of knowledge, their objectivity must be questioned." [130] Frisch speculated on the motives of Morris and other circumcision advocates, apparently failing to realize that similar speculation can be used to dismiss criticism by himself and his anti-circumcision allies. It's disappointing to find both sides of the circumcision debate repeating ad hominem accusations. Perhaps the strong emotions elicited by the subject matter brings out the worst in otherwise rational scholars. One hopes that Frisch, Boyle, and others involved in this debate will learn to set aside personal animosities and stick to a discussion of the evidence.

Other empirical evidence reveals severe sensory neurological damage from male circumcision. For example, Podnar [131] compared elicitation of the penilo-cavernosus reflex among circumcised and genitally intact men. He reported (2011, p. 582) that, "It is known that foreskin, but not glans penis, contains a high density of fine-touch mechanoreceptors. Clinically the penilo-cavernosus reflex provides information on function of the sacral nerves. The study demonstrated that in the majority of circumicised men this reflex cannot be elicited clinically..." [131]

Podnar [131] found that while the penilo-cavernosus reflex was elicited clinically in 92% of genitally intact men, it could only be elicited clinically in 27% of circumcised men, providing strong evidence of a statistically significant (p < 0.001) diminution in sexual response in circumcised versus genitally intact men. Podnar (p. 584) further commented that, "the penilo-cavernosus reflex is assumed to have the physiological function of... being part of the ejaculation process... [and may account for the] difference in sexual function between these two populations of men". [131] Podner examined 75 patients; 31 circumcised, 15 with retracted foreskin, and 29 with unretracted foreskin. All were referrals based on bladder, bowel or sexual dysfunctions. Subjects suffering from various medical conditions may not be representative of the general male population. The subjects were Slovenian, where, Podner admits, a "low percentage of circumcised men contrasts with the situation in many other countries, notably USA, Israel and Muslim countries, where infant male circumcision is the most common medical procedure." Podner didn't record age of circumcision. Nor did Podner consider the effect of a urinary or sexual condition. The AAP Task Force noted that the study "did not evaluate implications for sexual function or pleasure."

Psychosexual difficulties including premature ejaculation (PE) among young men [132], Shortly after criticizing Morris for relying on Morris's letters, Boyle now relies on his own letter.

and lack of sexual sensitivity, delayed ejaculation, and erectile dysfunction among older men [113] [134] [135], Apparently [133] is misnumbered as [113]. **Hammond [133]** cited a survey of 313 men that was conducted by the anti-circumcision group NO-HARMM. The respondents were self-selected and data was collected by self-reports, which <u>can be unreliable</u>. It doesn't appear that any attempt to include men who might report positive experiences was attempted.

as well as long-lasting PTSD in some cases appear to be pervasive in circumcising cultures [135]-[138]. Neither Boyle [135] nor Goldman [136-138] provided any evidence that a significantly higher percentage of circumcised men exhibit personality effects suggesting PTSD than the percentage of uncircumcised men who exhibit such traits. Boyle [135] cited Rhinehart (see comment to [77] above,) as well as studies in which babies weren't provided anesthesia. There is little research on the ability of adults to recollect traumatic events that occurred during the first six months of life. A 2013 BrainConnection.com article reported that "college students could recall events even if they were only 2 years old when the experiences occurred. Moving and a family member's death seemed to emerge from the haze of amnesia

around the more traditionally accepted age of 3." However "there were no verifiable reports for recollection of events occurring before age 2." **Goldman [136]** did not factually assert that PTSD appears more prevalent in circumcising cultures than in non-circumcising cultures. Rather, he merely speculated that "*if* circumcision has long-term psychological effects related to PTSD, then [American] society has been profoundly affected by [the procedure]." **Goldman [137]** admitted that "it is very difficult to distinguish [the supposed effects of circumcision trauma] from personality traits or effects resulting from other causes." Possibly frustrated by the lack of evidence for circumcision trauma, he accused circumcised men of denying or repressing their feelings, but offered no evidence for *those* claims. **Goldman [138]** didn't address PTSD, but accused physicians who perform routine circumcisions of using "psychological defence mechanisms to deny some of the evidence against circumcision."

Dias et al. (2014, p. 122) reported that following adult circumcision, "there was an increase in frequency of erectile dysfunction (9.7% versus 25.8%, p = 0.002) and delayed orgasm (11.3% versus 48.4%, p < 0.001)." Dias (139) conducted telephone surveys of men with sexual dysfunctions who were circumcised as adults, and cannot address the effects of newborn circumcision. (The full study is not available online.)

Also, Kim and Pang (2006, p. 619) have reported (N = 373) that, "There was a decrease in sexual enjoyment after circumcision, indicating that adult circumcision adversely affects sexual function in many men, possibly because of complications of the surgery and a loss of nerve endings." [140] Kim surveyed men circumcised as adults, and cannot address the effect of infant circumcision on sexual pleasure. Kim did not distinguish between men circumcised for therapeutic reasons and men circumcised for elective reasons. Men circumcised for medical reasons might have other factors that contribute to a decrease in sexual pleasure. Nevertheless, 80% of Kim's subjects reported no deterioration in their sex lives.

While acknowledging many factors are involved in the etiology of erectile dysfunction (ED) which impacts adversely on the psychosocial health and quality of life (QoL) of sufferers and their sexual partners, it is unlikely to be a coincidence that in circumcising cultures such as the USA, 52% of middle-aged men suffer from varying degrees of erectile dysfunction, whereas in non-circumcising cultures such as Germany, the prevalence is only 19% (see Wespes et al., 2012, p. 4) [141]. Boyle compared two different studies, one conducted in Boston, the other in Cologne. The Cologne researchers noted that "different definitions of ED, age distributions and concomitant medical conditions, as well as methodological differences, may explain much of the variance in reported prevalence rates." Shabsigh concurs: "The large variation in reported prevalence rates reflects differences in methodology, definitions of ED, regional and cultural perceptions of ED, age, and extent of concomitant medical conditions. The prevalence rates for mild and severe ED has been reported as 35% in the United States, 26% in Finland, 21% in Italy, 12% in France, and 11% in Spain." These figures do not indicate a correlation between circumcision and erectile dysfunction.

Moreover, in a study (N = 300) of alexithymia (a personality trait disorder associated with difficulty in emotional identification and expression)—measured via the 20-item Toronto Alexithymia Scale—in circumcised versus genitally intact males [142], Bollinger and Van Howe (2011, p. 184) reported that circumcised men were, "4.53 times more likely to use an erectile dysfunction drug" than genitally intact men [143]. Bollinger surveyed 236 circumcised and 64 uncircumcised men. Subjects visited a men's issues website and took a self-report scale that measures alexithymia. Bollinger combined the results of 192 men circumcised during infancy with 44 men circumcised at older ages and claimed that circumcision age wasn't a factor. The researchers admitted that their results were skewed by self-selection bias and that a "complex multi-factorial approach" might better measure the effects of "circumcision trauma." Boyle ignored Bollinger's caveat not to extrapolate the results "to the general population from this preliminary investigation, but instead use it as a springboard to further investigation."

In addition, Wespes et al. [141] reported (p. 32) that the highest prevalence of PE was found in the USA (31%) where circumcision is common, whereas in France (a non-circumcising culture), the lifetime prevalence was only 15%, suggesting that circumcision itself is a causal determinant of premature ejaculation. See comment to [141] above.

As Boyle (2012) commented, "Is it not more likely that it is precisely the lack of neurological control over the timing of ejaculation resulting from the severed neuronal circuitry after circumcision that is a major causal factor in PE?" [132] No. It is more likely that Boyle suffers from confirmation bias that blinds him to the explanations offered in the above comments. He would have been better advised simply to acknowledge that "many factors are involved in the etiology of erectile dysfunction" and leave it at that.

Indeed, Bollinger and Van Howe [143] found that young circumcised men were 2.56 times more likely than genitally intact men, to suffer from premature ejaculation—see also [144]. Bollinger [143] See comment to [143] above. Tang [144] surveyed 207 men from Malay (97), China (57), and India (53) who visited a Malasian medical clinic for treatment of acute conditions or chronic disease follow-up. While circumcision is common in Malaya, the circumcision rate in China ranges from under 3% to 20%. The circumcision rate in India is roughly 22%, (based on an estimated 120 million circumcised men in 2004 out of a population of 550 million males.) Since the vast majority of circumcised men in the three Asian countries are Muslim, cultural factors may affect the results. Furthermore, based on sociodemographic characteristics, 30% of the subjects were smokers, 38% had high blood pressure, 30% had high cholesterol, and 28% had diabetes. Subjects suffering or recovering from various medical conditions may not be representative of the general male population. And it's unclear what percentage of men were circumcised to correct a medical condition. Moreover Tang cautioned that further studies are necessary to determine whether there exists an association between circumcision and erectile dysfunction.

At least 10 studies have been published comparing PE prevalence in genitally intact versus circumcised men [117] [139] [144]-[151]. See comments to [117] [139] and [144] above. Laumann [145] was based on interviews with 1,511 men in the U.S. Laumann reported that 28% of circumcised men and 31% of uncircumcised men ejaculated prematurely. Laumann further reported that "almost every dysfunction is slightly more common among men who have not been circumcised. In particular, the likelihood of having difficulty in maintaining an erection is significantly lower for circumcised men." Masood [146] surveyed 150 men in the U.K. who were circumcised for benign disease. The response rate was just 56%. Men circumcised as adults for medical reasons cannot provide insight on the effect of newborn circumcision on PE. That said, Masood reported that "penile sensation improved after circumcision in 38% but got worse in 18%" and "overall satisfaction was 61%." Richters [147] interviewed more than 10,000 men via phone in Australia. Although 26% of circumcised men and 22% of uncircumcised men reported PE at least one month in the previous year, Richters found that the "difference was not significant" after adjusting for age. Richters also reported that uncircumcised men were more likely to report physical pain (62% vs 43%) and trouble maintaining an erection (62% vs 56%.) Krieger [148] studied 2,784 men in Kenya. Half were circumcised as part of the study. This study cannot address the effect of newborn circumcision in the U.S. Nevertheless, Krieger "found no significant difference between circumcised and uncircumcised men with respect to the frequency of erectile dysfunction" and concluded that "adult male circumcision was not associated with sexual dysfunction. Circumcised men reported increased penile sensitivity and enhanced ease of reaching orgasm." Ferris [149] conducted telephone interviews with 4,290 Australian men. Ferris found "no association between lack of circumcision and erection difficulties..." The full study wasn't available online. Son [150] conducted a self-report online survey of 283 men in Korea, with a very low 24% response rate. Circumcision age was not tracked, and men who participate in online surveys may not

be representative of the general male public. Nevertheless, Son reported "circumcision status showed no difference in the PE and non-PE groups in terms of ED..." **Shaeer [151]** reported that "the following risk factors were **not** accompanied by a statistically significant higher prevalence of PE: masturbation, low desire, **circumcision**, dysuria... Circumcision showed no correlation with PE. This is in accord with other studies that denied an effect for circumcision in the Middle East, Korea, Netherlands, United Kingdom, Spain, and the USA, though not in Turkey."

To review, not one of the ten studies Boyle cited would address the effect of **newborn** circumcision on premature ejaculation. Six of the studies reported no significant difference for PE. And four studies reported that circumcised men experienced greater sexual performance, enhanced pleasure, or reduced sexual dysfunction than uncircumcised men.

A meta-analysis based on all 10 studies (Van Howe [152]-Personal communication, 5 July, 2014) found a strong trend that circumcised men were more likely to suffer from premature ejaculation (OR = 1.15; 0.93 to 1.41). Van Howe is not available online.

In addition, Michetti et al. [153] reported increased alexithymia among men with ED problems.⁸ **Michetti** didn't investigate circumcision.

Note 8: Even by October 2001, it was estimated that more than 20,000 circumcised men were trying to undo at least some of the damage caused by circumcision, using various "foreskin restoration" methods—Reiss [154] (p. 202) cf. Bigelow [13]. Evidently, many circumcised men feel so distressed about having been subjected to involuntary genital cutting as non-consenting infants or children, thereby depriving them of normal sexual responsivity, that they feel compelled to endure years of difficult and sometimes painful penile skin-expansion "foreskin restoration" efforts. Some passages in the preceding section have been adapted from Boyle [119]. It's unclear how this information demonstrates a correlation between circumcision and erectile dysfunction. Boyle seems to assume that these men sought to correct an actual sexual dysfunction related to circumcision. He may not have considered two plausible alternate possibilities: that (a) some of the men suffered a dysfunction that they *incorrectly* attributed to circumcision, and (b) some men, relying on inaccurate information, *perceived* that they suffered a sexual dysfunction — a self-fulfilling prophecy.

5. Post-Traumatic Stress Disorder (PTSD)

According to Boyle et al. (2002, p. 332), "A traumatic experience is defined in DSM-IV as the direct consequence of experiencing or witnessing of serious injury or threat to physical integrity that produces intense fear, helplessness or (in the case of children) agitation (American Psychiatric Association, 1994). The significant pain and distress described earlier is consistent with this definition. Moreover, the disturbance (e.g., physiological arousal, avoidant behavior) qualifies for a diagnosis of acute stress disorder if it lasts at least two days or even a diagnosis of post-traumatic stress disorder (PTSD) if it lasts more than a month. Circumcision without anesthesia constitutes a severely traumatic event in a child's life." [135] The current APA clinical definition of trauma doesn't include a violation of physical integrity: See also [135] above and [155] below.

In the recently updated DSM-5, the very first criterion listed for a diagnosis of either Acute Stress Disorder (duration less than one month) or longer-lasting PTSD is "Exposure to actual or threatened death, serious injury, or sexual violence..." [155] There are two distinct periods of possible psychological trauma that in some cases may result in prolonged PTSD: the first is in response to the physical trauma of the actual

genital cutting itself; and the second during adolescence or adulthood, in response to the cognitive realization on the part of the individual that he has been exposed to a permanent, irreversible alteration in sexual sensation/performance as a result of his non-consented circumcision. The current **DSM-5** indicates that the exposure must involve "directly experiencing the event." As noted in the comment to [135], there are "no verifiable reports for recollection of events occurring before age 2." Thus a procedure for which the man has no actual recollection may not qualify for inclusion under the DSM-5 definition of PTSD. As for Boyle's assertion that a belief "on the part of the individual that he has been subjected to a permanent, irreversible alteration," the DSM-5 cautions that "actual or threatened death must have occurred in a violent or accidental manner."

Newly circumcised boys may suffer sleep disturbances with periods of abnormally prolonged NREM sleep, increased wakefulness and inability to sleep, difficulties in feeding, and interference with the mother-infant bonding [20]. Hill cited five studies and one anonymous magazine column that described the behavior of neonates immediately after circumcision without anesthesia, but did not discuss behavior of neonates who received pain relief for the procedure. Hill also cited Howard, who reported observations for 21 neonates circumcised with no pain relief and 23 circumcised with acetaminophen. Howard only measured the effectiveness of acetaminophen for the Gomco method, and did not test any other pain relief method or circumcision method. Howard reported "significant improvement ... in the group of neonates who received acetaminophen 6 hours postoperatively. It thus seems that acetaminophen may provide some analgesia in circumcised neonates after the immediate postoperative period."

Also, in a large scale study (N = 3253) in the Philippines, Ramos and Boyle [156] found that almost 70% of boys subjected to ritual circumcision ("Tuli") and 51% of boys subjected to medical circumcision satisfied the DSM-IV criteria for a diagnosis of PTSD, as measured via the Watson et al. PTSD-I scale [157]. Ramos studied effects of adolescent circumcision, and cannot address effects of infant circumcision. There's no indication that the Filipino boys received any mental health care that might have helped them better cope with emotional distress. Given the lack of a control group of uncircumcised boys, the study is unusable.

According to Menage [158], circumcised men who have become aware that their sexual dysfunction may be at least partially a consequence of having been circumcised during infancy or childhood, have reported feelings of helplessness, abuse, frustration, and of being violated. **Menage** reported on a survey of eight men, two of whom were circumcised at age 7, and another at age 3. Seven were from the United Kingdom, where circumcision is rare. She reported that "6 men fulfilled the diagnosis for PTSD." One of the 6 had seen a friend killed in an accident, while another had witnessed a suicide. Menage didn't clarify how many of the 6 had been circumcised as newborns and had not witnessed the death of another person. Menage cited Goldberg (see comment to [136] above) and the survey by the anti-circumcision group NO-HARMM (see comment to [133] above.)

Moreover, as Bensley and Boyle (2001, p. 215) reported, "Psychological consequences as a result of...surgery are well recognized in the medical literature (McGuire & Parkes [159]). Potential effects of loss of body parts are: 1. Grief for altered body image or function, or both. 2. Anxiety, depression, and sexual problems. 3. Avoidance of or obsessive preoccupation with the loss." [113] Boyle used ellipses to alter this quote from his paper. He and Bensley [113] actually wrote, "Psychological consequences as a result of amputative or mutilative surgery are well recognized in the medical literature." MaGuire and Parkes [159] studied subjects coping with the recent or impending loss of previously functioning limbs. In response to this author's email, Parkes replied: "It is not necessarily the case that people will grieve for the loss of something that they never had or lost when too young to know they had it. Thus children born with congenital deformities grow up with this body as their norm. Only when they are brought face to

face with others who have what they lack do they suffer a mixture of distressing emotions that may include grief, shame, anger and much else. I have no recollection of my circumcision that took place, on medical advice, shortly after my birth. I am unaware of any feelings of loss, mutilation or inferiority as a result and I have no need to grieve." Relating the findings of this study to circumcision is a stretch.

While many circumcised men seem to "have no conscious issue" with being circumcised, it is possible that they have suffered a deep psychological trauma that is repressed within the unconscious psyche [20]. Hill didn't address the notion that circumcised men repress a "deep psychological trauma."

Indeed, many women who have undergone even extreme forms of female genital cutting/FGM report being "satisfied" with their sex lives [160]; however, this may be due in part to the fact that they lack adequate knowledge of the relevant genital anatomy (such as the innervations and functions of the clitoris), and therefore may not know what it is that they are "missing" [121]. A further explanation involves awareness of cultural values. Tribal views are often based on a culture where female sexuality is repressed. In Somali culture, "women are afraid of their sexual impulses while Western women welcomed it... For Somali infibulated women, the sexual impulses are deplorable and shameful." Somali women practice FGM in order to thwart unwanted sexual impulses.

A similar phenomenon may occur in the case of circumcised men, who typically know very little about the anatomy and functions of the penile foreskin—for further discussion, see Earp and Darby [123]. The analogy fails because the clitoris and its hood provide essential function and pleasure in female sexuality. Yet Boyle has failed to demonstrate that the foreskin provides essential function and pleasure in male sexuality. Earp speculated that "if man has retained his foreskin ... then it is unlikely he will want to give it up." Yet a 2015 YouGov survey reported that 29% of uncircumcised men wish that they were circumcised, compared with just 10% of circumcised men who wish that they weren't. Presumably those 29% were aware of their foreskin and its functions, yet they don't value it as much as Earp thinks they should.

Finally, within psychological theory, it is well known that individuals who have been subjected to irreversible harm have a tendency to "rationalize" (or even outright deny) the harm, in an attempt to reduce the discomfort associated with cognitive dissonance (see discussion below).

Begging the question: assumes that circumcision causes "irreversible harm."

6. Long-Term Psychosexual Harm: The Importance of Constitutional Predisposition

In their study into alexithymia, a personality construct characterized by the sub-clinical inability to identify and describe one's own emotions, Bollinger and Van Howe (2011, p. 184) reported that, "circumcised men had age-adjusted alexithymia scores 19.9 percent higher [than] intact men." [143] This suggests that circumcised men are more likely than genitally intact men to exhibit dysfunction in emotional awareness, impacting adversely on their social attachments and interpersonal relationships.

See comment to [143] above.

Evidently, circumcision sometimes may result in long-term adverse psychosexual consequences among post-pubescent males [135] [161]. Boyle [135] cited several studies already addressed. (See comments to [67] [76]-[78] [86] [133] [134] [136] [137] [156] [159] above.) Boyle also cited **Jacobson**, who didn't study effects of newborn circumcision. Rather Jacobson found a correlation between birth complications and subsequent suicide of both males and females. **Johnson [161]** merely cited Boyle [135] and is redundant.

However, the importance of individual differences in pre-existing psychological profiles must be recognized: circumcision—no matter how traumatic—will not affect all men in precisely the same way. Indeed, empirical psychological research suggests that there are wide individual differences in personality structure, constitution and the ability to cope with stress [108] [162]. Accordingly, those who are constitutionally predisposed to respond to traumatic experiences with heightened negative mood states such as anxiety/neuroticism/depression [163] [164], may experience more negative psychosexual outcomes than those who are not so constitutionally predisposed. Begging the question: assumes that newborn circumcision is a traumatic experience. Even if, for the sake of argument, one were to accept that assumption, Boyle provided no evidence that — within a group of men identified as predisposed to respond to traumatic experiences with heightened negative mood states — circumcised men are more likely than uncircumcised men likely to exhibit negative psychosexual outcomes.

For example, it is possible that psychologically vulnerable individuals who come to realize psychologically vulnerable individuals who come to **believe**

that their sexual sensation, function and/or satisfaction may have been permanently diminished as a consequence of their circumcisions (i.e., unwanted removal of erotogenic tissue) [17] **Cold** speculated on the effects of circumcision but did not show that the procedure permanently diminishes sexual function, sensation, or satisfaction. See also comment to [17] above.

may be more likely to experience elevations in negative moods such as sadness, depression, anxiety, stress, frustration, anger and hostility [108] [165]. In some cases, this distress may result in unrelenting, psychological torment and PTSD throughout a man's life [166]. Bossio reported that "a proportion of circumcised men ... indicated high distress about their circumcision status. Furthermore, negative attitudes towards one's circumcision status—as opposed to circumcised status per se was related to worse body image and sexual functioning." In other words, circumcision didn't physically diminish a man's sexual sensation or function. The **negative attitudes** that some men hold regarding their circumcision status may cause a self-fulfilling prophecy.

In a survey of the long-term consequences of neonatal circumcision among 313 "circumcised but unhappy" men, Hammond (1997, p. 126) reported that, "96.2% suspected or were confident that circumcision had resulted in a reduction of normal male capacity for sexual response and pleasure. The percentage breakdown of categories of circumcision-caused harm is as follows: Sexual Harm: 84%; Emotional Harm: 83.1%; Physical Harm: 81.5%; Psychological Harm: 75.1%; Low Self-Esteem: 74.4%; Problems with Intimate Relationships: 44.7%; Problems with Addictions/Dependencies: 25.6%. A remaining 13.1% of respondents variously attributed their non-intact state to their problems with masculine identity, self-confidence, and fear of doctors." [133] See comment to [133] above.

In an expanded survey (N = 546), Hammond (1999, p. 87) subsequently reported that, "Respondents reported profound shifts in how they perceived their genitals, themselves, and the society that imposed such a loss. Some revealed violent attitudes toward their circumciser and/or suicidal/homicidal feelings... Emotional distress, manifesting as intrusive thoughts about one's circumcision, included feelings of mutilation (60%), low self-esteem/ inferiority to intact men (50%), genital dysmorphia (55%), rage (52%), resentment/depression (59%), violation (46%), or parental betrayal (30%). Many respondents (41%) reported that their physical/emotional suffering impeded emotional intimacy with partner(s), resulting in sexual dysfunction. For some, lack of compassion from parents, siblings or friends fostered bitter interpersonal conflict or alienation. Almost a third of respondents (29%) reported dependence on substances or behaviors to relieve their suffering (tobacco, alcohol, drugs, food and/or sexual

compulsivity). Generally, men have no acceptable outlet for serious feelings about circumcision. Predictably, 54% of respondents had not sought help for their suffering. The reasons given included: thinking no recourse was available (43%); embarrassment (19%); fear of ridicule (17%); and mistrust of doctors (11%)." [134] This "expanded survey" appears to be merely a continuation of the online survey conducted by the anti-circumcision group NO-HARMM. See comment to [133] above.

While these surveys suggest that a substantial cohort of circumcised men may be "suffering in silence" [121], According to a 2015 YouGov survey, just 10% of circumcised men wish that they had not been circumcised (compared with 29% of uncircumcised men who wish that they had been.) Presumably some of those 10% were not suffering, but merely wish that they had been able to make the decision for themselves.

the fact that a large number of circumcised men have reported no physical or psychosexual harm suggests that some men may have no conscious awareness of problems associated with circumcision (as discussed above). More plausibly, the lack of reported harm indicates a lack of actual harm.

Other men may have insight into their circumcision-induced losses, but may exhibit little, if any, concern about their situation, raising the possibility of alexithymia [143], or perhaps even resilience [167]. Begging the question: assumes that circumcision reduces sexual function or pleasure. If the assumption is inaccurate, then there is no "situation" requiring resilience. Also see comment to [143] above.

7. Who Promotes Infant Circumcision? The Possibility of Harm Denial

Circumcised men may ask: "Who are you to tell me that I am damaged? I am just fine and sex couldn't be better." However, as highlighted in Freudian psychoanalytic theory, psychically wounded individuals may often use defence mechanisms such as denial and rationalization to justify their wounding [168] [169], Denial is a closed circle argument that is based on the assumption that the statement being denied is true. "A patient regarded by his psychoanalyst as 'in denial' about his sexual orientation may be viewed as confirming he is homosexual simply by denying that he is; and if he has had sex with women, he may be accused of trying to buttress his denials." In other words, there is no way the patient could convincingly demonstrate his heterosexuality to the analyst. In the case of circumcision, the claim that a man is in denial about being harmed assumes that he has been harmed. If he says, "I am just fine and sex couldn't be any better," then Goldman, as the psychoanalyst, will decide that the man is using denial as a coping mechanism. He won't explore the consequences of taking a man at his word, perhaps because the consequences interfere with Goldman's narrative. The game is: "heads I win, tails you lose."

as would be expected from cognitive dissonance theory [170]. Such coping strategies may help to minimize any resultant hedonically unpleasant psychological impact. A more plausible explanation is that a scholar suffering from an anti-circumcision confirmation bias cannot accept the reality that the vast majority of circumcised men who report that they are fine, that they suffer no adverse physical or psychological effects, and that sex couldn't be better — are in fact fine. So this researcher employs logical fallacies (like begging the question) and closed circle arguments (like denial and repression) in order to explain away the evidence that contradicts his agenda.

Consistent with this view, it has been argued that infant circumcision may be largely promoted by circumcised men who are unconsciously seeking to perpetuate the procedure as a compensatory mechanism for their own unresolvable psychic wounding [171]-[173]. Boyle [171] cited his own speculative letter. Muller [172] admitted, "One of the limitations of the study was the fact that only

Saskatchewan physicians were surveyed. The fact that elective circumcisions are not covered by the provincial health plan might have had an influence on the opinions of some of the physicians. It might have been useful to have added this variable as one of the possible factors that influence a physician's position on circumcisions." Another plausible explanation is that medical views are partially related to a physician's knowledge of how circumcision affects sexual activity. A physician with a satisfying sex life, and who is circumcised or whose partner is circumcised, would have personal experience supporting studies that show that the procedure doesn't harm sexual performance or pleasure. A physician who is uncircumcised or whose partner is uncircumcised might assume that circumcision reduces sexual pleasure. Spilsbury [173] offered several possible explanations, none of which related to circumcision enrollment as a mechanism to deal with a psychic wounding. Neither Muller nor Spilsbury argued, as Boyle implied, that physicians promote circumcision to compensate for some personal psychological condition.

Such men may resort to the psychological defences of denial, rationalization, and projection to justify its continuance [174]. Begging the question: Boyle again assumes that infant circumcision is harmful, that circumcised men have been harmed, and that these psychologically damaged men need to erect defense mechanisms to cope with the alleged harm.

In this regard, Bigelow [13] has discussed the "adamant father syndrome" whereby a particular subset of circumcised fathers, against all rational discussion, vehemently insist that their own newborn sons also be subjected to the sexual-reduction surgery. Begging the question: assumes that circumcision of an infant is an irrational decision and that circumcision reduces a man's sexual abilities.

Moreover, in the USA context, the sheer ubiquity of circumcision suggests that any altered personality and/or behavior of circumcised males may tend to be viewed as "normal" [20]. Hill cited dozens of studies addressed elsewhere in this analysis. Hill did not address the idea that altered behavior of American men may be viewed as "normal." Nevertheless, following Boyle's reasoning, it would stand to follow that other countries with high circumcision rates (Israel, other Middle Eastern nations, South Korea, the Philippines) would also experience high levels of negative alterations to personality and behavior, that such societies view as "normal." In order for Boyle's point to stand, these personality and behavior alterations would be significantly less common in non-circumcision cultures (Europe, South America, Australia, New Zealand), which would consider them "abnormal." Yet Boyle offered no evidence of a correlation between national circumcision rates and these (unspecified) behavioral alterations.

Accordingly, circumcision practitioners may not have given much thought to the trauma and potential long-term adverse psychosexual consequences of the surgery Begging the question: assumes that circumcision during infancy is traumatic and causes long-term adverse psychosexual consequences.

they are paid to carry out. Instead, they may perform circumcisions as a matter of course, both because of parental/societal demand and the concomitant financial reward. Boyle provided no evidence to support his speculation that greed, rather than patient health, motivates physicians. Circumcision rates vary by state. One doctor told this author that his state Medicaid system pays about \$40-50 per circumcision, and that his costs include \$50 per circumcision for equipment outside the hospital and to cover the salary to a nurse practitioner.

Careful research has demonstrated that circumcision status plays a major role in whether doctors are in support of circumcisions or not [171]. **Boyle**'s own "careful research" [171] consisted of the following argument. Professors Ronald Gray and Aaron Tobian [who specialize in sexual and reproductive health at a renowned medical school ranked #4 in the 2015 QS World University Rankings] live in the United States,

making them "products of circumcising cultures." Their analysis of the risks and benefits of circumcision differs from policy statements issued by two foreign medical associations [but align with policy statements issued by other medical associations.] The only explanation for this conundrum is that these professors are "blinded by their own circumcision-generated emotional needs," causing them to write an article that "exudes Freudian defenses of denial and rationalization." Curiously, Boyle seems to expect that readers will take this irrational, self-serving dismissal seriously.

In a survey of 572 primary care physicians, Muller (2010, p. 227) reported that, "Although most respondents stated that they based their decisions on medical evidence, the circumcision status of, especially, the male respondents played a huge role in whether they were in support of circumcisions or not. Another factor that had an influence was the circumcision status of the respondents' sons." [172] See comment to [172] above.

This is consistent with the view that those who have been subjected to circumcision themselves may need to "rationalize" what happened to them by appealing to supposed "health benefits" that may follow from the surgery. Such a view may flourish in the fevered imagination of an anti-circumcision activist, frustrated that his flawed studies haven't been universally accepted. But it lacks empirical evidence.

Also, parents who had subjected their sons to circumcision were clearly in favour of the procedure. To paraphrase the comment to [172] above: Couples that include a circumcised partner with a satisfying sex life would have personal awareness that the procedure doesn't harm sexual performance or pleasure.

Some circumcised men may also feel the compulsion to repeat the trauma Begging the question: assumes that circumcision causes trauma.

by imposing genital cutting on others, including defenceless babies and children [175]. A more likely explanation is that parents prefer to have their sons circumcised for the medical benefits. And because they realize, as the World Health Organization stated, that the procedure is "simpler than that performed on older boys and men... Healing is quicker and complication rates are lower."

Disturbingly, as pointed out by Forbes (2015, p. 263), a small proportion of fervent circumcision advocates may well have a psychopathological erotic circumfetishism disorder [176]. Forbes mentioned in passing "'circum-fetish' groups with links to child pornography," but provided no details, examples, or statistics.

Note 9: See: http://www.croydonadvertiser.co.uk/Croydon-circumcision-campaigner-caught-child-porn/story-15866127-detail/story.html (Retrieved 25 March, 2015); <a href="http://www.croydonadvertiser.co.uk/Upper-Norwood-clergyman-die-bars-admitting-string/story-to-the-t

21666915-detail/story.html (Retrieved 25 March, 2015).

The articles report the 2012 arrest and 2014 guilty plea of the British head of a pro-circumcision group. The pedophile, who was also a Catholic clergyman, was to be sentenced for possession of three child porn videos and five sexual offenses against boys as young as 11. There is no indication that the videos depicted a circumcision procedure, nor that the perpetrator derived sexual arousal from the act or thought of circumcision. Even if that were the case, this evidence condemns one individual, not a "proportion of circumcision advocates." This may be a case of Boyle poisoning the well by trying to instill in readers the fear that a circumcision proponent may pose a threat or have some ulterior motive other than the best interests of children.

8. Conclusion

As Bollinger (2014) has pointed out, "No psychological study has ever concluded that circumcision is beneficial to a boy's psyche

Straw man: No one has suggested that an improved psyche is among the benefits of circumcision.

[whereas] more than one hundred scientific studies [have] found circumcision [to be] painful, traumatic, or psychologically harmful to men and boys." [177] Confirmation bias might cause a researcher to accept without pause any and every study that seems to support his agenda. This author asks merely that readers review the analysis, follow the links to the source material, and decide for themselves whether Boyle has provided one hundred studies – or even ten studies – that support his assertions.

Men who are constitutionally predisposed toward higher levels of emotionality [105] are more likely to suffer various degrees of sadness and unhappiness due to ongoing unresolvable sexual frustration and the realization of irreversible, circumcision-induced sexual deficits (in sensation, performance, and satisfaction), leading to chronic elevations in negative mood states. Begging the question: assumes that men circumcised during infancy have sexual deficits in sensation, performance, and satisfaction; that circumcised men have greater sexual frustration than uncircumcised men; or that circumcised men suffer greater degrees of sadness and unhappiness — and more chronic elevations of negative mood states — than uncircumcised men.

However, it should be noted that the emotional pain that some circumcised men experience must not be equated with psychological illness. Anger, grief, and resentment are normal emotions, not illnesses, although they are negative states of mind that are aversive and which individuals typically wish to avoid. Thus they can be counted among the psychological harms of circumcision in men who experience them. While anger and grief can be normal emotions, in this case they may be caused or augmented by **the promotion of false and misleading information**. A man who has an accurate knowledge of the effects of circumcision (as opposed to unproven and often exaggerated allegations of harm) may not experience understandable, but inappropriately negative emotions. The fact that an uncircumcised American man is three times more likely to regret his circumcision status than a circumcised American man may suggest that a strong negative feeling is not a normal, healthy response to one's own circumcision.

With the advent of the internet, men who are "circumcised but unhappy" have the opportunity to communicate with thousands of other men who also feel aggrieved about having been subjected to involuntary genital surgery in infancy or childhood. As awareness of the physical and psychosexual harm that may result from circumcision continues to grow, it may become increasingly difficult for US doctors to deny that the non-therapeutic genital cutting of males is a form of harmful mutilation, as is already recognized in the case of female children [85] [178].

With this changing zeitgeist, it is likely that there will be a growing cohort of circumcised men [133] [134] who may need psychological and psychosocial support to deal with their concerns and the ongoing psychosexual difficulties with which they struggle. The solution lies not in coddling and infantilizing men, but in an educational approach that teaches healthy skepticism. Rather than blindly accept information that seems to support their views, the public should be taught the importance of critical thinking skills. Critical thinking involves the ability to analyze and weigh evidence. "A critical eye needs to be turned to all studies that support the beliefs of the scientists conducting them."

When turning a critical eye on "Circumcision of Infants and Children," one is confronted with page after page of the faulty and haphazard scholarship that is sadly prevalent within the body of circumcision

research. Boyle cited several studies involving men circumcised as adults and adolescents that cannot address the effects of infant circumcision. Boyle failed to account for contributory factors and he misrepresented the scope and results of a number of studies. One psychiatrist that this author contacted rejected Boyle's description of his research. Boyle redacted phrases that provide essential context to quotes.

Boyle appealed to a statement from a writer who claimed that circumcision causes "stereotypical Jewish greed." He appealed to a man who used his own experience to assert that circumcised men fantasize about anal sex. He cited the president of an anti-circumcision group, who has argued that circumcision may be the cause of one million abortions in the U.S. each year. Boyle and his sources repeatedly used accusations of denial to dismiss the opinions of their critics and millions of other men whose neutral or positive views of their own circumcision inconveniently challenge the anti-circumcision agenda.

There is a disturbing trend among anti-circumcision academics that could be considered the scholarly equivalent of incest. They habitually and uncritically cite each other's studies and papers. It can be dizzying to observe Boyle, Bollinger, Dennison, Earp, Goldman, Hill, and Van Howe repeatedly appeal to the papers of themselves and each other in an attempt to bolster their own lackluster research.

Boyle and others who conduct research in order to advance a personal agenda should assess their own critical-thinking skills and confirmation bias. "Researchers are sometimes guilty of confirmation bias by setting up experiments or framing their data in ways that will tend to confirm their hypotheses. They compound the problem by proceeding in ways that avoid dealing with data that would contradict their hypotheses." A scholar should maintain an awareness of his own confirmation bias and take steps to reduce or neutralize it. This author hopes the analysis presented here will contribute to an increasing recognition of the pitfalls of confirmation bias, particularly within the academic debate over circumcision.

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