Male Circumcision

A special report to

Centers

for

Medicare and Medicaid Services

Prepared by

Doctors Opposing Circumcision

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I. PREFACE

DOCTORS OPPOSING CIRCUMCISION (DOC) is a Seattle-based non-profit educational organization, which has been granted tax-exempt status by the Internal Revenue Service. DOC has been a member of Child Rights International Network since 2007. George C. Denniston, MD, MPH, is the founder and president of DOC. DOC has many other professional experts on its board.[1]

DOC's mission is to provide information and education on all aspects of male circumcision. DOC's mission statement reads:

> We are an international network of physicians dedicated to protecting the genital integrity and eventual autonomy of all children, serving both health professionals and the public through education, support, and advocacy.

DOC is concerned that the Centers for Medicare and Medicaid Services apparently has not reviewed its policy regarding male circumcision since the founding of Medicaid on July 30, 1965 — some fifty-three years ago. Since that time, there have been major scientific advances in the areas of anatomy, physiology, complications, sexual, and emotional injury, human rights, ethics, law, and other areas. Effective new conservative treatments have been developed to treat most foreskin problems that preserve penile tissue and replace circumcision as a treatment in most cases. DOC believes that the time is long overdue for a review of CMS policies regarding circumcision.

United States Medicaid appears to be the only governmental health insurance program in the Americas that pays for non-therapeutic circumcision. Payment for non-therapeutic circumcision encourages its harmful practice when there is no medical indication or benefit. The *Comité consultatif de bioéthique Belgique* (Belgian Consultative Bioethics Committee) has affirmed payment by government health insurance for non-therapeutic circumcision to be unethical,[2] so a complete review of Medicaid circumcision policy is

[1] Board of Directors. URL: https://www.doctorsopposingcircumcision.org/about-us/#board-directors, Accessed 11 September 2018.

[2] Comité consultatif de bioéthique de Belgique. *Opinion no. 70 of 8 May 2017 on the ethical aspects of nonmedical circumcision.* 8 May 2017, https://erikbuys.files.wordpress.com/2018/07/opinion_70_web.pdf, Accessed 12 December 2018.

appropriate. The United States is profoundly out of step with international good practice in this area.[3]

Male circumcision amputates a multi-functional body part so it is inherently harmful.[4] [5] [6] It can only be beneficial in cases where it treats an injury, deformity or disease in which the benefit exceeds the inherent harm.

DOC has prepared this comprehensive review of all facets concerning male circumcision to enable CMS to revise its policies as necessary, which we offer to CMS without cost or obligation. DOC sincerely hopes that CMS will study it carefully and institute the needed changes.

[3] Watson L, Golden T. Male circumcision grief: Effective and ineffective therapeutic approaches. *New Male Studies: An international journal.* 2017;6(2):109–25. URL: http://newmalestudies.com/OJS/index.php/nms/article/view/261/317, Accessed 7 December 2018.
[4] Hammond T. A preliminary poll of men circumcised in infancy or childhood. *BJU Int* 1999;83 Suppl 1:85–92. URL: https://onlinelibrary.wiley.com/doi/epdf/10.1046/j.1464-410x.1999.0830s1085.x, Accessed 11 January 2019.
[5] Peter W. Adler. Is circumcision legal? XVI:iii *Richmond Journal of Law and the Public Interest* 439 at 446. URL: https://scholarship.richmond.edu/cgi/viewcontent.cgi?article=1265&context=jolpi Accessed 18 October 2018.
[6] Svoboda JS, Adler PW, Van Howe RS. Circumcision is unethical and harmful. *The Journal of Law, Medicine, & Ethics*. 2016;44:263–82. URL: https://www.researchgate.net/publication/323538792_Circumcision_Is_Unethical_and_Unlawful, Accessed 18 October 2018.

II. INTRODUCTION

This document is lengthy because it is intended to be a comprehensive review of the issues arising from the practice of male circumcision, when it is performed as a non-therapeutic operation, so as to provide complete information to Centers for Medicare and Medicaid Services. Each chapter is designed to be complete and independent of the others, so there will be some redundancy, when information is relevant to more than one.

- Circumcision is an excision and amputation of functional tissue of the penis — the foreskin. To properly assess an amputation, one must understand exactly what is being amputated. We start with a discussion of the structure and multiple protective, immunological, sexual, and sensory functions of the foreskin.
- We then present an extensive history of the introduction of a prehistoric, antique ritual surgical procedure into medical practice and the development of opposition to that practice.
- Non-therapeutic male circumcision is touted as having *potential* prophylactic benefits, so we present a discussion of the alleged but *unproven* claimed prophylactic benefits of non-therapeutic circumcision.
- Non-therapeutic circumcision has an unbelievable variety of adverse outcomes up to and including death, so we present many of them.
- Male circumcision is now understood to adversely affect sexual relations for both men and their female partners, so we provide a chapter where information on that subject is presented.
- There is emerging information on the adverse emotional and psychological impact of male circumcision, so that information is also included.
- The policy of other nations with regard to health insurance coverage of non-therapeutic circumcision is surveyed.
- Medicaid law requires that payments only be made for therapeutic services, so information on Medicaid law is presented.
- The United States is now under a human rights treaty, so information on human rights as it impacts non-therapeutic circumcision of male children is discussed.
- We present recommendations for a change in CMS policy.

Citations are as complete as possible. URLs to aid in locating cited documents are presented when available. (An optional electronic version of this document, if requested, retains ‘hotlink’ attribution features.)

II. The Foreskin

The nature and functions of the prepuce or foreskin, which is amputated and destroyed by circumcision, must be considered and fully understood in any discussion of male circumcision.[7]

Structure

An excellent descriptive summary of foreskin anatomy and functions was published recently:

> Few parts of the human anatomy can compare to the incredibly multifaceted nature of the human foreskin. At times dismissed as "just skin," the adult foreskin is, in fact, a highly vascularized and densely innervated bilayer tissue, with a surface area of up to 90 cm, and potentially larger. On average, the foreskin accounts for 51% of the total length of the penile shaft skin and serves a multitude of functions. The tissue is highly dynamic and biomechanically functions like a roller bearing; during intercourse, the foreskin "unfolds" and glides as abrasive friction is reduced and lubricating fluids are retained. The sensitive foreskin is considered to be the primary erogenous zone of the male penis and is divided into four subsections: inner mucosa, ridged band, frenulum, and outer foreskin; each section contributes to a vast spectrum of sensory pleasure through the gliding action of the foreskin, which mechanically stretches and stimulates the densely packed corpuscular receptors. Specialized immunological properties should be noted by the presence of Langerhans cells and other lytic materials, which defend against common microbes, and there is robust evidence supporting HIV protection. The glans and inner mucosa are physically protected against external irritation and contaminants while maintaining a healthy, moist surface. The foreskin is also immensely vascularized and acts as a conduit for essential blood vessels within the penis, such as supplying the glans via the frenular artery.[8]

[7] Cold CJ, Taylor JR. The prepuce. *BJU Int.* 1999;83 Suppl. 1: 34–44 doi: 10.1046/j.1464-410x.1999.0830s1034.x URL: http://onlinelibrary.wiley.com/doi/10.1046/j.1464-410x.1999.0830s1034.x/abstract, Accessed 18 October 2018.

[8] Purpura V, Bondioli E, Cunningham EJ, *et al*. The development of a decellularized extracellular matrix–based biomaterial scaffold derived from human foreskin for the purpose of foreskin reconstruction in circumcised males. *Journal*

The foreskin (also known as the prepuce) is the double-layered fold of smooth muscle tissue, blood vessels, neurons, skin, and mucous membrane part of the penis that covers and protects the glans penis and the urinary meatus.[9] The foreskin comprises more than fifty percent of the epithelium of the penis.[10]

The foreskin is the movable part of the penis. The foreskin is not attached to the underlying structure and is free to glide back and forth.[11] The gliding action reduces the friction of intercourse and helps to prevent abrasions, while conserving vaginal lubrication and moisture.[12]

The epithelium of the outer layer of the foreskin is true skin while the epithelium of the inner layer is mucosal membrane. There is a mucocutaneous boundary at the tip of the foreskin. The mucocutaneous boundary is a specific erogenous zone.[13]

The layer of dartos muscle is contained within the foreskin.[14] The dartos muscle keeps the foreskin snugly against the glans.[15] The fibers of the dartos muscle form a whorl at the tip that functions as a sphincter. The sphincter opens to allow urine to flow out, but closes to protect the penis from foreign matter, contaminants, and pathogens[16] [17]

of Tissue Engineering 2018;9:1–11 DOI: 10.1177/2041731418812613. URL: https://journals.sagepub.com/doi/full/10.1177/2041731418812613, Accessed 1 January 2019.

[9] Cold CJ, Taylor JR. The prepuce. *BJU Int.* 1999;83 Suppl. 1: 34–44 doi: 10.1046/j.1464-410x.1999.0830s1034.x URL: http://onlinelibrary.wiley.com/doi/10.1046/j.1464-410x.1999.0830s1034.x/abstract, Accessed 18 October 2018.

[10] Taylor JR, Lockwood AP, Taylor AJ. The prepuce: specialized mucosa of the penis and its loss to circumcision. *Br J Urol.* 1996;77: 291–5. doi: 10.1046/j.1464-410X.1996.85023.x URL: http://www.arclaw.org/sites/default/files/primer/Taylor%20Prepuce%20SpecMucosa%20BJU%201996.pdf, Accessed 5 December 2017.

[11] Lakshmanan S., Prakash S. Human prepuce: some aspects of structure and function. *Indian J Surg.* 1980;44: 134–7. URL: https://www.researchgate.net/publication/286998210_Human_prepuce_-_some_aspects_of_structure_and_function, Accessed 18 October 2018.

[12] Warren J, Bigelow J. The case against circumcision. *Br J Sex Med.* 1994; Sept/Oct: 6-8.

[13] Winkelmann RK. The erogenous zones: their nerve supply and significance. *Mayo Clin Proc* 1959;34(2): 39–47.

[14] Jefferson G. The peripenic muscle; some observations on the anatomy of phimosis. *Surgery, Gynecology, and Obstetrics.* (Chicago) 1916; 23(2): 177–81.

[15] Lakshmanan S., Prakash S. Human prepuce: some aspects of structure and function. *Indian J Surg.* 1980;44: 134–7. URL: https://www.researchgate.net/publication/286998210_Human_prepuce_-_some_aspects_of_structure_and_function Accessed 18 October 2018.

[16] Fleiss P, Hodges F, Van Howe RS. Immunological functions of the human prepuce. *Sex Trans Inf.* 1998;74(5): 364–7. URL: http://sti.bmj.com/content/sextrans/74/5/364.full.pdf, Accessed 18 October 2018.

[17] Cold CJ, Taylor JR. The prepuce. *BJU Int.* 1999;83 Suppl. 1: 34–44 doi: 10.1046/j.1464-410x.1999.0830s1034.x URL: http://onlinelibrary.wiley.com/doi/10.1046/j.1464-410x.1999.0830s1034.x/abstract

The ridged band area is found near the mucocutaneous junction. The ridged band area is characterized by rete ridges with Meissner's corpuscles in the ridges.[18] The foreskin is the most sensitive part of the male body.[19]

Protective Functions

The foreskin provides physical protection. The foreskin protects the glans penis and meatus from abrasion and irritation from ammoniacal diapers.[20] [21] [22] In the absence of the foreskin about ten to twenty percent of boys suffer urethral stricture (meatal stenosis) requiring further treatment.[23] Frisch & Simonsen (2016) reported the incidence of meatal stenosis to be 3.7 times higher in circumcised boys.[24]

Immunological Functions

Fleiss *et al.* (1998) have listed numerous immunological functions of the foreskin, including a large blood supply, that help to protect the human body against infection. The narrow, non-retractable foreskin of infants keeps feces from the diaper away from the glans penis and meatus. The sub-preputial moisture contains cathepsin B, chymotrypsin, neutrophil elastase, and cytokines. Lysozyme, which has the capacity to destroy bacterial cell walls, is also present in the moisture.[25]

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[18] Taylor JR, Lockwood AP, Taylor AJ. The prepuce: specialized mucosa of the penis and its loss to circumcision. *Br J Urol.* 1996;77: 291–95. doi: 10.1046/j.1464-410X.1996.85023.x URL: http://onlinelibrary.wiley.com/doi/10.1046/j.1464-410X.1996.85023.x/full, Accessed 5 December 2017.

[19] Domashevskiy JA, Domashevskiy AV. Ethics pertaining to the legalities of male routine infant circumcision and surrogate consent to non-therapeutic surgery. *J Clin Res Bioeth.* 2016;7: 1000276. doi:10.4172/2155-9627.1000276 URL: https://www.researchgate.net/publication/308123848_Ethics_Perrtaining_to_the_Legalities_of_Male_Routine_Infant_Circumcision_and_Surrogate_Consent_to_Non-Therapeutic_Surgery, Accessed https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2051968/pdf/brmedj03656-0009.pdf, Accessed 18 October 2017.

[20] Gairdner D. The fate of the foreskin: a study of circumcision. *Br Med J.* 1949;2: 1433–7. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2051968/pdf/brmedj03656-0009.pdf, Accessed 18 October 2017.

[21] Dobanavacki D, Lucić Prostran B, Sarac D*; et al*. Prepuce in boys and adolescents: what when, and how? *Med Pregl*. 2012;65(7-8): 295–300. doi: 10.2298/MPNS1208295D URL: https://www.researchgate.net/publication/230746332_Prepuce_in_boys_and_adolescents_What_when_and_how, Accessed 28 October 2017.

[22] Frisch M, Simonsen. Cultural background, non-therapeutic circumcision and the risk of meatal stenosis and other urethral stricture disease: Two nationwide register-based cohort studies in Denmark 1977e2013. *The Surgeon*. 2016. doi:10.1016/j.surge.2016.11.002 URL: http://www.thesurgeon.net/article/S1479-666X(16)30179-2/pdf, Accessed 7 December 2018.

[23] Ibid.

[24] Ibid.

[25] Fleiss P, Hodges F, Van Howe RS. Immunological functions of the human prepuce. *Sex Trans Inf.* 1998;74(5): 364–7. URL: http://sti.bmj.com/content/sextrans/74/5/364.full.pdf, Accessed 25 October 2018.

The foreskin contains Langerhans dendritic cells in the epithelium.[26] The Langerhans cells produce a substance called Langerin that blocks the uptake of HIV by capturing the HIV, putting it into Birbeck granules, and degrading it.[27]

Sexual Functions

The foreskin is an organ densely supplied with specialized sexual nerve endings. We should not be surprised to discover that its loss has deleterious consequences for the male.[28] [29]

It provides both mechanical and erogenous functions in sexual intercourse.[30] The gliding action adds sexual sensation and facilitates intromission.[31] [32] During the thrusting of sexual congress, the gliding action reduces abrasions and irritation in the female partner and avoids problems with vaginal dryness.[33] [34]

The foreskin is endowed with a profusion of various kinds of nerve endings.[35] The foreskin contains the areas on the penis that are more sensitive to fine touch.[36] [37] The ridged band everts during intercourse so that the area is fully exposed. The nerves are stimulated when the foreskin moves or is stretched.[38] The autonomic nervous system is

[26] Ibid.
[27] de Witte L, Nabatov A, Pion M, *et al.* Langerin is a natural barrier to HIV-1 transmission by Langerhans cells. *Nat Med.* 2007;13: 367–71. URL: http://icgi.org/Downloads/IAS/de_Witte.pdf, Accessed 18 October 2018.
[28] Cold CJ, Taylor JR. The prepuce. *BJU Int.* 1999;83 Suppl. 1: 34–44 doi: 10.1046/j.1464-410x.1999.0830s1034.x URL: http://onlinelibrary.wiley.com/doi/10.1046/j.1464-410x.1999.0830s1034.x/abstract, Accessed 18 October 2018.
[29] Peter W. Adler. Is circumcision legal? XVI:iii *Richmond Journal of Law and the Public Interest.* 439 at 447. URL: https://scholarship.richmond.edu/cgi/viewcontent.cgi?article=1265&context=jolpi, Accessed 18 October 2018.
[30] Shahid SK. Phimosis in children. *ISRN Urology*. 2012; 707329. Epub 2012 Mar 5. doi: 10.5402/2012/707329 URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3329654/, Accessed 5 December 2017.
[31] Morgan WKC. The rape of the phallus. *JAMA.* 1965;193: 123–4. doi:10.1001/jama.1965.03090030045013 URL: https://jamanetwork.com/journals/jama/article-abstract/656072, Accessed 25 October 2018.
[32] Taves D. The intromission function of the foreskin. *Med Hypotheses.* 2002;59(2): 180. URL: http://www.sciencedirect.com/science/article/pii/S0306987702002505, Accessed 28 October 2017.
[33] Morgan WKC. The rape of the phallus. *JAMA.* 1965;193: 123–4. doi:10.1001/jama.1965.03090030045013 URL: https://jamanetwork.com/journals/jama/article-abstract/656072, Accessed 7 December 2018.
[34] Warren J, Bigelow J. The case against circumcision. *Br J Sex Med.* 1994; Sept/Oct: 6-8.
[35] Cold CJ, Taylor JR. The prepuce. *BJU Int.* 1999;83 Suppl. 1:34–44. doi: 10.1046/j.1464–410x.1999.0830s1034.x URL: http://onlinelibrary.wiley.com/doi/10.1046/j.1464-410x.1999.0830s1034.x/abstract, Accessed 24 September 2018.
[36] Sorrells ML, Snyder JL, Reiss MD, *et al.* Fine-touch pressure thresholds in the adult penis. *BJU Int* 2007;99: 864 –9. doi: 10.1111/j.1464-410X.2006.06685.x URL: http://onlinelibrary.wiley.com/doi/10.1111/j.1464-410X.2006.06685.x/full, Accessed 7 December 2018.
[37] Bossio JA, Pukall CF, Steele SS. Examining penile sensitivity in neonatally circumcised and intact men using quantitative sensory testing. *J Urol.* 2016;195: 18485–3. doi: 10.1016/j.jurol.2015.12.080 URL: https://www.researchgate.net/publication/288056254_Examining_Penile_Sensitivity_in_Neonatally_Circumcised_and_Intact_Men_Using_Quantitative_Sensory_Testing, Accessed 22 November 2017.
[38] Taylor JR. Letter. *Can Fam Physician.* 2003;49(12): 1592. URL: http://www.cfp.ca/content/49/12/1592.1, Accessed 28 October 2017.

connected through nerves in the urethra,[39] so the sensations from the foreskin are believed to stimulate contractions of muscles associated with ejaculation.[40]

Solinis & Yiannaki (2007) reported a decrease in couples' sexual life after circumcision, possibly because of complications of surgery and loss of nerve endings.[41]

Frisch *et al*. (2011) reported:

> Circumcision was associated with frequent orgasm difficulties in Danish men and with a range of frequent sexual difficulties in women, notably orgasm difficulties, dyspareunia and a sense of incomplete sexual needs fulfilment. Thorough examination of these matters in areas where male circumcision is more common is warranted.[42]

Bronselaer *et al.* (2013) carried out a large-scale study in Belgium. They found that the foreskin has erogenous sensitivity. The foreskin is more sensitive than the glans penis, so sensitivity is lost after circumcision. Circumcised men experienced decreased sexual pleasure and lower orgasm intensity as compared with intact, normal, men. Circumcised men reported more pain, discomfort, numbness, and unusual sensations, as compared with intact, normal, men.[43]

Cold & Taylor (1999) concluded:

> The prepuce is primary, erogenous tissue necessary for normal sexual function.[44]

[39] Cold CJ, Taylor JR. The prepuce. *BJU Int.* 1999;83 Suppl. 1: 34–44 doi: 10.1046/j.1464–410x.1999.0830s1034.x URL: http://onlinelibrary.wiley.com/doi/10.1046/j.1464-410x.1999.0830s1034.x/abstract, Accessed 18 September 2018.
[40] Taylor JR. Fine touch pressure thresholds in the adult penis. *BJU Int.* 2007;100(1):218. doi: 10.1111/j.1464-410X.2007.07026_4.x URL: http://onlinelibrary.wiley.com/doi/10.1111/j.1464-410X.2007.07026_4.x/full, Accessed 28 October 2017.
[41] Solinis I, Yiannaki A. Does circumcision improve couple's sex life? *Journal of Men's Health and Gender.* 2007; 4(3):361. URL: https://www.sciencedirect.com/science/article/pii/S1571891307001288, Accessed 28 October 2017.
[42] Frisch M, Lindholm, Grønbæk M. Male circumcision and sexual function in men and women: a survey-based, cross-sectional study in Denmark. *Int J Epidemiol.* 2011;40(5):.1367–81. doi:10.1093/ije/dyr104 URL: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.693.5364&rep=rep1&type=pdf, Accessed 28 October 2017.
[43] Bronselaer GA, Schober JM, Meyer-Bahlburg HFL, *et al*. Male circumcision decreases penile sensitivity as measured in a large cohort. *BJU Int.* 2013;111(5): 820–7. doi: 10.1111/j.1464-410X.2012.11761.x URL: http://onlinelibrary.wiley.com/doi/10.1111/j.1464-410X.2012.11761.x/full
[44] Cold CJ, Taylor JR. The prepuce. *BJU Int.* 1999;83 Suppl. 1: 344–54 doi: 10.1046/j.1464-410x.1999.0830s1034.x URL: http://onlinelibrary.wiley.com/doi/10.1046/j.1464-410x.1999.0830s1034.x/abstract, Accessed 25 October 2018.

The later work of Solinis & Yiannaki (2007), Frisch *et al.* (2011), and Bronselaer *et al*. (2013), reported above, further strengthen that conclusion.

III. HISTORY

MEDICAL HISTORY

Ancient History

The practice of circumcision seems to have originated in East Africa before the dawn of recorded history.[45] It was practiced in ancient Egypt and adopted by the Hebrew people as a religious ritual,[46] [47] it is thought, to supplant child sacrifice.[48]

Introduction into American Medical Practice (1870-1932)

Although there undoubtedly were ritual circumcisions performed by *mohels* since the beginning of Jewish settlement in the United States, medical circumcision was not performed until 1870, when orthopedic surgeon Lewis Sayre performed a circumcision on a five-year-old boy to treat paralysis.[49]

Thereafter, a growing number of American physicians started to recommend male circumcision to treat a wide variety of illnesses, including mental disorders such as epilepsy.[50]

John Harvey Kellogg, M. D, the director of the Battle Creek Sanitarium, was an ardent promoter of circumcising boys to prevent masturbation. He wrote:

> "A remedy which is almost always successful in small boys is circumcision, especially when there is any degree of phimosis. The operation should be performed by a surgeon without administering an anesthetic, as the brief pain attending the operation will have a salutary effect upon the mind, especially if it be connected with the idea of punishment, as it may well be in

[45] DeMeo, James. The geography of sexual mutilations. In: *Sexual Mutilations: A Human Tragedy*, New York: Plenum Press, 1997 (ISBN 0-306-45589-7).
[46] Genesis 17. URL: https://www.biblegateway.com/passage/?search=Genesis+17&version=NIV, Accessed 26 October 2017.
[47] Joshua 5:2–9. URL: https://www.biblegateway.com/passage/?search=Joshua+5%3A2-9&version=NIV, Accessed 26 October 2017.
[48] Glick, Leonard B. *Marked in Your Flesh: Circumcision from Ancient Judea to Modern America.* New York: Oxford University Press, 2005.
[49] Gollaher DL. From ritual to science: the medical transformation of circumcision in America. *Journal of Social History.* 1994;28(1) :5–36. URL: https://academic.oup.com/jsh/article-abstract/28/1/5/1001216?redirectedFrom=fulltext, Accessed 28 October 2018.
[50] Ibid.

> some cases. The soreness which continues for several weeks interrupts the practice,…"[51]

Peter Charles Remondino, M. D., a prominent San Diego physician, published a lengthy book in 1891 in which he expounded at length on the alleged evils of the prepuce and advocated circumcision for numerous moral, mental, and physical reasons. His tome is short on science and long on emotional arguments against the prepuce and in favor of circumcision.[52]

L. Emmet Holt, M. D. (1913), wrote an article printed in the *Journal of the American Medical Association* in which he criticized the practice of ritual circumcision, through which many boys were being infected with tuberculosis by tuberculosis-bearing *mohels*, causing numerous deaths.[53]

Abraham Leo Wolbarst , M. D., a New York physician, was moved by this attack on ritual circumcision. He then wrote an article in support of male circumcision as a sanitary measure. He collected the opinions of other physicians in favor of male circumcision and published them as an article in the *Journal of the American Medical Association*. The article advocated universal circumcision of all boys.[54] Despite the lack of any medical science, the article had a strong influence in the United States on the practice of circumcision in the time before the advent of evidence-based medicine.

Wolbarst did not stop there. In 1932, he published his *opinion* in the *Lancet* that circumcision prevents penile cancer.[55] There was no evidence to the contrary at the time, so his opinion as published in the prestigious *Lancet* was accepted as fact and used to justify non-therapeutic circumcision until 1970 when Noel Preston's paper was published

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[51] Kellogg JH. *Plain Facts for Old and Young*. Burlington: I. H. Segner, 1881. URL: https://ia600303.us.archive.org/14/items/plainfaorold00kell/plainfaorold00kell.pdf, Accessed 28 November 2017.
[52] Remondino PC. *The history of circumcision from the earliest times to the present*. Philadelphia: F. A. Davis, 1891. URL: file:///C:/Users/1172/AppData/Local/Temp/pg23135-images.epub, Accessed 11 December 2018.
[53] Holt LE. Tuberculosis acquired through ritual circumcision. *JAMA.* 1913;LXI(2): 99–102. doi:10.1001/jama.1913.04350020025011 URL: https://jamanetwork.com/journals/jama/article-abstract/215500, Accessed 26 October 2017.
[54] Wolbarst AL. Universal circumcision as a sanitary measure. *JAMA.* 1914; LXII(2): 92–7. doi: 10.1001/jama.1914.02560270008003 URL: https://jamanetwork.com/journals/jama/article-abstract/453164, Accessed 26 October 2017.
[55] Wolbarst AL. Circumcision and penile cancer. *Lancet* 1932;219(5655): 150–3. doi: 10.1016/s0140-6736(01)24346-3 URL: http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(01)24346-3/abstract, Accessed 26 October 2017.

in the *Journal of the American Medical Association*,[56] and Boczko & Freed (1979) reported penile cancer in circumcised males.[57] Wolbarst's myth mislead medical science for decades.[58]

The Gairdner Article (1949)

The pre-eminent British paediatrician Douglas Gairdner[59] published a landmark article regarding child circumcision in the *British Medical Journal* on December 24, 1949, reporting sixteen deaths a year secondary to non-therapeutic circumcision in the United Kingdom. Gairdner also noted the protective function of the foreskin and the risk of meatal ulcer in children after its removal. The evidence-based article concluded that the child's prepuce "should therefore be left in its natural state."[60] Gairdner's article is credited for the end of the general practice of non-therapeutic circumcision in the United Kingdom and New Zealand. Gairdner's paper was generally ignored in the United States, where doctors continued to circumcise about 90 percent of newborn boys, in the false belief that infant circumcision would prevent penile cancer.[61]

The Creation of Medicaid (1965)

Medicaid was created on July 30, 1965 when Congress passed Title XIX. Following the *opinion*-based medical practice of the time, non-therapeutic circumcision of boys was included as a covered procedure.

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[56] Preston EN. Whither the foreskin. *JAMA.* 1970; 213(11): 1853–8. doi:10.1001/jama.1970.03170370037006
[57] Boczko S, Freed S. Penile carcinoma in circumcised males. *N Y State J Med.* 1979; 79(12): 1903–4.
[58] Fleiss PM, Hodges F. Neonatal circumcision does not protect against cancer. *BMJ.* 1996;312(7033): 779–80. *doi: https://doi.org/10.1136/bmj.312.7033.779c* URL: http://www.bmj.com/content/312/7033/779.4 , Accessed 26 October 2017.
[59] Douglas Gairdner at Wikipedia. URL: https://en.wikipedia.org/wiki/Douglas_Gairdner, Accessed 2 December 2017.
[60] Gairdner D. The fate of the foreskin: a study of circumcision. *Br Med J.* 1949;2: 1433–7. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2051968/pdf/brmedj03656-0009.pdf, Accessed 26 October 2017.
[61] Schoen EG. The status of circumcision of the newborn. *New Engl J Med*. 1990; 322:1308–12 doi: 10.1056/NEJM199005033221810 URL: http://www.nejm.org/doi/pdf/10.1056/NEJM199005033221810, Accessed 24 November 2017.

America Questions the Practice of Nontherapeutic Circumcision. (1965-1970)

William Keith Morgan, M. D. (1965) published a letter in *JAMA* that questioned the practice of non-therapeutic circumcision of boys.[62]

Non-therapeutic circumcision of boys was not seriously considered until 1970, when Captain E. Noel Preston published a landmark paper in the *Journal of the American Medical Association*. He discussed a wide range of issues, including complications and sexual and psychological issues and concluded:

> Routine circumcision of the newborn is an unnecessary procedure. It provides questionable benefits and is associated with a small but definite incidence of complications and hazards. These risks are preventable if the operation is not performed unless truly medically-indicated. Circumcision of the newborn is a procedure that should no longer be consider routine.[63]

Preston's paper (1970) came five years after the formation of Medicaid so it was not considered at the time of Medicaid formation.

1971 AAP Circumcision Policy Statement

The American Academy of Pediatrics first published a position statement on circumcision of boys in 1971. It cited Preston and said, "[t]here are no valid medical indications for circumcision in the neonatal period."[64]

The Academy's members are paid on a fee-for-service basis, so we might expect that among the AAP membership there would be those who are inspired to continue the practice for financial reasons. As a result, the Academy has been hedging its 1971 pronouncement for decades.

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[62] Morgan WKC. The rape of the phallus. *JAMA.* 1965;193: 123–4. URL: https://jamanetwork.com/journals/jama/article-abstract/656072, Accessed 18 November 2017.
[63] Preston EN. Whither the foreskin. *JAMA.* 1970; 213(11): 1853–8. URL: https://jamanetwork.com/journals/jama/article-abstract/356609, Accessed 31 October 2017.
[64] American Academy of Pediatrics, Committee on Fetus and Newborn. *Standards and Recommendation for Hospital Care of Newborn infants*. 5th ed. Evanston, IL: American Academy of Pediatrics, 1971:110.

1971 Australian Paediatric Association Statement

The Australian Paediatric Association (1971) recommended "that newborn male infants should *not*, as a routine, be circumcised."[65]

1975 CPS Circumcision Policy Statement

The Foetus and Newborn Committee of the Canadian Paediatric Association, under the chairmanship of Dr. P. R. Swyer, published a statement regarding non-therapeutic male circumcision in 1975. It said "there is no medical indication for circumcision during the neonatal period." The statement called it an "obsolete operation". The statement concluded:

> Adoption of the foregoing concepts should result in a sharper decrease in the percentage of infants circumcised…[66]

1975 AAP Circumcision Policy Statement

In 1975, the Academy issued a new statement affirming the 1971 statement and declared that non-therapeutic circumcision is an *elective* procedure but claimed that non-therapeutic circumcision was permissible for religious and cultural reasons. It also attempted to transfer responsibility for the medical decision to the parents. The statement concluded:

> Therefore, circumcision of the newborn cannot be considered an essential component of adequate total health care.[67]

Medicaid, however, took little documented notice of the changing medical landscape of non-therapeutic circumcision.

Then, in 1978, David A. Grimes, MD, of Atlanta, Georgia noted the following in the American Journal of Obstetrics and Gynecology, regarding non-therapeutic circumcision:

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[65] Belmaine SP. Circumcision. *Med J Aust.* 1971;1: 1148.
[66] Foetus and Newborn Committee. FN 75-01 Circumcision in the newborn period. *CPS News Bull Suppl*. 1975; 8(2): 1–2.
[67] Thompson HC, King LR, Knox E, *et al.* Report of the ad hoc task force on circumcision. *Pediatrics.* 1975;56(4): 610–1. URL: http://pediatrics.aappublications.org/content/56/4/610, Accessed 31 October 2017.

> However, until the benefits of routine circumcision of the neonate can be proved worth the risk and cost, medical resources probably should be allocated to measures of demonstrated value.[68]

Once again, Medicaid took no notice of this advance in medical knowledge and continued to fund medically-unnecessary, non-therapeutic, genital amputation.

Cost-benefit Analysis

Cadman *et al*. (1984) studied the costs of routine, non-therapeutic circumcision. The authors concluded that the monetary benefits of circumcising newborns will not exceed this cost. The authors proposed that the procedure be regarded as cosmetic surgery and be paid for by parents who wish the procedure carried out rather than by taxpayer-funded health insurance plans.[69]

It was about this time that certain segments of the medical community noted that if male circumcision began to be considered non-therapeutic, this lucrative practice would surely decline.

The Urinary Tract Infection Issue

Thomas E. Wiswell, M. D., a United States Army pediatrician, was inspired by a paper published by Charles M. Ginsburg, M. D., and George H. McCracken, M. D. of Dallas, Texas, who were studying urinary tract infection in children.

The two Dallas doctors, while carrying out a study of urinary tract infection (UTI) in children, at Parkland Memorial Hospital, a large public hospital, reported that the infants with UTI responded promptly to anti-microbial therapy, they noted that most of the boys were uncircumcised, (which was to be expected because Parkland Hospital did not provide its patients with non-therapeutic circumcision even if parents demanded it,[70] so most boys

[68] Grimes DA. Routine circumcision of the newborn: a reappraisal. *Am J Obstet Gyneco.l* 1978; 130(2): 125–9. URL: http://www.sciencedirect.com/science/article/pii/0002937878903538, Accessed 25 November 2017.
[69] Cadman D, Gafni A, Mcnamee J: Newborn circumcision: an economic perpective. *Can Med Assoc J.* 1984; 131: 1353–5. URL: http://www.cmaj.ca/content/131/11/1353, Accessed 25 November 2017.
[70] Wallerstein E. Circumcision: the uniquely American medical enigma. *Urol Clin North Am.* 1985;12(1): 123–32. URL: https://www.readbyqxmd.com/read/3883617/circumcision-the-uniquely-american-medical-enigma, Accessed 25 October 2018.

in the hospital's catchment area were uncircumcised).[71] They speculated that the presence of the foreskin had something to do with the UTI.

Wiswell decided to use the United States Army records system to retrospectively examine medical records to see if foreskins had anything to do with UTI. He did this without examining any patients, nor did he consider confounding factors, including the common practice of handling infant genitalia without surgical gloves or other antisepsis, and forcible foreskin retraction. Wiswell (1985) published a controversial paper, which purported to show a substantially higher incidence of UTI in intact, natural, boys,[72] and brought him instant fame.

Wiswell then became a militant circumcision apologist, and published several more papers on the same subject.[73] [74] He continues to write in support of non-therapeutic circumcision in 2017.

Others, however, expressed concern. Stan J. Watson, M. D. (1987), a pediatrician from Palm Springs, California, published his experience, which showed the foreskin should be left alone.[75]

Herzog (1989) published a study that seemed to support Wiswell's findings about UTI.[76]

McCracken (1989), apparently dismayed by Wiswell's contentions, reviewed the use of antimicrobial therapy to treat UTI. He stated in regard to circumcision:

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[71] Ginsburg CM, McCracken, Jr. GH. Urinary tract infections in young infants. *Pediatrics.* 1982;69(4): 409–412. URL: http://pediatrics.aappublications.org/content/69/4/409

[72] Wiswell TE, Smith FR, Bass JW. Decreased incidence of urinary tract infections in circumcised male infants. *Pediatrics.* 1985, 75(5): 901–3. URL: http://pediatrics.aappublications.org/content/75/5/901, Accessed 1 November 2017.

[73] Wiswell TE, Roscelli JD. Corroborative evidence for the decreased incidence of urinary tract infection in circumcised male infants. *Pediatrics.* 1986;78(1): 96–9. URL: http://pediatrics.aappublications.org/content/78/1/96, Accessed 1 November 2017.

[74] Wiswell TE, Enzenauer RW, Holton ME, Cornish JD, Hankins CT. Declining frequency of circumcision: implications for changes in the absolute incidence and male to female sex ratio of urinary tract infections in early infancy. *Pediatrics.* 1987; 79(3): 338–42. URL: http://pediatrics.aappublications.org/content/79/3/338, Accessed 28 November 2017.

[75] Watson SJ. Care of uncircumcised penis. *Pediatrics.* 1987;80(5): 765. URL: http://pediatrics.aappublications.org/content/80/5/765.1? Accessed 14 October 2018.

[76] Herzog LW. Urinary tract infections and circumcisions: a case control study. *Am J Dis Child.* 1989;143: 348–50. doi:10.1001/archpedi.1989.02150150106026 URL: https://jamanetwork.com/journals/jamapediatrics/article-abstract/514525, Accessed 28 November 28, 2017.

> Because long term outcome of UTI in uncircumcised males is unknown, it is inappropriate at this time to recommend circumcision as a routine medically indicated procedure.[77]

1987 New Understanding of Infant Pain

Prior to 1987, doctors, based on an 1872 paper, falsely believed that newborn infants could not feel pain because the infant nerves were not myelinated.[78] Even open-heart surgery was done on infants without anesthesia. Anand and Hickey (1987) published a definitive, landmark paper in the *New England Journal of Medicine*, which concluded:

> Numerous lines of evidence suggest that even in the human fetus, pain pathways as well as cortical and subcortical centers necessary for pain perception are well developed late in gestation, and the neurochemical systems now known to be associated with pain transmission are intact and functional....Other responses in newborn infants are suggestive of integrated emotional and behavioral responses to pain and are retained in memory long enough to modify subsequent behavior patterns....[I]n decisions about the use of these techniques, current knowledge suggests that humane considerations should apply as forcefully to the care of neonates and young nonverbal infants as they do to children and adults in similar painful and stressful situations.[79]

This article conclusively established that infants not only feel pain, but feel it more intensely than adults.

[77] McCracken G. Options in antimicrobial management of urinary tract infections in infants and children. *Pediatr Infect Dis J.* 1989;8(8): 552–55.
[78] Cope DK. Neonatal Pain: The Evolution of an Idea. *The American Association of Anesthesiologists Newsletter,* September 1998.
[79] Anand KJS, Hickey PR. Pain and its effects in the human neonate and fetus. *New Engl J Med.* 1987;317(21): 1321–9. doi: 10.1056/NEJM198711193172105 URL: http://www.nejm.org/doi/full/10.1056/NEJM198711193172105, Accessed 26 November 2017.

1989 AAP Circumcision Policy Statement

Edgar J. Schoen, M. D., an Oakland, California physician, published his "*Ode to a circumcised man,*" a tasteless doggerel in praise of circumcision in 1987.[80] His unapologetic bias in favor of circumcision may have been the reason he was chosen to chair the Task Force on Circumcision that convened to produce a new circumcision policy statement for the AAP.

The task force included Schoen as chairman, Glen Anderson, Constance Bohon, Frank Hinman, Ronald L. Poland, and E. Maurice Wakeman.

The new position statement was published in *Pediatrics*, the AAP controlled journal in October 1989.[81]

The statement completely omits any discussion of the known functions of the foreskin in protecting the glans penis or preventing meatal stenosis, and contains no mention of the human rights issues raised by non-therapeutic amputations upon the genitalia of minors.

The statement for the first-time recognized behavior changes in circumcised infants but claimed they were gone in twenty-four hours. Although the AAP had previously adopted a policy that called for pain control for infants,[82] the statement declined to recommend pain control for circumcision surgery, due to alleged risks, thereby condemning millions of newborn American boys to intensely painful surgery.

The ethics discussion failed to recognize that children are people with rights of their own, including the legal right to *bodily integrity* and the human right to *security of the person*, which are compromised by the amputation of a body part. The statement also failed to

[80] Shoen EJ. Ode to the circumcised male. *Am J Dis Child*. 1987 Feb;141(2):128. doi:10.1001/archpedi.1987.04460020018014. URL: https://jamanetwork.com/journals/jamapediatrics/article-abstract/513293, Accessed 28 November 2017.
[81] Task Force on Circumcision. Report of the task force on circumcision. *Pediatrics.* 1989;84(4):388–91. URL: http://pediatrics.aappublications.org/content/pediatrics/84/2/388.full.pdf, Accessed 26 November 2017.
[82] American Academy of Pediatrics. Neonatal anesthesia. *Pediatrics* 1987;80(3):446. URL: http://pediatrics.aappublications.org/content/pediatrics/80/3/446.full.pdf?download=true, Accessed 11 January 2019.

report that surrogate consent is necessarily limited to granting of consent for investigation and treatment of disease.

The statement speaks favorably of infant circumcision but a clear recommendation for infant circumcision is missing, perhaps for legal reasons.

Infant circumcision is a non-therapeutic procedure performed only on healthy infants. No disease is present to be treated. The statement discusses *potential* benefits that may occur in the future. *Potential* benefits exist only in possibility, but not in actuality. On the other hand, the risks and adverse outcomes described in the statement are real and actual.[83]

The statement cites Thomas E. Wiswell's methodologically flawed statements as evidence that infant circumcision prevented urinary tract infections.[84] While scientifically questionable, this action served the Academy's apparent desire to protect the benefits of the of non-therapeutic circumcision that accrues to its membership.

Criticism of the 1989 AAP Circumcision Policy Statement

The publication of this statement caused enduring criticism. Professor Ronald M. Poland, a member of the task force, took issue with its use of Wiswell's dubious conclusions, the failure to consider the cost of mass circumcision, and published his own paper. He concluded:

> Although the risks of routine neonatal circumcision are small, the benefits appear to be uncertain. It therefore seems prudent to consider neonatal circumcision a procedure to be performed at the discretion of the parents, not as a part of routine medical care. Omitting circumcision in the newborn period should not be considered to be medical neglect.[85]

[83] Ibid.
[84] Ibid.
[85] Poland RL. The question of routine neonatal circumcision. *N Eng J Med. 1990*; 322: 1312–5. doi: 10.1056/NEJM199005033221811. URL: http://www.nejm.org/doi/full/10.1056/NEJM199005033221811, Accessed 24 November 2017.

Dr. Schoen responded in the same issue (*New England Journal of Medicine*, May 3, 1990) and defended non-therapeutic infant circumcision as it was practiced in the 1940s.[86]

The Canadian Paediatric Society (1989) was not impressed by Wiswell's papers and in a special statement commented:

> As the present information available concerning the risks of urinary tract infections and transmission of sexually transmitted diseases in relation to circumcision are not sufficiently compelling to justify a change in policy, the Committees maintain that no change should be made to the CPS recommendations concerning routine circumcision.[87]

Schoen's questionable use of Wiswell's flawed papers to promote the practice of circumcision alerted several colleagues. Winberg *et al.* (1989), writing from Sweden, suggested several alternatives to circumcision for the prevention of UTI.[88] Coppa *et al*. (1990), writing from Ancona, Italy, proposed breastfeeding to reduce incidence of UTI,[89] and this was supported by Pisacane *et al*. (1990), writing from Naples,[90] and by Marild (1990), writing from Sweden.[91]

Altshul (1990) reported a much lower incidence of UTI, than Wiswell and estimated the cost of preventing one UTI by circumcision at $60,000. Altshul concluded:

> We in the United States are culturally acclimated to regard the foreskin as non-essential and even pathologic. Therefore, forsaking the ancient cautionary *primum non nocere* becomes easy. We must not forget that the burden of proof is on the circumcision advocates. Showing disease association is not

[86] Schoen EG. The status of circumcision of newborns. *N Engl J Med*. 1990; 322:1308–12. doi: 10.1056/NEJM199005033221810 URL: http://www.nejm.org/doi/pdf/10.1056/NEJM199005033221810, Accessed 24 November 2017.
[87] Canadian Paediatric Society. *Routine Circumcision*. Ottawa: Canadian Paediatric Society, 1989.
[88] Winberg J, Bollgren I, Gothefors L, *et al*. The prepuce: a mistake of nature? *Lance.t* 1989;1: 598–9. doi: http://dx.doi.org/10.1016/S0140-6736(89)91619-X URL: http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(89)91619-X/abstract, Accessed 28 November 2017.
[89] Coppa GV, Gabrielli O, Giorgi P, *et al*. Preliminary study of breastfeeding and bacterial adhesion to uroepithelial cells. *Lancet.* 1990; 335: 569-71. DOI: http://dx.doi.org/10.1016/0140-6736(90)90350-E.
[90] Pisacane A, Graziano L, Zona G. Breastfeeding and urinary-tract infection (Letter). *Lancet.* 1990;336: 50. doi: http://dx.doi.org/10.1016/0140-6736(90)91559-S URL: http://www.thelancet.com/journals/lancet/article/PII0140-6736(90)91559-S/fulltext, Accessed 28 November 2017.
[91] Mårild S. Breastfeeding and Urinary Tract Infections. *Lancet.* 1990;336: 942. URL: http://www.sciencedirect.com/science/article/pii/0140673690923137?_rdoc=1&_fmt=high&_origin=gateway&_docanchor=&md5=b8429449ccfc9c30159a5f9aeaa92ffb&ccp=y, Accessed 28 November 28, 2017.

> sufficient. They must prove cause and effect. Furthermore, they must prove (not conjecture) that the advantages of circumcision outweigh the risks.[92]

Thomson (1990) commented:

> *Unequivocal proof* that lack of circumcision is a risk factor for increased urinary tract infection is currently unavailable.[93]

Hughes (1990) criticized the non-therapeutic surgical operation.[94]

1995 AAP Bioethics Statement

The American Academy of Pediatrics (1995) issued a statement on bioethics of pediatric consent. The statement said in part:

> Only patients who have appropriate decisional capacity and legal empowerment can give their informed consent to medical care. In all other situations, parents or other surrogates provide informed permission for diagnosis and treatment of children with the assent of the child whenever appropriate.[95]

Parents and other surrogates are limited in their authority to granting permission for diagnosis and treatment. Non-therapeutic circumcision of children does not meet this standard as it is neither diagnosis nor treatment.

This AAP ethics policy directly conflicts with the AAP task force's contention that parents have a right to consent to non-therapeutic circumcision of boys since non-therapeutic circumcision is neither diagnosis nor treatment. If the AAP properly applied its own bioethics statement to non-therapeutic child circumcision, then parents could not consent to the non-therapeutic amputation of a functional, healthy body part.[96]

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[92] Altschul MS. The circumcision controversy (editorial). *Am Fam Physician.* 1990;41: 817–20.
[93] Thompson RS. Routine circumcision in the newborn: an opposing view. *J Fam Pract.* 1990;31(2): 189–96.
[94] Hughes GK. Circumcision: another look. *Ohio Medicine* 1990;86(2):92.
[95] American Academy of Pediatrics Committee on Bioethics. Informed consent, parental permission, and assent in pediatric practice. *Pediatrics.* 1995;95(2): 314–7. URL: http://pediatrics.aappublications.org/content/95/2/314, Accessed 5 December 2017.
[96] Domashevskiy JA, Domashevskiy AV. Ethics pertaining to the legalities of male routine infant circumcision and surrogate consent to non-therapeutic surgery. *J Clin Res Bioeth* 2016;7: 1000276. doi:10.4172/2155-9627.1000276 URL: https://www.researchgate.net/publication/308123848_Ethics_Perrtaining_to_the_Legalities_of_Male_Routine_Infant_Circumcision_and_Surrogate_Consent_to_Non-Therapeutic_Surgery, Accessed https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2051968/pdf/brmedj03656-0009.pdf, Accessed 18 October 2017.

1996 CPS Circumcision Policy Statement

The Canadian Paediatric Society (CPS), with Dr. Eugene W. Outerbridge as principal author**,** issued its own circumcision statement in the March 15, 1996 issue of the *Canadian Medical Association Journal*. The statement carefully examined the evidence relating to urinary tract infection and concluded that routine circumcision was not justified.

The authors of the CPS statement found a lack of evidence that circumcision is effective in preventing penile or cervical cancer.

The authors of the CPS statement found that the incidence of complications of circumcision approach that of UTI among uncircumcised male infants. They said the "cost of complications need to be considered in any assessment of the cost-effectiveness of routine circumcision."

The authors reported that the prepuce has protective functions. They also reported the inner mucosa of the prepuce has numerous oval, rounded, or elongated nerve corpuscles in the inner mucosal surface of the prepuce.

With regard to cost-benefit analysis, the CPS cited Cadman *et al*. (1984) who estimated the cost of prevention is 100 times the cost of treatment of cancer of the penis. The authors stated:

> The authors conclude that the monetary benefits of circumcising newborns will not exceed this cost. It is proposed that the procedure be regarded as cosmetic surgery and be paid for by parents who wish the procedure carried out rather than by taxpayer-funded health insurance plans.[97]

The CPS said infants feel pain, the need for pain control is strong, and discussed methods of pain control.

[97] Cadman D,Gafni A, McNamee J: Newborn circumcision: an economic perspective. *Can Med Assoc J* 1984; 131:1353–5. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1483656/, Accessed 25 October 2018.

The authors accepted the position of Ronald Poland, that for a procedure to be recommended, benefits must clearly exceed the risks and costs,[98] while tacitly rejecting the position of Edgar J. Schoen and the American Academy of Pediatrics.

The CPS failed to recognize the child's right under the *Charter of Rights and Freedoms* (1982)[99] to *security of the person*, which is compromised by the amputation of a body part.

The study concluded that the benefits and harms of circumcision are so evenly balanced that it does not support recommending circumcision as a routine procedure for newborns. The statement recommended, "Circumcision of newborns should not be routinely performed."[100]

1996 BMA Circumcision Policy Statement

The British Medical Association (BMA) published its first guidance for physicians on child circumcision in 1996. The guidance said in part:

- Where conditions can effectively be treated conservatively, it is accepted good practice to do so. Even limited procedures should only be carried out where there is good reason, and then only after adequate conservative treatment. The BMA opposes unnecessarily invasive procedures being used where alternative, less invasive techniques, are equally efficient and available.
- Therefore, to circumcise for therapeutic reasons where medical research has shown other techniques to be at least as effective and less invasive would be unethical and inappropriate.
- The BMA strongly recommends that either the written consent of *both* parents, or of the person with parental responsibility be obtained for circumcision. Parents must be aware of the nature and implications of the procedure, and the risks involved.[101]

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[98] Poland RL. The question of routine neonatal circumcision. *N Eng J Med. 1990*; 322: 1312–5. doi: 10.1056/NEJM199005033221811. URL: http://www.nejm.org/doi/full/10.1056/NEJM199005033221811, Accessed 24 November 2017.
[99] Constitution Act (1982). URL: http://laws-lois.justice.gc.ca/eng/Const/page-15.html, Accessed 26 November 2017.
[100] Fetus and Newborn Committee, Canadian Paediatric Society. Neonatal circumcision revisited. *CMAJ.* 1996;154(6): 769–80. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1487803/pdf/cmaj00090-0027.pdf, Accessed 26 November 2017.
[101] British Medical Association. *Circumcision of Male Infants: Guidance for Doctors*. London: British Medical Association, 1996. URL: https://www.bma.org.uk/-/media/files/pdfs/practical advice at work/ethics/circumcision.pdf Accessed 23 October 2018.

Behavioral Changes Caused by Circumcision Pain

Taddio *et al*. (1997) compared the pain responses of circumcised boys to uncircumcised boys at subsequent vaccination. This study showed that neonatal circumcision in male infants is associated with increased pain response in vaccination 4-6 months after surgery. The authors thought it "possible that the greater vaccination response in the infants circumcised without anaesthesia may represent an infant analogue of a post-traumatic stress disorder triggered by a traumatic and painful event and re-experienced under similar circumstances of pain during vaccination."[102] [103]

1999 AAP Circumcision Policy Statement

The American Academy of Pediatrics was now acutely embarrassed by the 1989 Schoenesque circumcision policy statement. It announced the formation of a new task force.[104] The chairperson was Carole M. Lannon, MD, M.P.H. The members of the task force were Ann Geryl Doll Bailey, MD, Alan R. Fleishman, MD, George W. Kaplan, MD, Craig T. Shoemaker, MD Jack T. Swanson, M.D, and obstetrician Donald Coustan, MD, who was there to represent the interests of the members of the American College of Obstetricians and Gynecologists.

The new statement was published in *Pediatrics*, the official journal of the AAP, in March 1999.[105]

The statement, once again, withholds well-known information on the protective function of the foreskin and its prevention of meatal ulceration and stenosis.

[102] Taddio A, Katz J, Ilersich AL, Koren G. Effect of neonatal circumcision on pain response during subsequent routine vaccination. *Lancet.* 1997;349(9052): 599–603. URL: https://www.sciencedirect.com/science/article/pii/S0140673696103160, Accessed 27 October 2018.
[103] Elhaik E. A "wear and tear" hypothesis to explain sudden infant death syndrome. *Front Neurol* 2016;7: 180. doi. 10.3389/fneur.2016.00180 URL: https://eprints.whiterose.ac.uk/107491/1/fneur-07-00180.pdf, Accessed 15 January 2019.
[104] Oh W, Merenstein G. Fourth Edition of the *Guidelines for Perinatal Care*: Summary of Changes. *Pediatrics.* 1997;100(6): 1021–7. URL: http://pediatrics.aappublications.org/content/100/6/1021, Accessed 27, October 2018.
[105] Task Force on Circumcision. Circumcision Policy Statement. *Pediatrics.* 1999;100(3): 686–93 URL: http://pediatrics.aappublications.org/content/103/3/686, Accessed 23 October 2018.

The statement for the first time mentions the presence of nerves in the foreskin, but by relying on the outdated, inaccurate Masters & Johnson (1966) observations,[106] gets the sexual function of the foreskin wrong.

The statement, as did the previous statement, attempts to make the case that neonatal non-therapeutic circumcision reduces the incidence of UTI, but fails to mention that the preferred therapy is antimicrobial,[107] not amputation surgery.

The statement recognizes the need for pain control during circumcision and suggests several options.

Singh-Grewal *et al*. (2005) carried out a systematic review of the UTI literature. They found that the number needed to treat to prevent one UTI is 111, clearly uneconomic. They recommended circumcision only in cases in boys with recurrent UTI or high grade vesicoureteric reflux, (VUR).[108] The Singh-Grewal paper is generally regarded as authoritative and conclusive.

The ethics discussion fails to recognize that children are people with rights of their own, including the legal right to *bodily integrity* and the human right to *security of the person*, which are compromised by the amputation of a body part. Although the AAP's own statement on bioethics (1995) limits parents to granting of informed permission for diagnosis and treatment,[109] the circumcision statement fails to report that surrogate consent is necessarily limited to granting of permission for investigation and treatment of disease.[110] The statement cites an irrelevant paper on the care of gravely ill children as its ethical

[106] Masters WL, Johnson V. *Human sexual response*. New York: Bantam Books, 1966.
[107] McCracken G. Options in antimicrobial management of urinary tract infections in infants and children. *Pediatr Infect Dis J.* 1989;8(8):552–55. URL: https://utsouthwestern.influuent.utsystem.edu/en/publications/options-in-antimicrobial-management-of-urinary-tract-infections-i, Accessed 23 October 2018.
[108] Singh-Grewal D, Macdessi J, Craig J. Circumcision for the prevention of urinary tract infection in boys: A systematic review of randomized trials and observational studies. *Arch Dis Child.* 2005;90(8): 853–8. URL: https://adc.bmj.com/content/archdischild/early/2005/05/12/adc.2004.049353.full.pdf, Accessed 18 October 2018.
[109] American Academy of Pediatrics Committee on Bioethics. Informed consent, parental permission, and assent in pediatric practice. *Pediatrics.* 1995;95(2): 314–7. URL: http://pediatrics.aappublications.org/content/pediatrics/95/2/314.full.pdf?download=true, Accessed 27 October 2018.
[110] American Academy of Pediatrics Task Force on Circumcision. Circumcision policy statement. *Pediatrics.* 1999;103(3):686–93. URL: http://pediatrics.aappublications.org/content/pediatrics/103/3/686.full.pdf?download=true, Accessed 27 October 2018.

authority.[111] Non-therapeutic male circumcision is neither investigation nor treatment of disease, so according to the AAP's own ethical guidelines, parents cannot consent to non-therapeutic circumcision.

2006 BMA Circumcision Policy Statement

The United Kingdom adopted the Human Rights Act (2000), which brought international human rights law into domestic law. Following this action, the BMA considered that its existing guidance on circumcision (1996) was inadequate and it issued a new guidance in 2003. However, two British law professors', Marie Fox and Michael Thomson, expressed concern about the lawfulness of non-therapeutic circumcision in the UK[112] and the 2003 guidance was revised and reissued in 2006. The guidance does not address medical issues but does address legal and ethical issues pertaining to the performance of non-therapeutic male circumcision on children in the UK. The statement is strongly protective of a child patient's genital integrity and autonomy. The BMA did *not* express concern that the British National Health Service does not provide non-therapeutic circumcision. It states in part:

> Unnecessarily invasive procedures should not be used where alternative, less invasive techniques, are equally efficient and available. It is important that doctors keep up to date and ensure that any decisions to undertake an invasive procedure is based on the best available evidence. Therefore, to circumcise for therapeutic reasons where medical research has shown other techniques to be at least as effective and less invasive would be unethical and inappropriate.[113]

The incidence of non-therapeutic male circumcision of children in the USA started to decline in 2000. Sixteen state Medicaid agencies had discontinued payments for non-therapeutic circumcision by 2007.[114] The three trade associations whose members profit

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[111] Fleischman AL, Nolan K, Dubler NN, *et al*. Caring for gravely ill children. *Pediatrics.* 1994;94: 433–39. URL: http://pediatrics.aappublications.org/content/94/4/433 Accessed 23 October 2018.
[112] Fox M, Thomson M. A covenant with the status quo? Male circumcision and the new BMA guidance to doctors. *J Med Ethics.* 2005;31: 463–9. URL: http://jme.bmj.com/content/31/8/463.full, Accessed 26 November 2017.
[113] British Medical Association. *Law and ethics of male circumcision* (2006). URL: https://www.bma.org.uk/-/media/files/pdfs/practical%20advice%20at%20work/ethics/circumcision.pdf, Accessed 26 November 2017.
[114] Leibowitz AA, Desmond K, Belin T. Determinants and policy implications of male circumcision in the United States. *Am J Pub Health.* 2009;99(1): 138–45. doi: 10.2105/AJPH.2008.134403 URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2636604/pdf/138.pdf, Accessed 27 November 2017.

by doing circumcisions (AAP, ACOG, AAFP) were apparently concerned by the decline, as the published papers reveal. It was felt that the neutral 1999 AAP circumcision policy statement was causing the decline.[115] [116] Conveniently, articles had appeared citing flawed African studies that purported to show that male circumcision had a protective effect against infection by heterosexual coitus. Based on this, the AAP, announced in 2007 that it would form a new task force to study male circumcision and issue a position statement apparently to correct the decline in the incidence of circumcision and loss of benefit to their members).[117]

The AAP appointed a new task force in June 2007[118] headed by Susan Blank, MD, MPH. The composition of the task force is curious and interesting because it reveals the true purpose of a new circumcision policy statement. The members of the task force were:

- Michael Brady, MD, Representing the AAP Committee on Pediatric AIDS
- Ellen Buerk, MD, Representing the AAP Board of Directors
- Waldemar Carlo, MD, Representing the AAP Committee on Fetus and Newborn
- Douglas Diekema, MD, MPH, Representing the AAP Committee on Bioethics
- Andrew Freedman, MD, Representing the AAP Section on Urology
- Lynne Maxwell, MD, Representing the AAP Section on Anesthesiology
- Steven Wegner, MD, JD, Representing the AAP Committee on Child Health Financing

Certain other organizations provided liaisons to protect their interests:

- Charles LeBaron, MD – Centers for Disease Control and Prevention (CDC)
- Lesley Atwood, MD – American Academy of Family Physicians (AAFP)
- Sabrina Craigo, MD – American College of Obstetricians and Gynecologists (ACOG)

[115] Ibid.
[111] Warner L, Cox S, Whiteman M, *et al*. Impact of health insurance type on trends in newborn circumcision, United States 2000 to 2010, *Am J Pub Health.* 2015;105(9): 1943–9. doi: 10.2105/:JPH.2015.302629 URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4539816/pdf/AJPH.2015.302629.pdf, Accessed 27 October 2018.
[117] Ibid.
[118] Leibowitz AA, Desmond K, Belin T. Determinants and policy implications of male circumcision in the United States. *Am J Pub Health.* 2009;99(1): 138–45. doi: 10.2105/AJPH.2008.134403. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2636604/pdf/138.pdf, Accessed 27 November 2017.

A position statement on neonatal circumcision would normally be prepared by the Committee on Fetus and Newborn, but this statement is different because of the monetary interest involved. Ellen Buerk was present to see that the interest of the board of directors in securing the income of the voting members of the AAP was realized. Michael Brady was there because of the intention to use HIV/AIDS as a justification to circumcise infant boys. Waldemar Carlo was there as the token member of Committee on Fetus and Newborn. Andrew Freedman, MD, a man who circumcised his own son on a kitchen table and derives twenty percent of his medical practice from repair of botched circumcisions, was there because he was believed to favor circumcision. Lynne Maxwell was there because of the ongoing criticism of circumcision as a painful procedure with behavioral after effects. Steven Wegner, with both medical and law degrees, a health care financial expert, was there to secure the money that the AAP, ACOG, and AAFP all wanted for their members. The focus on getting money for doctors resulted in the formation of a task force on circumcision composed of people who knew little about circumcision. After its formation the AAP task force lapsed into silence for five years.

2010 KNMG Circumcision Policy Statement

While the AAP task force was biding its time, the Royal Dutch Medical Association, (*Koninklijke Nederlandsche Maatschappij tot bevordering der Geneeskunst*) or KMNG on 27 May 2010, published its own position paper on non-therapeutic circumcision of male minors. The KNMG did *not* complain that the Dutch national health insurance does not cover non-therapeutic circumcision. The KNMG stated in part:

- there is no convincing evidence that circumcision is useful or necessary in terms of prevention or hygiene. Partly in the light of the complications which can arise during or after circumcision, circumcision is not justifiable except on medical/therapeutic grounds. Insofar as there are medical benefits, such as a possibly reduced risk of HIV infection, it is reasonable to put off circumcision until the age at which such a risk is relevant and the boy himself can decide about the intervention, or can opt for any available alternatives.
- contrary to what is often thought, circumcision entails the risk of medical and psychological complications. The most common complications are bleeding, infections, meatal stenosis (narrowing of the urethra) and

panic attacks. Partial or complete penis amputations as a result of complications following circumcisions have also been reported, as have psychological problems as a result of the circumcision.

- Non-therapeutic circumcision of male minors is contrary to the rule that minors may only be exposed to medical treatments if illness or abnormalities are present, or if it can be convincingly demonstrated that the medical intervention is in the interest of the child, as in the case of vaccinations.
- Non-therapeutic circumcision of male minors conflicts with the child's right to autonomy and physical integrity[119]

2010 RACP policy statement

The Royal Australasian College of Physicians (RACP), which determines policy for Australia and New Zealand, issued a new policy statement in September 2010. The RACP did *not* express concern that the public hospitals of Australia have stopped providing non-therapeutic circumcision. The statement provides in part:

> Ethical and human rights concerns have been raised regarding elective infant male circumcision because it is recognised that the foreskin has a functional role, the operation is non-therapeutic and the infant is unable to consent.
>
> After reviewing the currently available evidence, the RACP believes that the frequency of diseases modifiable by circumcision, the level of protection offered by circumcision and the complication rates of circumcision do not warrant routine [non-therapeutic] infant circumcision in Australia and New Zealand.[120]

Although Australia once circumcised most of its newborn boys (as did the United States) in the false belief that non-therapeutic infant circumcision prevented penile cancer, the Australian Paediatric Association announced in 1971 that infant circumcision was not

[119] *Non-therapeutic circumcision of male minors*. Utrecht: KNMG (2010), URL: https://www.knmg.nl/web/file?uuid=4f46a948-1a37-4ee4-95be-976b541ec6ee&owner=5c945405-d6ca-4deb-aa16-7af2088aa173&contentid=286&elementid=1890370, Accessed 30 January 2018.

[120] *Circumcision of infant males*. Sydney: Paediatrics and Child Health Division, Royal Australasian College of Physicians, September 2010. URL: https://www.racp.edu.au/docs/default-source/advocacy-library/circumcision-of-infant-males.pdf, Accessed 28 November 28, 2017.

necessary and should not be performed. Following that announcement, the incidence of non-therapeutic circumcision of the newborn gradually and steadily declined and was recently reported (2018) at four percent of boys.[121]

2010 Circumcision Policy of Government of Mexico

The policy of the Secretary of Health of the Government of Mexico is:

> Circumcision should not be done in children without medical indication.[122]

Debunking HIV claims

Boyle & Hill (2011) carefully examined the three coordinated African randomized clinical trials that purport to show that male circumcision decreases female to male transmission of HIV by 60 percent They discovered a significant statistical error. Although the *relative* decrease was 60 percent, the *absolute* decrease was only a statistically insignificant 1.3 percent.[123]

2012 AAP Circumcision Policy Statement

Although the AAP task force was formed in June 2007, it published nothing until September 2012 — a period in excess of five years. It is not clear why there was such a delay. However, it has been postulated that the task force was waiting for the publication of medical articles favorable to male circumcision. The task force presented two papers, a three-page policy statement with no citations, and a massive thirty-page technical report with 248 citations. The citations include 41 that had been published after the task force was formed.[124]

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[121] Circumcision Information Australia. *Incidence and prevalence of circumcision in Australia*, January 2018. URL: http://www.circinfo.org/news_2018.html#fall, Accessed 24 September 2018.
[122] Gobierno Federal. Consejo de Salubridad General. (2010) *Circuncisión: Evidencias y recomendaciones*: p. 21. URL: http://www.circumstitions.com/Docs/mexico-sp.pdf, Accessed 7 December 2018.
[123] Boyle GJ, Hill G. Sub-Saharan African randomised clinical trials into male circumcision and HIV transmission: Methodological, ethical and legal concerns. *J Law Med.* (Melbourne) 2011;19: 316–34. URL: http://www.salem-news.com/fms/pdf/2011-12_JLM-Boyle-Hill.pdf, Accessed 5 December 2017.
[124] Task Force on Circumcision. Male circumcision. *Pediatrics.* 2012;130: e756–85. doi: 10.1542/peds.2012-1990 URL: http://pediatrics.aappublications.org/content/pediatrics/130/3/e756.full.pdf, Accessed 5 December 2017.

The 2012 AAP policy statement provided in part:

> Although health benefits are not great enough to recommend routine [non-therapeutic] circumcision for all male newborns, the benefits of circumcision are sufficient to justify access to this procedure for families choosing it and to warrant third-party payment for circumcision of male newborns. It is important that clinicians routinely inform parents of the health benefits and risks of male newborn circumcision in an unbiased and accurate manner.[125]

One should note the emphasis on *third-party payment* in the above quotation. The AAP places the well-being of the American child secondary to the need to obtain money benefits for its physician members to perform a medically unnecessary, non-therapeutic, risky and injurious amputation of a body part from a minor child who cannot grant consent. The AAP once again makes the parents responsible for the decision to perform the circumcision and absolves itself and its doctors from liability for the certain damage by the loss of a multi-functional body part at the request of poorly advised parents.

The Technical Report (TR) is lengthy, however the TR found no space to include a description of the body part that would be amputated by circumcision or a description of its many functions.[126] The TR did mention sexual sensation and sexual pleasure but relied on biased papers from Africa, which were written by circumcision promoters. In any event, recent research[127] [128] has rendered its conclusions from 2012 erroneous and outmoded.

The section on ethical issues has so many shortcomings it is difficult to know how to explain them and where to begin. The position of the AAP on the bioethics seems little changed since its last statement in 1999. The section cites the AAP statement on ethics,[129]

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[125] Task Force on Circumcision. Circumcision policy statement. *Pediatric*s. 2012;130: 585–6. doi: 10.1542/peds.2012-1989 URL: http://pediatrics.aappublications.org/content/pediatrics/130/3/585.full.pdf, Accessed 5 December 2017.
[126] Task Force on Circumcision. Male circumcision. *Pediatrics.* 2012;130: e756–85. DOI: 10.1542/peds.2012-1990 URL: http://pediatrics.aappublications.org/content/pediatrics/130/3/e756.full.pdf, Accessed 31 October 2018.
[127] Frisch M, Lindholm M, Grønbæk M. Male circumcision and sexual function in men and women: a survey-based, cross-sectional study in Denmark. *Int J Epidemiol*. 2011;40(5): 1367–81. doi:10.1093/ije/dyr104 URL: http://www.i2re-searchhub.org/wp-content/uploads/storage/2NJRBTCK/Frisch%20et%20al.%20-%202011%20-%20Male%20circumci-sion%20and%20sexual%20function%20in%20men%20and%20women.pdf, Accessed 17 November 2017.
[128] Bronselaer GA, Schober JM, Meyer-Bahlburg HFL, *et al*. Male circumcision decreases penile sensitivity as meas-ured in a large cohort. *BJU Int*. 2013;111(5):820–7. doi: 10.1111/j.1464-410X.2012.11761.x URL: http://onlineli-brary.wiley.com/doi/10.1111/j.1464-410X.2012.11761.x/full, Accessed 18 November 2017.
[129] American Academy of Pediatrics Committee on Bioethics. Informed consent, parental permission, and assent in pe-diatric practice. *Pediatrics.* 1995;95(2):314–7. URL: http://pediatrics.aappublications.org/content/pediat-rics/95/2/314.full.pdf Accessed 23 October 2018.

but fails to mention the limitations on surrogate consent that would prohibit parental consent for non-therapeutic circumcision. The section then cites an article on the ethics of treating dying children,[130] which is totally irrelevant to a non-therapeutic amputation of part of a healthy child's penis. At no time does the ethics section or the TR generally recognize the child as a human person with his own rights and privileges.

The TR considered numerous diseases, including sexually transmitted infections (STIs), including HIV; urinary tract infection (UTI); cancer; penile dermatoses; phimosis (a condition, not a disease). Not surprisingly, it found non-therapeutic circumcision to be effective against all of them. It failed to point out that condoms are effective against STIs, that the preferred treatment for UTI is antimicrobial,[131] and that girls and boys may now be immunized against HPV infection, which causes penile cancer in men and cervical cancer in women. It also failed to mention that phimosis may be treated non-surgically by manual stretching with or without the application of topical steroid ointment.[132] [133] [134]

With regard to complications of non-therapeutic circumcision of the newborn in the United States, the AAP (2012) variously reported rates of 0.19%, 0.22%, and 3.1%.[135] The task force actually admitted "The true incidence of complications after newborn circumcision is unknown, …",[136] which makes balancing benefits with complications impossible. Lau *et al*. (2018), however, reported an actual incidence of complications of 11.5% in a statistical study carried out in Utah.[137]

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[130] Fleischman AR, Nolan K, Dubler NN, *et al*. Caring for gravely ill children. *Pediatrics*. 1994;94(4 pt 1):433–39. URL: http://pediatrics.aappublications.org/content/94/4/433 Accessed 23 October 2018.
[131] McCracken G. Options in antimicrobial management of urinary tract infections in infants and children. *Pediatr Infect Dis J.* 1989;8(8): 552–55. URL: https://utsouthwestern.influuent.utsystem.edu/en/publications/options-in-antimicrobial-management-of-urinary-tract-infections-i, Accessed 23 October 2018.
[132] Dunn HP. Non-surgical management of phimosis. *Aust N Z J Surg*. 1989;59(12): 963.
[133] Beaugé M. The causes of adolescent phimosis. *Br J Sex Med.* 1997; Sept/Oct: 26.
[134] Zampieri N, Corroppolo M, Giacomello L, *et al*. Phimosis: Stretching methods with or without application of topical steroids? *J Pediatr.* 2005;147(5):7 05–6. URL: https://www.sciencedirect.com/science/article/pii/S0022347605006840, Accessed 23 October 2018.
[135] Task Force on Circumcision. Male circumcision. *Pediatrics.* 2012;130: e756–85. DOI: 10.1542/peds.2012-1990 URL: http://pediatrics.aappublications.org/content/pediatrics/130/3/e756.full.pdf, Accessed 31 October 2018.
[136] Ibid.
[137] Lau G, Kim J, Schaeffer A. Identification of circumcision complications using a regional claims database. *The Societies for Pediatric Urology* 2018. URL: http://spuonline.org/abstracts/2018/P21.cgi, Accessed 7 January 2018.

One of the oddest claims is that non-therapeutic *male* circumcision is effective against vaginosis in women. The claim was based on a single study carried out in Africa,[138] not the U. S., and may not be relevant to conditions in a developed country. The paper reported a 15 percent relative risk, however, the actual absolute difference was an insignificant 0.034.[139] In any event, it is profoundly unethical to circumcise a non-consenting child for the benefit of another person.[140] [141]

The 2012 AAP Circumcision Policy Statement and Technical Report should be regarded as a vehicle with which to argue for the 'fellows' of the AAP to receive benefits from third-party payers, instead of as a statement of medical information.

Criticism of the 2012 AAP Circumcision Policy Statement

The 2012 AAP Circumcision Policy Statement and the accompanying technical report have been heavily criticized.[142]

Brian Earp (2012), an ethicist at the University of Oxford, was the first to comment on the AAP Circumcision Policy Statement.

> The AAP appears to be out of tune with world opinion on this issue. On a global scale, medical authorities remain skeptical about whether circumcision of male minors confers any – let alone significant – net health benefits. Indeed, child health experts in Britain, Germany, Scandinavia, Australia, New Zealand, Canada, and elsewhere are predominately of the view that non-therapeutic circumcision (NTC) confers no meaningful health benefits on balance (considered against drawbacks, harms,

[138] Gray RH, Kigozi G, Serwadda D*, et al*. The effects of male circumcision on female partners' genital tract symptoms and vaginal infections in a randomized trial in Rakai, Uganda. *Am J Obstet Gynecol*. 2009;200(1):42.e1–e7. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2727852/, Accessed 23 October 2018.
[139] Van Howe RS. (2018) Personal communication.
[140] Beauchamp, Tom L., and Childress, James F. 2001. *Principles of Biomedical Ethics*. New York: Oxford University Press.
[141] Peter W. Adler. Is circumcision legal? XVI:iii *Richmond Journal of Law and the Public Interest* 439 at 466. URL: https://scholarship.richmond.edu/cgi/viewcontent.cgi?article=1265&context=jolpi, Accessed 18 October 2018.
[142] Elhaik E. A "wear and tear" hypothesis to explain sudden infant death syndrome. *Front Neurol* 2016;7: 180. doi. 10.3389/fneur.2016.00180 URL: https://eprints.whiterose.ac.uk/107491/1/fneur-07-00180.pdf, Accessed 15 January 2019.

> and risks), and that it should be neither recommended to parents nor funded by health insurance systems.[143]

A large group of prominent European doctors took issue with the 2012 AAP Circumcision Policy Statement. Frisch and 35 other prominent European doctors (2013) rebutted the contentions of the AAP. The Europeans criticized the conclusions of the AAP relative to urinary tract infection, penile cancer, traditional STDs and HIV/AIDS. The Europeans said the AAP placed no value on the foreskin in sexuality, although the foreskin is richly innervated, protects the glans and plays an important function in the sex act. The Europeans pointed to sexual problems in circumcised men. The Europeans criticized the ethics discussion for failing to address the child's basic right to physical integrity and the violations of human rights. The Europeans considered that the medical evidence was viewed through the lens of American cultural bias in favor of non-therapeutic circumcision and distorted to favor male circumcision.[144]

Svoboda & Van Howe (2013) examined the AAP statement in an article published in the *Journal of Medical Ethics*. They wrote a scathing condemnation of the AAP Circumcision Policy Statement and its accompanying Technical Report.

> Even in the far from definite case that benefits do exist, as the KNMG notes, 'it is reasonable to put off circumcision until the age at which such a risk is relevant and the boy himself can decide about the intervention, or can opt for any available alternatives.' Accordingly, the AAP should immediately retract its policy statement and technical report and replace them with documents reflecting such critical concerns as the functions of the lost tissue, medical ethics and the importance of respecting non-consenting children's rights.[145]

The 2012 AAP Circumcision Policy Statement and accompanying Technical Report present a unique view of the medical evidence that is not shared by other medical societies.

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[143] Earp BD. The AAP report on circumcision: bad science+bad ethics=bad medicine. *Practical Ethics*. University of Oxford. http://blog.practicalethics.ox.ac.uk/2012/08/the-aap-report-on-circumcision-bad-science-bad-ethics-bad-medicine/, Accessed 1 December 1, 2017.

[144] Frisch M, Aigrain Y, Barauskas V, *et al*. Cultural bias in the AAP's 2012 technical report and policy statement on male circumcision. *Pediatrics.* 2013;131(4):1–5. doi:10.1542/peds.2012-2896 URL: http://pediatrics.aappublications.org/content/131/4/796, Accessed 30 November 2017.

[145] Svoboda JS, Van Howe RS. *J Med Ethics.* 2013;39(7): Published Online First. 18 Jun 2013. doi: 10.1136/medethics-2013-101346 URL: http://jme.bmj.com/content/39/7/434, Accessed 1 December 1, 2017.

It combines this view with a plea for third-party reimbursement. Some critics have suggested that this might amount to fraud, but no cases have yet been decided on those grounds.

Watson & Golden (2017) state:

> The bias in favor of male pedocircumcision arises from the belief that the foreskin is a superfluous structure and is prone to a range of dangerous pathologies. These cultural constructions are promoted by the North American medical profession in sharp contrast to medical organizations in the UK, Europe and Australasia.[146]

2015 CPS Circumcision Policy Statement

The Canadian Paediatric Society (CPS) issued a new circumcision statement in September 2015.[147] The CPS did *not* express concern that insurance coverage of non-therapeutic circumcision by third-party payers is not available in Canada.

The CPS observed that the foreskin covers the glans penis and has an abundance of sensory nerves. The CPS pointed out that non-retractile foreskin is normal in boys and can remain non-retractile until puberty. If treatment is needed, then it recommends topical steroid ointment accompanied by gentle traction.

The CPS found evidence that 111 to 125 normal infant boys would have be circumcised to prevent one UTI.

The CPS said it is unclear whether African data concerning HIV acquisition could be applied to developed countries. It pointed out the need for safe sex practices, including the use of condoms.

[146] Watson L, Golden T. Male circumcision grief: Effective and ineffective therapeutic approaches. *New Male Studies: An international journal.* 2017;6(2):109–25. URL: http://newmalestudies.com/OJS/index.php/nms/article/view/261/317, Accessed 7 December 2018.
[147] Sorokan ST, Finlay JC, Jefferies AL. Newborn male circumcision. *Paediatr Child Health*. 2015;20(6):311–15. URL: https://www.cps.ca/en/documents/position/circumcision, Accessed 28 November 2017.

The CPS listed minor bleeding, local infection, and unsatisfactory cosmetic result as normal adverse outcomes. More severe adverse outcomes include partial amputation of the penis, and rare deaths from hemorrhage or sepsis.

It said meatal stenosis is a late adverse outcome of circumcision.

The CPS expressed concern about the ethics and legality of circumcision, because it has lifelong consequences and is performed on a child who cannot give consent. It said the authority of substitute decision makers is "limited to those interventions deemed to be medically necessary." It failed to point out that circumcision violates the child's rights under the *Charter of Rights and Freedoms*. It did refer readers to the July 2013 issue of the *Journal of Medical Ethics*, which is devoted to the ethical issues with the practice of non-therapeutic child circumcision.

The CPS said in conclusion that it "does not recommend the routine [non-therapeutic] circumcision of every newborn male."[148]

2018 Canadian Urological Association Statement

The Canadian Urological Association published a statement regarding neonatal circumcision in February 2018. The statement concluded:

> Given the socioeconomic, educational status, and health demographics of our population, universal neonatal circumcision cannot be justified based on the current evidence available.[149]

[148] Sorokan ST, Finlay JC, Jefferies AL. Newborn male circumcision. *Paediatr Child Health*. 2015;20(6): 311–15. URL: https://www.cps.ca/en/documents/position/circumcision, Accessed 28 November 2017.
[149] Dave S, Afshar K, Braga LH, Anderson P. Canadian Urological Association guideline on the care of the normal foreskin and neonatal circumcision in Canadian infants (abridged version). *Can Urol Assoc J.* 2018;12(2): 18–28. URL: http://www.cua.org/themes/web/assets/files/5034_foreskin_guidelinesabridged.pdf, Accessed 5 December 2018.

2019 Report on SIDS and Male Neonatal Circumcision

Elhaik (2019) reported a strong correlation between Medicaid payment for male neonatal circumcision, increased circumcision incidence, and increased incidence of sudden infant death syndrome (SIDS).[150]

Recent Developments

Two large-scale studies of the sexual function of the foreskin have been published. Frisch *et al*. (2011) carried out an extremely large-scale survey in Denmark of both men and women.[151] Bronselaer *et al*. (2013) carried out a large-scale study in Belgium to compare penile sensitivity in circumcised and uncircumcised men.[152] (See Chapter VII Sexual Issues for more information.)

The Cochrane Library reports that topical steroid ointment is an effective first treatment for non-retractile foreskin before resorting to surgery.[153]

Sneppen & Thorup (2016) report the results of a large-scale study from Denmark, where non-therapeutic circumcision is not practiced. The population of boys under 18 years of age was 206,302. They report in 2014, 581 boys were referred for a surgical procedure on the foreskin, which may be frenuloplasty, preputioplasty, or circumcision.[154] Forty-four (0.02 of 1%) actually were circumcised.

The American Medical Association's *Journal of Ethics* published two articles in August 2017 that question the ethics of non-therapeutic child circumcision.

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[150] Elhaik E. Neonatal circumcision and prematurity are associated with sudden infant death syndrome (SIDS). Journal of Translational Research 2018;4(2): Published online first. 10 January 2019. DOI: https://www.jctres.com/en/04.201802.005/. URL: https://www.jctres.com/media/filer_public/94/aa/94aafcfa-dbe0-4275-8f7c-fb149ab0daf9/elhaik2018jclintranslres_epub.pdf, Accessed 15 January 2019.

[151] Frisch M, Lindholm, Grønbæk M. Male circumcision and sexual function in men and women: a survey-based, cross-sectional study in Denmark. *Int J Epidemiol*. 2011;40(5):1367–81. doi:10.1093/ije/dyr104 URL: https://academic.oup.com/ije/article/40/5/1367/658163, Accessed 24 October 2018.

[152] Bronselaer GA, Schober JM, Meyer-Bahlburg HFL, *et al*. Male circumcision decreases penile sensitivity as measured in a large cohort. *BJU Int*. 2013;111(5): 820–7. doi: 10.1111/j.1464-410X.2012.11761.x URL: http://onlinelibrary.wiley.com/doi/10.1111/j.1464-410X.2012.11761.x/full, Accessed 18 November 2017.

[153] Moreno G, Corbalán J, Peñaloza B, Pantoja T. Topical corticosteroids for treating phimosis in boys. *Cochrane Database of Systematic Reviews*., 2 September 2014. Issue 9. Art. No.: CD008973. doi: 10.1002/14651858.CD008973.pub2. URL: http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD008973.pub2/full, Accessed 2 December 2, 2017.

[154] Sneppen I, Thorup J. Foreskin morbidity in uncircumcised males. *Pediatrics*. 2016;137(5): e20154340. URL: http://pediatrics.aappublications.org/content/pediatrics/early/2016/04/04/peds.2015-4340.full.pdf, Accessed 2 December 2017.

Svoboda (2017) concluded:

> The vast majority of medical practitioners have the best interests of their patients at heart; if they recommend or agree to circumcision, it is usually in the belief that it does more good than harm. As more physicians are coming to realize, however, this belief is misguided: many physicians to whom I speak these days now say that they would prefer not to circumcise and only do it because the parents ask for it. At the same time, it is often the case that the only reason parents ask for it is because they believe circumcision is medically beneficial, recommended by health authorities, or the normal thing to do. It is time for this vicious circle to be broken. Who better to take the initiative than the community that introduced NTC in the first place—the American medical profession? [155]

Reis-Dennis & Reis (2017) concluded:

> We have argued that physicians should not modify children's genitals for nontherapeutic reasons. In addition, we believe that they should play a bigger role in educating their young patients about genital and body variability and consider their motivations when advocating surgical normalization. When physicians do perform genital surgeries for nonmedical reasons, a wronged patient's feeling and expression of blaming attitudes can be both fitting and justified. In fact, the expression of anger can be part of a productive social interaction that can, under certain circumstances, prompt apology and facilitate psychological healing. [156]

[155] Svoboda JS. Nontherapeutic circumcision of minors as an ethically problematic form of iatrogenic injury. *AMA Journal of Ethics*. 2017;19(8): 815-24. doi: 10.1001/journalofethics.2017.19.08.msoc2-1708. URL: http://journalofethics.ama-assn.org/2017/08/msoc2-1708.html, Accessed 2 December 2017.

[156] Reis-Dennis S, Reis E. Are physicians blameworthy for iatrogenic harm resulting from unnecessary genital surgeries?. *AMA Journal of Ethics*. 2017;19(8): 825–33. doi: 10.1001/journalofethics.2017.19.08.msoc3-1708 URL: http://journalofethics.ama-assn.org/2017/08/msoc3-1708.html, Accessed 2 December 2017.

Human Rights History

The United Nations and Human Rights (1945)

The United Nations was formed at San Francisco in 1945. The United Nations is required to promote "universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion."[157]

The United Nations General Assembly adopted the *Universal Declaration of Human Rights* on 10 December 1948. The *Declaration* enunciated a wide range of human rights for the first time and inaugurated the human rights era.[158]

The International Covenant on Civil and Political Rights (1966)

The General Assembly of the United Nations adopted the *International Covenant on Civil and Political Rights* on 16 December 1966. Every nation, which is a State-Party to the Covenant, "undertakes to respect and to ensure to all individuals within its territory and subject to its jurisdiction the rights recognized in the present Covenant, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status."[159] The Senate of the United States of America ratified the *Covenant* with reservations in 1976. The *Covenant* provides such rights as self-determination, freedom from cruel or degrading treatment, security of the person, and freedom of religion, which are applicable to the practice of non-therapeutic circumcision of children.

UN Convention on the Rights of the Child (1989)

The General Assembly of the United Nations adopted the *Convention on the Rights of the Child* on 12 December 1989.[160] The *Convention* enunciated special rights that

[157] Chapter IX, *Charter of the United Nations* (1945). URL: http://www.un.org/en/sections/un-charter/chapter-ix/index.html
[158] *Universal Declaration of Human Rights*, G.A. res. 217A (III), U.N. Doc A/810 at 71 (1948). URL: http://www.un.org/en/universal-declaration-human-rights/index.html, Accessed 28 November 2017.
[159] *International Covenant on Civil and Political Rights*. United Nations General Assembly Resolution 2200A [XX1]. 16 December 1966. URL: http://www.ohchr.org/EN/ProfessionalInterest/Pages/CCPR.aspx, Accessed 28 November 2017.
[160] UN *Convention on the Rights of the Child.* General Assembly resolution 44/25 of 20 November 1989. URL: https://www.ohchr.org/en/professionalinterest/pages/crc.aspx Accessed 18 October 2018.

children enjoy by reason of their minority, which are in addition to their general human rights.[161] [162]

Presidential Executive Order to Implement Human Rights

Then President William Jefferson Clinton published Executive Order 13107 on December 15, 1998. It ordered all executive departments of the federal government to respect and implement the provisions of human rights treaties to which the United States is a state-party. E. O. 13107 provides in part:

> **Section 1**. Implementation of Human Rights Obligations. (a) It shall be the policy and practice of the Government of the United States, being committed to the protection and promotion of human rights and fundamental freedoms, fully to respect and implement its obligations under the international human rights treaties to which it is a party, including the ICCPR, the CAT, and the CERD.[163]

The Department of Health and Human Services and the Centers for Medicare and Medicaid Services are part of the executive branch of government, so they are subject to this executive order.

[161] *Genital Integrity Policy Statement*. (2008) Seattle: Doctors Opposing Circumcision: p. 43. URL: https://www.littleimages.org/wp-content/uploads/2015/05/GenitalIntegrityStatement.pdf, Accessed 15 December 2018.
[162] UNICEF. *Understanding the CRC*. 19 May 2014. URL: https://www.unicef.org/crc/index_understanding.html, Accessed 15 December 2018.
[163] William Jefferson Clinton. Executive Order 13107, December 15, 1998. URL https://www.gpo.gov/fdsys/pkg/FR-1998-12-15/pdf/98-33348.pdf, Accessed 28 November 2017.

IV. Alleged Benefits of Non-Therapeutic Circumcision

The vast majority of the circumcisions in the United States are non-therapeutic circumcisions performed on newborn boys within a few days of birth. Boys are born with healthy foreskins. No disease or malformation of the foreskin is present to provide an indication for circumcision. In fact, there is absolutely no medical indication to justify performing a non-therapeutic circumcision on a boy or adult male.[164]

The only possible reason is hope for a *potential* benefit — prevention of some disease that could possibly occur in the future. In this section we shall examine the claims made for by some members of the medical profession regarding these *potential*[165] future benefits.

Phimosis

The term phimosis loosely describes the condition in which the foreskin cannot be drawn back (retracted) to uncover the glans (head) of the penis. Unfortunately, the term has been misused for over 100 years, and inappropriately used as an excuse for circumcision. It has been used to refer to both a normal, physiological developmental stage in children, as well as to a pathological condition, usually of adults, but rarely found in children. The former requires no treatment whatsoever, and the latter can be typically be prevented by proper care and/or treated conservatively. It is important to distinguish between these two meanings.

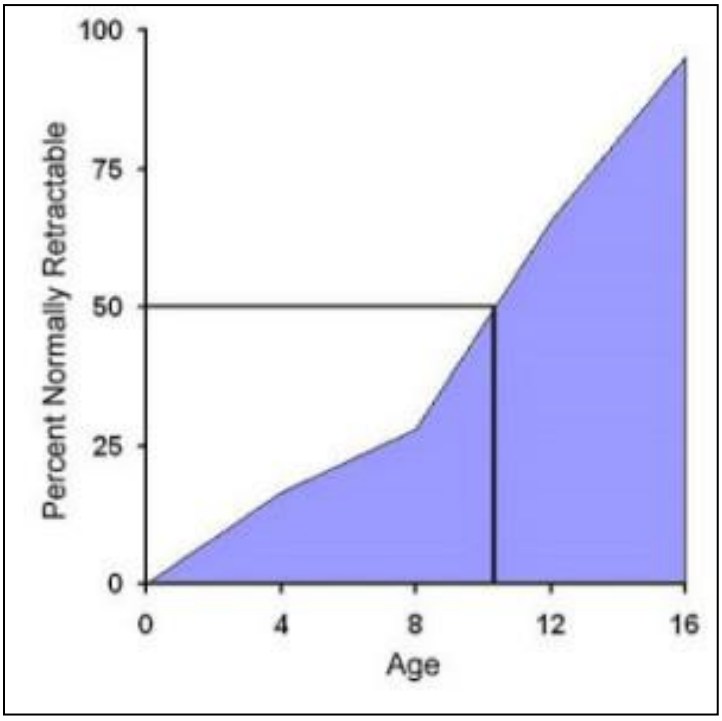
Normal physiological non-retractability – At birth, the foreskin is usually fused to the glans (head) of the penis, and so cannot be retracted. A non-retractable foreskin in itself is not a disease but a physiologically normal developmental stage in boys. There is no set age by which a boy "must" be retractable. The foreskin gradually becomes retractable, all

[164] *Non-therapeutic circumcision of male minors*. Utrecht, Royal Dutch Medical Association (KNMG), 2010. URL: https://www.knmg.nl/web/file?uuid=4f46a948-1a37-4ee4-95be-976b541ec6ee&owner=5c945405-d6ca-4deb-aa16-7af2088aa173&contentid=286&elementid=1890370, Accessed 28 November 2017.

[165] *Potential* is a word used frequently by the hawkers of male non-therapeutic circumcision. It is used to describe something that does not exist but could conceivably come into existence in the future. The words "potential benefit" do not indicate an actual existing proved health benefit. Use of the misleading phrase "potential benefit" is a deceptive practice.

by itself, between infancy and early adulthood.[166] About 50% of boys are able to fully retract their foreskin by 10 years of age, and only about 1 percent of males aged 18-plus have a non-retractile foreskin.[167] [168] In the absence of tissue changes indicating a disease process, a diagnosis of "phimosis" in a pathological sense is inappropriate for most children and adolescents

RETRACTABILITY ACCORDING TO ØSTER 1968



Physiological non-retractability requires no treatment. The fusion of the foreskin to the glans penis naturally dissolves gradually over time, along with accompanying loosening of the foreskin outlet, without any need for intervention. Occasional spraying of urine, or the presence of ballooning upon urination, are typically harmless, transitory phenomena sometimes seen during the developmental process.[169] Even those few men who retain a non-retractable foreskin into adulthood may never have any problems with hygiene, comfort, or sexual performance.

[166] Thorvaldsen MA, Meyhoff H. Patologisk eller fysiologisk fimose? *Ugeskr Læger*. 2005;167(17): 1858–62. URL: http://ugeskriftet.dk/videnskab/patologisk-eller-fysiologisk-fimose, Accessed 19 December 2018.
[167] Kayaba H, Tamura H, Kitajima S, Fujiwara Y, Kato T, Kato T. Analysis of shape and retractibility of the prepuce in 603 Japanese boys. *J Urol*. 1996;156: 1813–5. URL: https://www.sciencedirect.com/journal/the-journal-of-urology/vol/156/issue/5, Accessed 18 December 2018.
[168] Øster J. Further fate of the foreskin: incidence of preputial adhesions, phimosis, and smegma among Danish Schoolboys. *Arch Dis Child*. 1968;43: 200–3. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2019851/pdf/archdisch01557-0066.pdf, Accessed 19 December 2018.
[169] Babu R, Harrison SK, Hutton KA. Ballooning of the foreskin and physiological phimosis: is there any objective evidence of obstructed voiding? *BJU Int*. 2004;94(3):384–7. URL: https://www.jurology.com/doi/full/10.1097/01.ju.0000175872.17368.f9, Accessed 19 December 2018.

Pathological and problem phimosis.

Pathological phimosis is rare; one large study found the cumulative risk to be 0.6% by age 15 years.[170] Most cases are likely caused by forced retraction of the foreskin in childhood (often by health professionals, or by parents following improper medical advice) that causes tears, resulting in scarring and adhesion of the foreskin to the glans as the tissue heals.

Phimosis can also be the result of a rare condition called balanitis xerotica obliterans (BXO), in which disease processes harden the tissue of the foreskin outlet. Since BXO may be a precursor to squamous cell carcinoma (a cancer of the skin and internal linings),[171] this may in part explain the observed association of penile cancer with a history of phimosis.[172]

When treatment is deemed necessary, for example, if the foreskin is too tight to allow for urination, 80% to 95% of cases can be successfully treated by application of topical steroid ointment which avoids surgical risk.[173] [174] Older boys and men may treat a non-retractable foreskin with gentle manual stretching to accomplish permanent tissue expansion.[175] [176] With the development of conservative treatments, including topical therapies

[170] Shankar KR, Rickwood AMK. The incidence of phimosis in boys. *BJU Int*. 1999;84: 101–2. URL: https://www.deepdyve.com/lp/wiley/the-incidence-of-phimosis-in-boys-pp9JXzrDEU, Accessed 19 December 2018.
[171] Edwards SK, Bunker CB, Ziller F, van der Meijden WI. 2013 European guideline for the management of balanoposthitis. *Int J STD AIDS*. 2014;25(9):615–26. URL: https://journals.sagepub.com/doi/abs/10.1177/0956462414533099?rfr_dat=cr_pub%3Dpubmed&url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&journalCode=stda, Accessed 19 December 2018.
[172] Tsen HF, Morgenstern H, Mack T, Peters RK. Risk factors for penile cancer: results of a population-based case-control study in Los Angeles County (United States). *Cancer Causes Control*. 2001;12(3): 267–77. URL: https://link.springer.com/article/10.1023/A:1011266405062, Accessed 19 December 2019.
[173] Orsola A, Caffaratti J, Garat JM. Conservative treatment of phimosis in children using a topical steroid. *Urology*. 2000;56(2):307–10. URL: https://reference.medscape.com/medline/abstract/10925099, Accessed 19 December 2018.
[174] Ashfield JE, Nickel KR, Siemens DR, MacNeily AE, Nickel JC. Treatment of phimosis with topical steroids in 194 children. *J Urol*. 2003;169(3): 1106–8. URL: https://www.jurology.com/doi/10.1097/01.ju.0000048973.26072.eb, Accessed 19 December 2018.
[175] Dunn HP. Non-surgical management of phimosis. *Aust N Z J Surg*. 1989;59(12): 963. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1445-2197.1989.tb07640.x, Accessed 19 December 2018.
[176] Beaugé M. The causes of adolescent phimosis. *Br J Sex Med*. 1997;Sept/Oct: 26.

and foreskin-sparing surgical techniques,[177] [178] the use of circumcision as a treatment of choice to prevent or relieve phimosis is obsolete.[179]

Phimosis can occasionally be caused by a condition called *frenulum breve* in which the frenulum (the web of tissue connecting the foreskin to the underside of the glans) is too short to allow retraction. Frenulum breve may be relieved by a minor incision in the frenulum (frenuloplasty).[180]

Infant circumcision itself can actually cause a phimotic condition, as the circular scar may contract over the top of the glans following surgery, trapping it behind a ring of scar tissue. One study found that phimosis occurs in 2.9% of circumcision patients[181] – a figure that easily exceeds the incidence of pathological phimosis in intact males.[182] Lau *et al*. (2018) report 6.9 percent of circumcised boys in Utah develop post-circumcision phimosis.[183] Since circumcision may cause more cases of phimosis than it prevents, it cannot be recommended to prevent phimosis.

Urinary Tract Infections (UTIs)

Among the few alleged benefits of circumcision that are of actual relevance to children, the most prominent is the claim that it protects against urinary tract infections in the first year of life. The degree of relative risk reduction for circumcised boys is most often reported as 10-fold (over a small absolute incidence), based on retrospective data.[184] However, a large prospective cohort study – a more reliable research design – reported a

[177] Cuckow PM, Rix G, Mouriquand PD. Preputial plasty: a good alternative to circumcision. *J Pediatr Surg*. 1994;29: 561–3. URL: https://www.sciencedirect.com/science/article/pii/0022346894900922, Accessed 19 December 2018.
[178] Lane TM, South LM. Triple incision to treat phimosis in children: an alternative to circumcision. *BJU Int*. 2004;93: 635. URL: https://onlinelibrary.wiley.com/doi/full/10.1046/j.1464-410X.2003.04354.x, Accessed 19 December 2018.
[179] Sukhbir Kaur Shahid. Phimosis in children. *ISRN Urol*. 2012: 1–6. doi:10.5402/2012/707329, URL: https://www.hindawi.com/journals/isrn/2012/707329/
[180] Dockray J, Finlayson A, Muir GH. Penile frenuloplasty: a simple and effective treatment for frenular pain or scarring. *BJU Int*. 2012;109(10): 1546–50. URL: https://onlinelibrary.wiley.com/doi/full/10.1111/j.1464-410X.2011.10678.x, Accessed 19 December 2018.
[181] Blalock HJ, Vemulakonda V, Ritchey ML, Ribbeck M. Outpatient management of phimosis following newborn circumcision. *J Urol*. 2003;169(6): 2332–4. URL: https://www.jurology.com/article/S0022-5347(05)63612-9/fulltext, Accessed 19 December 2018.
[182] Shankar KR, Rickwood AMK. The incidence of phimosis in boys. *BJU Int*. 1999;84: 101–2. URL: https://www.deepdyve.com/lp/wiley/the-incidence-of-phimosis-in-boys-pp9JXzrDEU, Accessed 19 December 2018.
[183] Lau G, Kim J, Schaeffer A. Identification of circumcision complications using a regional claims database. *The Societies for Pediatric Urology* 2018. URL: http://spuonline.org/abstracts/2018/P21.cgi, Accessed 7 January 2018.
[184] Singh-Grewal D, Macdessi J, Craig J. Circumcision for the prevention of urinary tract infection in boys: a systematic review of randomized trials and observational studies. *Arch Dis Child*. 2005;90(8): 853–8.

relative risk reduction in hospitalization for UTI of 3.7-fold.[185] Furthermore, in this study, when all outpatient UTIs were considered, the relative risk reduction dropped to 1.73-fold.[186]

To put UTIs into perspective, a study from Sweden, where boys are not circumcised, and forcible foreskin retraction does not occur, found that, over the first six years of life, the absolute risk of UTIs in boys was low, at 1.8% versus 6.6% in girls, and that UTI infection in boys was rare after the first year of life (0.1-0.2%).[187] Another investigator found a UTI rate of 0.08% in males >1 year old.[188] When UTIs do occur, they respond rapidly to antibiotic therapy.[189] [190] [191] UTIs in the first months of life are less likely to involve the

[185] To T, Agha M, Dick PT, Feldman W. Cohort study on circumcision of newborn boys and subsequent risk of urinary-tract infection. *Lancet*. 1998;352: 1813–6. URL: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(98)02392-7/fulltext, Accessed 22 February 2018.
[186] Ibid.
[187] Mårild S, Jodal U. Incidence rate of first-time symptomatic urinary tract infection in children under 6 years of age. *Acta Paediatr*. 1998;87(5): 549–52. URL: https://reference.medscape.com/medline/abstract/9641738, Accessed 22 December 2018.
[188] Roberts KB, Akintemi OB. The epidemiology and clinical presentation of urinary tract infections in children younger than 2 years of age. *Pediatr Ann*. 1999;28: 644–9. URL: https://www.healio.com/pediatrics/journals/pedann/1999-10-28-10/%7B88bb964a-5af9-4a79-89b1-77c15b7464de%7D/the-epidemiology-and-clinical-presentation-of-urinary-tract-infections-in-children-younger-than-2-years-of-age, Accessed 22 December 2018.
[189] McCracken G. Options in antimicrobial management of urinary tract infections in infants and children. *Pediatr Infect Dis J*. 1989;8(8): 552–5. URL: https://utsouthwestern.influuent.utsystem.edu/en/publications/options-in-antimicrobial-management-of-urinary-tract-infections-i, Accessed 22 December 2018.
[190] Larcombe J. Urinary tract infection in children. *BMJ*. 1999;319: 1173–5. URL: https://www.bmj.com/content/319/7218/1173, Accessed 22 December 2018.
[191] Hoberman A, Wald ER, Hickey RW, Baskin M, Charron M, Majd M, *et al*. Oral versus initial intravenous therapy for urinary tract infections in young febrile children. *Pediatrics*. 1999;104: 79–86. URL: http://pediatrics.aappublications.org/content/104/1/79? , Accessed 22 December 2018

kidneys,[192] and UTIs rarely, if ever, result in hypertension or end-stage kidney disease.[193] [194] [195] [196] [197] [198] [199] [200]

Nonetheless, UTIs have been touted as a "compelling" reason for circumcision largely due to the efforts of Thomas E. Wiswell who, beginning in 1982, searched U.S. Army hospital databases to compare UTI rates in circumcised and intact infant males.[[201], and others] The American Academy of Pediatrics itself critiqued the spate of studies produced by Wiswell and other investigators around the same time, stating,

> It should be noted that these studies were retrospective in design and may have methodological flaws. For example, they do not include all boys born in any single cohort or those treated as outpatients, so the study population may have been influenced by selection bias.[202]

In addition, these studies failed to control for potentially confounding factors, such as being born prematurely. Prematurity puts babies at higher risk of infections of all kinds due to their immature immune systems, and such infants are more likely to undergo

[192] Pecile P, Miorin E, Romanello C, Vidal E, Contardo M, Valent F, *et al*. Age-related renal parenchymal lesions in children with first febrile urinary tract infections. *Pediatrics*. 2009;124: 23–9. URL: http://pediatrics.aappublications.org/content/124/1/23?download=true, Accessed 22 December 2018.
[193] Sreenarasimhaiah S, Hellerstein S. Urinary tract infections per se do not cause end-stage kidney disease. *Pediatr Nephrol.* 1998;12: 210–3. URL: https://link.springer.com/article/10.1007/s004670050439, Accessed 22 December 2018.
[194] Helin I, Winberg J. Chronic renal failure in Swedish children. *Acta Paediatr Scand.* 1980;69: 607–11. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1651-2227.1980.tb07330.x, Accessed 22 December 2018.
[195] Esbjörner E, Aronson S, Berg U, Jodal U, Linne T. Children with chronic renal failure in Sweden 1978-1985. *Pediatr Nephrol*. 1990;4: 249–52. URL: https://rd.springer.com/article/10.1007%2FBF00857667, Accessed 22 December 2018.
[196] Esbjörner E, Berg U, Hansson S. Epidemiology of chronic renal failure in children: a report from Sweden 1986-1994. Swedish Pediatric Nephrology Association. *Pediatr Nephrol*. 1997;11: 438–42. URL: https://www.researchgate.net/publication/226243826_Epidemiology_of_chronic_renal_failure_in_children_A_report_from_Sweden_1986-1994, Accessed 22 December 2018.
[197] Wennerström M, Hansson S, Jodal U, Sixt R, Stokland E. Renal function 16 to 26 years after first urinary tract infection in childhood. *Arch Pediatr Adolesc Med.* 2000;154:339–45. URL: https://archpedi.jamanetwork.com/journals/peds/articlepdf/348983/poa90200.pdf, Accessed 22 December 2018.
[198] Wennerström M, Hansson S, Hedner T, Himmelmann A, Jodal U. Ambulatory blood pressure 16-26 years after the first urinary tract infection in childhood. *J Hypertens.* 2000;18:485–91. URL: https://journals.lww.com/jhypertension/Abstract/2000/18040/Ambulatory_blood_pressure_16_26_years_after_the.19.aspx, Accessed 22 Decmber 2018.
[199] Wolfish NM, Delbrouck NF, Shanon A, Matzinger MA, Stenstrom R, McLaine PN. Prevalence of hypertension in children with primary vesicoureteral reflux. *J Pediatr.* 1993;123: 559–63. URL: https://www.sciencedirect.com/science/article/pii/S0022347605809503, Accessed 22 December 2018.
[200] Salo J, Ikäheimo R, Tapiainen T, Uhari M. Childhood urinary tract infections as a cause of chronic kidney disease. *Pediatrics*. 2011;128: 840–7. URL http://pediatrics.aappublications.org/content/128/5/840?, Accessed 22 December 2018.
[201] Wiswell TE, Smith FR, Bass JW. Decreased incidence of urinary tract infections in circumcised male infants. *Pediatrics*. 1985;75(5): 901–3. URL: http://pediatrics.aappublications.org/content/75/5/901?
[202] Task Force on Circumcision. Report of the Task Force on Circumcision. *Pediatrics*. 1989;84(4): 388–91. URL: http://pediatrics.aappublications.org/content/pediatrics/84/2/388.full.pdf, Accessed 22 December 2018.

catheterization for various reasons, in itself increasing the infection risk. However, premature babies are also typically not circumcised because of their fragile medical condition, thus prematurity itself (rather than the presence of a foreskin) could explain the higher rate of UTIs found in intact infants.

There are no studies on circumcision and UTI that have adjusted for the various possible confounding factors. One statistical analysis modeled the impact of confounders on rates of diagnosis of UTIs, starting from the hypothetical assumption of no actual difference in UTIs between circumcised and intact boys.[203] Documented confounders accounted for in the model included prematurity, method of urine collection (the commonly used bag method produces more false positives in intact boys), differential health-seeking behavior (parents of prematurely born [thus more often intact] babies, and of typically non-circumcised Hispanic boys, have been shown to disproportionately seek medical care for minor medical problems), and differential rates of UTI testing of intact boys (due to clinicians' assumptions of their increased risk), among others. The model determined that, if there were no real difference in the rate of UTIs, intact boys would be diagnosed with a UTI 4.27 times more often than circumcised boys due to such confounding factors alone. The author concluded that "it is quite possible that the differences noted in the incidence of urinary tract infection between circumcised and non-circumcised boys are entirely due to confounding factors."[204]

In particular, no study has ever adjusted for the effect of forcible foreskin retraction, a common injury that was once standard medical 'care' based on North American clinicians' lack of understanding of normal foreskin development.[205] [206] Although the American Academy of Pediatrics has recommended against the practice of forced foreskin retraction for decades, it persists both in clinical settings and at home by parents, due to erroneous and aggressive hygiene advice. Traumatic retraction is invariably performed without any

[203] Van Howe RS. Effect of confounding in the association between circumcision status and urinary tract infection. *J Infect*. 2005;51: 59–68. URL: https://www.researchgate.net/publication/7765284_Effect_of_Confounding_in_the_Association_Between_Circumcision_Status_and_Urinary_Tract_Infection, Accessed 22 December 2018.
[204] Ibid.
[205] Osborn LM, Metcalf TJ, Mariani EM. Hygienic care in uncircumcised infants. *Pediatrics*. 1981;67(3):365–7. URL: http://pediatrics.aappublications.org/content/67/3/365?, Accessed 22 December 2018.
[206] Geisheker J. What is the greatest danger for an uncircumcised boy? *Psychology Today* website. 2011 Oct 23. URL: https://www.psychologytoday.com/us/blog/moral-landscapes/201110/what-is-the-greatest-danger-uncircumcised-boy, Accessed 22 December 2018.

antisepsis, putting intact boys at risk of iatrogenic (doctor-caused) UTI, and potentially biasing studies of UTI incidence.

On the other hand, a number of other studies have failed to find a UTI risk-reduction effect from circumcision.

For example, eight studies from Israel demonstrated, in fact, the opposite: a positive association between ritual circumcision on the eighth day and immediate post-circumcision UTI.[207] [208] [209] [210] [211] [212] [213] [214]

Mueller *et al*. (1997) conducted in a prospective study of 108 male infants under 6 months of age with UTI.[215] They found that, regardless of circumcision status, infants who presented with their first UTI at 6 months or less were likely to have an underlying GU abnormality (~75%), mostly vesicoureteral reflux (VUR) (backward flow of urine from the bladder to the kidneys, which can carry pathogens upstream in the urinary tract), and that in the remaining boys with UTI who had normal anatomy, circumcised and intact boys were equally represented. Thus, the presence of anatomical abnormalities, not the foreskin, was found to be the predominant associated risk factor of the UTIs.

[207] Menahem S. Complications arising from ritual circumcision: pathogenesis and possible prevention. *Isr J Med Sci*. 1981;17(1): 45–8. URL: https://www.researchgate.net/publication/15737047_Complications_arising_from_ritual_circumcision_Pathogenesis_and_possible_prevention, Accessed 22 December 2018.
[208] Cohen HA, Drucker MM, Vainer S, Ashkenasi A, Amir J, Frydman M, *et al*. Postcircumcision urinary tract infection. *Clin Pediatr*.1992;31(6): 322–4. URL: https://journals.sagepub.com/doi/abs/10.1177/000992289203100601, Accessed 22 December 2018.
[209] Goldman M, Barr J, Bistritzer T, Aladjem M. Urinary tract infection following ritual Jewish circumcision. *Isr J Med Sci*. 1996;32: 1098–102.
[210] Amir J, Varsano I, Mimouni M. Circumcision and urinary tract infection in infants. *Am J Dis Child*. 1986;140: 1092. URL: https://jamanetwork.com/journals/jamapediatrics/article-abstract/513140, Accessed 22 December 2018.
[211] Amir J, Alpert G, Reisner SH, Nitzan M. Fever in the first year of life. *Israel J Med Sci*. 1984;20: 447–8.
[212] Harel L, Straussberg R, Jackson S, Amir J. Influence of circumcision technique on frequency of urinary tract infections in neonates. *Pediatr Infect Dis. J* 2002;21:879–80. URL: https://journals.lww.com/pidj/Fulltext/2002/09000/Influence_of_circumcision_technique_on_frequency.20.aspx, Accessed 22 December 2018.
[213] Prais D, Shoov-Furman R, Amir J. Is ritual circumcision a risk factor for neonatal urinary tract infections? *Arch Dis Child*. 2009;94: 191–4. URL: https://adc.bmj.com/content/94/3/191, Accessed 22 December 2018.
[214] Toker O, Schwartz S, Segal G, Godovitch N, Schlesinger Y, Raveh D. A costly covenant: ritual circumcision and urinary tract infection. *Isr Med Assoc J*. 2010;12: 262–5. URL: https://www.ima.org.il/FilesUpload/IMAJ/0/39/19639.pdf, Accessed 22 December 2018.
[215] Mueller ER, Steinhardt G, Naseer S. The incidence of genitourinary abnormalities in circumcised and uncircumcised boys presenting with an initial urinary tract infection by 6 months of age. *Pediatrics*. 1997;100(Supplement): 580.

Kwak *et al*. (2004) studied whether circumcision during surgery to correct vesicoureteral reflux made a difference in the incidence of post-operative UTI.[216] Over 12 years of follow-up, the authors found no difference in number of post-operative UTI episodes between boys circumcised during antireflux surgery and those that were not. Again, the presence of the foreskin was not a factor.

Even if the earlier studies are accurate, it is estimated that between 111 and 195 circumcisions would be needed to prevent one urinary tract infection.[217] [218] Since circumcisions cost at least $285 each,[219] it would be necessary to spend between $31,635 and $55,575 to prevent a single infection with no long-term consequences, and that infection can easily be treated with an oral antibiotic that costs less than $20. It has been estimated that only one boy in 6000 will legitimately require a circumcision related to difficulties from UTIs.[220]

The evidence suggests that circumcision is, at best, of little value in reducing UTI. Risks, complications, and disadvantages of circumcision outweigh any reduction in UTI.[221] [222] [223] Breastfeeding has a protective effect against infection in infancy, including UTI,[224]

[216] Kwak C, Oh SJ, Lee A, Choi H. Effect of circumcision on urinary tract infection after successful antireflux surgery. *BJU Int*. 2004;94(4): 627–9. URL: https://onlinelibrary.wiley.com/doi/full/10.1111/j.1464-410X.2004.05014.x, Accessed 22 December 2018.
[217] Singh-Grewal D, Macdessi J, Craig J. Circumcision for the prevention of urinary tract infection in boys: a systematic review of randomized trials and observational studies. *Arch Dis Child*. 2005;90(8): 853–8. URL: https://adc.bmj.com/content/90/8/853, Accessed 22 December 2018.
[218] To T, Agha M, Dick PT, Feldman W. Cohort study on circumcision of newborn boys and subsequent risk of urinary-tract infection. *Lancet*. 1998;352: 1813–6. URL: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(98)02392-7/fulltext, Accessed 22 December2018.
[219] Hart-Cooper GD, Tao G, Stock JA, Hoover KW. Circumcision of privately insured males aged 0 to 18 years in the United States. *Pediatrics*. 2014;134: 950–6. DOI: 10.1542/peds.2014-1007.
[220] Broadis E, Kronfli R, Flett ME, Cascio S, O'Toole SJ. 'Targeted top down' approach for the investigation of UTI: a 10-year follow-up study in a cohort of 1000 children. *J Pediatr Urol*. 2016;12(1): 39.e1–6. URL: https://www.sciencedirect.com/science/article/pii/S1477513115002958, Accessed 22 December 2018.
[221] Chessare JB. Circumcision: is the risk of urinary tract infection really the pivotal issue? *Clin Pediatr*. 1992;31(2): 100–4. URL: https://journals.sagepub.com/doi/abs/10.1177/000992289203100207?, Accessed 22 December 2018.
[222] Ganiats TG, Humphrey JB, Taras HL, Kaplan RM. Routine neonatal circumcision: a cost-utility analysis. *Med Decis Making*. 1991;11:282–93. URL: https://journals.sagepub.com/doi/abs/10.1177/0272989X9101100406, Accessed 22 December 2018.
[223] Van Howe RS. A cost-utility analysis of neonatal circumcision. *Med Decis Making*. 2004;24: 584–601. URL: http://www.arclaw.org/sites/default/files/primer/VanHowe%20Cost%20Utility%20MedDecMaking%202004.pdf, Accessed 22 December 2014.
[224] Hanson LÅ. Protective effects of breastfeeding against urinary tract infection. *Acta Paediatr Scand*. 2004;93(2): 154-6. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1651-2227.2004.tb00695.x, Accessed 22 December 2018.

[225] [226] [227] an effect that continues even after weaning.[228] [229] Instead of circumcision, breast-feeding[230] [231] and rooming-in (to colonize the infant with maternal bacteria)[232] are recommended to reduce UTI in infancy.

Balanitis

Intact males may sometimes present with balanitis − a catch-all term covering various minor inflammatory problems affecting the foreskin and/or glans. Balanitis can be caused by mechanical or chemical irritation (e.g. from soiled diapers, soap, or harsh pool chemicals), or by infection with bacteria or fungi. It is rarely an indication for therapeutic circumcision, and never for prophylactic circumcision. Effective conservative treatment measures exist for all types of balanitis, including BXO, and are considered the first line of treatment.[233]

Sexually Transmitted Infections (STIs)

Despite the fact that infants and children are not sexually active and thus not at risk for any sexually transmitted infection (STI) (and that adults can take appropriate precautions), the idea that circumcision significantly reduces the risk of STIs is a rationale commonly given for the practice. However, this notion is a piece of medical folklore dating

[225] Mårild S, Hansson S, Jodal U, Oden A, Svedberg K. Protective effect of breastfeeding against urinary tract infection. *Acta Paediatr Scand*. 2004;93(2): 164–8. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1651-2227.2004.tb00699.x, Accessed 22 December 2018.
[226] Pisacane A, Graziano L, Mazzarella G, Scarpellino B, Zona G. Breast-feeding and urinary tract infection. *J Pediatr*. 1992;120(1):87–9. URL: https://www.sciencedirect.com/science/article/pii/S0022347605806079, Accessed 22 December 2018.
[227] Ladomenou F, Moschandreas J, Kafatos A, Tselentis Y, Galanakis E. Protective effect of exclusive breastfeeding against infections during infancy: a prospective study. *Arch Dis Child*. 2010;95(12): 100–8. URL: https://adc.bmj.com/content/95/12/1004, Accessed 22 December 2018.
[228] Hanson LÅ. Protective effects of breastfeeding against urinary tract infection. *Acta Paediatr Scand*. 2004;93(2): 154–6. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1651-2227.2004.tb00695.x, Accessed 22 December 2018.
[229] Mårild S, Hansson S, Jodal U, Oden A, Svedberg K. Protective effect of breastfeeding against urinary tract infection. *Acta Paediatr Scand*. 2004;93(2): 164–8. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1651-2227.2004.tb00699.x, Accessed 22 December 2018.
[230] Outerbridge EW. Decreasing the risk of urinary tract infections [letter]. *Paediatr Child Health*. 1998;3(1): 19. URL: https://europepmc.org/articles/PMC2851257, Accessed 22 December 2018.
[231] Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics*. 2005;115(2): 496–506. URL: pediatrics.aappublications.org/content/pediatrics/115/2/496.full.pdf, Accessed 22 December 2018.
[232] Winberg J, Bollgren I, Gothefors L, Herthelius M, Tullus K. The prepuce: a mistake of nature? *Lancet*. 1989;1: 598–9. URL: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(89)91619-X/fulltext, Accessed 22 December 2018.
[233] Edwards SK, Bunker CB, Ziller F, van der Meijden WI. 2013 European guideline for the management of balanoposthitis. *Int J STD AIDS*. 2014;25(9): 615–26. URL: https://www.huidziekten.nl/richtlijnen/european-guideline-balanoposthitis-2013.pdf, Accessed 19 December 2019.

back to Victorian-era medicine, before a modern understanding of the causes of disease and before the advent of evidence-based medicine.[234]

In the 1910s, an article was published in the *Journal of the American Medical Association* criticizing ritual circumcision because of the number of cases of tuberculosis acquired through the open wound.[235] In response, New York physician Abraham Wolbarst published a defensive reply in which he cited the prevention of 'venereal disease' (along with prevention of masturbation and many other problems) to justify his call for "universal circumcision as a sanitary measure."[236]

However, modern science has not confirmed Wolbarst's claims. Since his time, dozens of studies have sought to determine whether circumcision makes a meaningful difference in the risk of STI acquisition, with inconsistent and contradictory results.

When the results of STI studies are considered in aggregate using meta-analysis, circumcision has been shown to have *no significant impact* on the risk of gonorrhea,[237] [238] chlamydia,[239] [240] genital herpes simplex virus infections,[241] human papilloma virus (HPV),[242] or chancroid.[243] [244] Being circumcised is associated with an *increased risk* of

[234] Darby R. *A surgical temptation: the demonization of the foreskin and the rise of circumcision in Britain*. Chicago: University of Chicago Press; 2005.
[235] Holt LE. Tuberculosis acquired through ritual circumcision. *JAMA*. 1913;LXI(2): 99–102. URL: https://jamanetwork.com/journals/jama/article-abstract/215500, Accessed 20 December 2018.
[236] Wolbarst AL. Universal circumcision as a sanitary measure. *JAMA*. 1914;LXII(2): 92–7. URL: https://jamanetwork.com/journals/jama/article-abstract/453164, Accessed 20 December 2018.
[237] Van Howe RS. Genital ulcerative disease and sexually transmitted urethritis and circumcision: a meta-analysis. *Int J STD AIDS*. 2007;18: 799–809. URL: http://www.academia.edu/6991850/Genital_ulcerative_disease_and_sexually_transmitted_urethritis_and_circumcision_a_meta-analysis, Accessed 20 December 2018.
[238] Van Howe RS. Sexually transmitted infections and male circumcision: a systematic review and meta-analysis. *ISRN Urol.* 2013: 109846. URL: https://www.hindawi.com/journals/isrn/2013/109846/, Accessed 20 December 2018.
[239] Van Howe RS. Genital ulcerative disease and sexually transmitted urethritis and circumcision: a meta-analysis. *Int J STD AIDS*. 2007;18: 799–809. URL: http://www.academia.edu/6991850/Genital_ulcerative_disease_and_sexually_transmitted_urethritis_and_circumcision_a_meta-analysis, Accessed 20 December 2018.
[240] Van Howe RS. Sexually transmitted infections and male circumcision: a systematic review and meta-analysis. *ISRN Urol.* 2013: 109846. URL: https://www.hindawi.com/journals/isrn/2013/109846/, Accessed 20 December 2018.
[241] Ibid.
[242] Ibid.
[243] Van Howe RS. Genital ulcerative disease and sexually transmitted urethritis and circumcision: a meta-analysis. *Int J STD AIDS*. 2007;18: 799–809. URL: http://www.academia.edu/6991850/Genital_ulcerative_disease_and_sexually_transmitted_urethritis_and_circumcision_a_meta-analysis, Accessed 20 December 2018.
[244] Van Howe RS. Sexually transmitted infections and male circumcision: a systematic review and meta-analysis. *ISRN Urol.* 2013: 109846. URL: https://www.hindawi.com/journals/isrn/2013/109846/, Accessed 20 December 2018.

non-specific urethritis,[245] [246] genital discharge syndrome (which includes gonorrhea, chlamydia, and non-specific urethritis),[247] [248] and an increased risk of contracting any STI (as opposed to having no STIs).[249] Being circumcised is associated with a *slightly lowered risk* of genital ulcerative disease (which includes chancroid, syphilis, and genital herpes infection)[250] [251] [252][67-69] and syphilis (primarily in Africa).[253] [254] However, prospective studies have found a *slight increase* in the incidence of syphilis in circumcised males.[255] [256]

In the case of HPV, sampling bias can occur if only the glans of the penis is tested. Several studies have shown that circumcised men are more likely than intact men to harbor

[245] Van Howe RS. Genital ulcerative disease and sexually transmitted urethritis and circumcision: a meta-analysis. *Int J STD AIDS*. 2007;18: 799–809. URL: http://www.academia.edu/6991850/Genital_ulcerative_disease_and_sexually_transmitted_urethritis_and_circumcision_a_meta-analysis, Accessed 20 December 2018.
[246] Van Howe RS. Sexually transmitted infections and male circumcision: a systematic review and meta-analysis. *ISRN Urol.* 2013: 109846. URL: https://www.hindawi.com/journals/isrn/2013/109846/, Accessed 20 December 2018.
[247] Van Howe RS. Genital ulcerative disease and sexually transmitted urethritis and circumcision: a meta-analysis. *Int J STD AIDS*. 2007;18: 799–809. URL: http://www.academia.edu/6991850/Genital_ulcerative_disease_and_sexually_transmitted_urethritis_and_circumcision_a_meta-analysis, Accessed 20 December 2018.
[248] Van Howe RS. Sexually transmitted infections and male circumcision: a systematic review and meta-analysis. *ISRN Urol.* 2013: 109846. URL: https://www.hindawi.com/journals/isrn/2013/109846/, Accessed 20 December 2018.
[249] Ibid.
[250] Van Howe RS. Genital ulcerative disease and sexually transmitted urethritis and circumcision: a meta-analysis. *Int J STD AIDS*. 2007;18: 799–809. URL: http://www.academia.edu/6991850/Genital_ulcerative_disease_and_sexually_transmitted_urethritis_and_circumcision_a_meta-analysis, Accessed 20 December 2018.
[251] Van Howe RS. Sexually transmitted infections and male circumcision: a systematic review and meta-analysis. *ISRN Urol.* 2013: 109846. URL: https://www.hindawi.com/journals/isrn/2013/109846/, Accessed 20 December 2018.
[252] Weiss HA, Thomas SL, Munabi SK, Hayes RJ. Male circumcision and risk of syphilis, chancroid, and genital herpes: a systematic review and meta-analysis. *Sex Transm Infect*. 2006;82: 101–10. URL: https://sti.bmj.com/content/82/2/101, Accessed 20 December 2018.
[253] Van Howe RS. Sexually transmitted infections and male circumcision: a systematic review and meta-analysis. *ISRN Urol.* 2013:109846. URL: https://www.hindawi.com/journals/isrn/2013/109846/, Accessed 20 December 2018.
[254] Weiss HA, Thomas SL, Munabi SK, Hayes RJ. Male circumcision and risk of syphilis, chancroid, and genital herpes: a systematic review and meta-analysis. *Sex Transm Infect*. 2006;82: 101–10. URL: https://sti.bmj.com/content/82/2/101, Accessed 20 December 2018.
[255] Tobian AAR, Serwadda D, Quinn TC, Kigozi G, Gravitt PE, Laeyendecker O, *et al*. Male circumcision for the prevention of HSV-2 and HPV infections and syphilis. *N Engl J Med*. 2009;360: 1298–309. URL: https://www.nejm.org/doi/full/10.1056/NEJMoa0802556, Accessed 20 December 2018.
[256] Mehta SD, Moses S, Parker CB, Agot K, Maclean I, Bailey RC. Circumcision status and incident HSV-2 infection, genital ulcer disease, and HIV infection. *AIDS*. 2012;26: 1141–9. URL: https://indigo.uic.edu/bitstream/handle/10027/10833/Mehta%20circ%20hsv2%20gud%20hiv%20manuscript%20AIDS%20REVISION%201-17-12%20Final%20no%20Ndinya%20%282%29.pdf?sequence=2, Accessed 31 December 2018.

the HPV virus on the shaft of the penis as compared to the glans.[257] [258] [259] [260] [261] [262] As a result, sampling only the glans will miss more HPV infections in circumcised men than it will in intact men, thus overestimating the association between having a foreskin and genital HPV.[263] [264] For example, several recent HPV studies from Africa only sampled the glans.[265] [266] When adjusted for sampling bias, the results of these studies were no longer statistically significant.[267] [268]

There is no evidence that circumcision has reduced the incidence of STIs in the United States. While the prevalence of chlamydia, gonorrhea and syphilis has declined steadily in (non-circumcising) Europe since 1980, in the (circumcising) U.S., the incidence of syphilis has increased, and the incidence of chlamydia has soared.[269] The incidence of

[257] Weaver BA, Feng Q, Holmes KK, Kiviat N, Lee SK, Meyer C, *et al*. Evaluation of genital sites and sampling techniques for detection of human papillomavirus DNA in men. *J Infect Dis*. 2004;189: 677–85. URL: https://pdfs.semanticscholar.org/ec57/174d70da244a1cfe2fb2d6a3a2cd7e4824e1.pdf, Accessed 20 December 2018.
[258] VanBuskirk K, Winer RL, Hughes JP, Geng Q, Arima Y, Lee S-K, *et al*. Circumcision and the acquisition of human papillomarvirus infection in young men. *Sex Trans Dis*. 2011;38: 1074–81. URL: https://journals.lww.com/stdjournal/Fulltext/2011/11000/Circumcision_and_Acquisition_of_Human.16.aspx, Accessed 20 December 2018.
[259] Aynaud O, Piron D, Bijaoui G, Casanova JM. Developmental factors of urethral human papillomavirus lesions: correlation with circumcision. *BJU Int*. 1999;84: 57–60. URL: https://onlinelibrary.wiley.com/doi/full/10.1046/j.1464-410x.1999.00104.x, Accessed 20 December 2018.
[260] Aynaud O, Ionesco M, Barrasso R. Penile intraepithelial neoplasia. Specific clinical features correlate with histologic and virologic findings. *Cancer*. 1994;74: 1762–7. URL: https://onlinelibrary.wiley.com/doi/abs/10.1002/1097-0142%2819940915%2974%3A6%3C1762%3A%3AAID-CNCR2820740619%3E3.0.CO%3B2-1, Accessed 20 December 2018.
[261] Oriel JD. Natural history of genital warts. *Br J Vener Dis*. 1971;47: 1–13. URL: https://sti.bmj.com/content/sextrans/47/1/1.full.pdf, Accessed 31 December 2018.
[262] Hernandez BY, Wilkens LR, Zhu X, McDuffie K, Thompson P, Shvetsov YB, *et al.* Circumcision and human papillomavirus infection in men: a site-specific comparison. *J Infect Dis*. 2008;197:787–94. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2596734/, Accessed 1 January 2019.
[263] Van Howe RS. Sexually transmitted infections and male circumcision: a systematic review and meta-analysis. *ISRN Urol*. 2013:109846. URL:
[264] Van Howe RS. Human papillomavirus and circumcision: a meta-analysis. *J Infect*. 2007;54(5): 490–6. URL: http://www.academia.edu/6991948/Human_papillomavirus_and_circumcision_A_meta-analysis, Accessed 20 December 2018.
[265] Tobin AAR, Serwadda D, Quinn TC, Kigozi G, Gravitt PE, Laeyendecker O*, et al*. Male circumcision for the prevention of HSV-2 and HPV infections and syphilis. *N Engl J Med*. 2009;360: 1298–309. URL: https://www.nejm.org/doi/full/10.1056/NEJMoa0802556, Accessed 20 December 2018.
[266] Auvert B, Sobngwi-Tambekou J, Cutler E, Nieuwoudt M, Lissaouba P, Puren A, *et al*. Effect of male circumcision on the prevalence of high-risk human papillomavirus in young men: results of a randomized controlled trial conducted in Orange Farm, South Africa. *J Infect Dis*. 2009;199: 14–9. URL: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.366.9670&rep=rep1&type=pdf, Accessed 20 December 2018.
[267] Storms MR. Male circumcision for the prevention of HSV-2 and HPV infections. *N Engl J Med*. 2009;361: 307. URL: https://www.nejm.org/doi/full/10.1056/NEJMc090844, Accessed 20 December 2018.
[268] Van Howe RS. Sampling bias explains association between human papillomavirus and circumcision. *J Inf Dis*. 2009;200: 832. URL: https://academic.oup.com/jid/article/200/5/832/866790, Accessed 20 December 2018.
[269] Sexually transmitted diseases across space and time. OnlineDoctor (UK) website. n.d. URL: onlinedoctor.superdrug.com/std-us-eu/, Accessed 20 December 2018

gonorrhea in the U.S. is 20 times higher than in Europe, while the incidence of chlamydia in the U.S. is 45 times higher than in Europe.[270]

Circumcised men report that the use of condoms is not an option for them.[271] A recent study of men visiting public STI clinics found that circumcised men were less likely than intact men to use condoms, which may in part explain these STI trends.[272]

The medical evidence does not support the practice of neonatal circumcision to prevent sexually transmitted infections. In fact, the evidence indicates that circumcision may actually increase the overall risk of STIs. Even if circumcision did reduce the risk of STIs, preemptive amputation is not a preferred approach to diseases that can readily be cured with a short course of antibiotics, or prevented by simple safe-sex behaviors. An adult male can choose to have his foreskin removed, if he prefers, but it is neither medically reasonable nor ethically acceptable to force this choice on not-at-risk children.

HIV/AIDS

While prevention of sexually transmitted infections is irrelevant to non-sexually-active newborns and children, nonetheless, prevention of human immunodeficiency virus (HIV) has become one of the main 'medical benefits' rationales given for circumcision.[273]

A decade ago, three randomized controlled trials (RCTs) done in sub-Saharan Africa appeared to show, during the study period, a 38-66% relative reduction for the circumcised

[270] Ibid.
[271] Hammond T, Carmack A. Long-term adverse outcomes from neonatal circumcision as reported in a survey of 1,008 men: an overview of human rights implications. *The International Journal of Human Rights*. 2017. URL: http://dx.doi.org/10.1080/13642987.2016.1260007, Accessed 12 January 2019.
[272] Crosby R, Charnigo RJ. A comparison of condom use perceptions and behaviours between circumcised and intact men attending sexually transmitted disease clinics in the United States. *Int J STD AIDS*. 2013;24(3): 175–8. URL: https://journals.sagepub.com/doi/abs/10.1177/0956462412472444, Accessed 20 December 2018.
[273] American Academy of Pediatrics Task Force on Circumcision. Male circumcision. *Pediatrics*. 2012;130(3): e756–85. URL: http://pediatrics.aappublications.org/content/pediatrics/130/3/e756.full.pdf, Accessed 21 December 2018.

subjects in the risk of heterosexual, female to male only, transmission of HIV.[274] [275] [276] All three studies were terminated early, due to their apparently clear results. However, Dowsett & Couch (2007) examined the results of the three RCTs, but found insufficient evidence to recommend circumcision to prevent HIV infection.[277] Green *et al.* (2008) reviewed the evidence and also found "insufficient data" as well as contrary evidence.[278] [279]

While RCTs are often considered the gold standard of medical trials, this only applies to RCTs with study designs that minimize bias. The three African RCTs were very similar in study design and contained multiple sources of bias, outlined below[280] [281] [282] [283]:

- Researcher expectation bias − Many of the investigators had written papers advocating for male circumcision to prevent HIV infection *prior* to undertaking these RCTs. Siegfried *et al.* note, on the topic of research on circumcision to prevent HIV,

[274] Auvert B, Taljaard D, Lagarde E, Sobngwi-Tambekou J, Sitta R, Puren A. Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: the ANRS 1265 Trial. *PLoS Med*. 2005;2: e298. URL: https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0020298, Accessed 21 December 2018.
[275] Bailey RC, Moses S, Parker CB, Agot K, Maclean I, Krieger JN, *et al*. Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial. *Lancet*. 2007;369: 643–56. URL: http://www.med.mcgill.ca/epidemiology/hanley/BionanoWorkshop/CircumcisionHIV_UgandaKenya.pdf, Accessed 21 December 2018.
[276] Gray RH, Kigozi G, Serwadda D, Makumbi F, Watya S, Nalugoda F, *et al*. Male circumcision for HIV prevention in men in Rakai, Uganda: a randomised trial. *Lancet*. 2007;369(9562): 657–66. URL: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2807%2960313-4/fulltext, Accessed 1 January 2019.
[277] Dowsett GW, Couch M. Male circumcision and HIV prevention: is there really enough of the right kind of evidence? *Reprod Health Matters*. 2007;15(29): 33–44. URL: https://www.researchgate.net/publication/6320861_Roundtable_Male_Circumcision_and_HIV_Prevention_Is_There_Really_Enough_of_the_Right_Kind_of_Evidence, Accessed 21 December 2018.
[278] Green LW, McAllister RG, Peterson KW, Travis JW. Male circumcision is not the HIV 'vaccine' we have been waiting for! *Futur HIV Ther*. 2008;2(3): 193–9. URL: http://arclaw.org/sites/default/files/primer/Green%20Circumcision%20not%20HIV%20Vaccine%202008.pdf, Accessed 21 December 2018.
[279] Green LW, Travis JW, McAllister RG, Peterson KW, Vardanyan AN, Craig A. Male circumcision and HIV prevention: insufficient evidence and neglected external validity. *Am J Prev Med.* 2010;39(5): 479–82. URL: https://www.researchgate.net/publication/47519182_Male_Circumcision_and_HIV_Prevention_Insufficient_Evidence_and_Neglected_External_Validity, Accessed 21 December 2018.
[280] Green LW, McAllister RG, Peterson KW, Travis JW. Male circumcision is not the HIV 'vaccine' we have been waiting for! *Futur HIV Ther*. 2008;2(3): 193–9. URL: http://arclaw.org/sites/default/files/primer/Green%20Circumcision%20not%20HIV%20Vaccine%202008.pdf, Accessed 21 December 2018.
[281] Green LW, Travis JW, McAllister RG, Peterson KW, Vardanyan AN, Craig A. Male circumcision and HIV prevention: insufficient evidence and neglected external validity. *Am J Prev Med.* 2010;39(5): 479–82. URL: https://www.researchgate.net/publication/47519182_Male_Circumcision_and_HIV_Prevention_Insufficient_Evidence_and_Neglected_External_Validity, Accessed 21 December 2018.
[282] Boyle GJ, Hill G. Sub-Saharan African randomised clinical trial in male circumcision and HIV transmission: methodological, ethical and legal concerns. *J Law Med*. 2011;19: 316–34. URL: https://www.researchgate.net/profile/Gregory_J_Boyle/publication/272498905_Sub-Saharan_African_randomised_clinical_trials_into_male_circumcision_and_HIV_transmission_Methodological_ethical_and_legal_concerns/links/54e72e040cf2cd2e02916428/Sub-Saharan-African-randomised-clinical-trials-into-male-circumcision-and-HIV-transmission-Methodological-ethical-and-legal-concerns.pdf, Accessed 21 December 2018.
[283] Van Howe RS, Storms MR. How the circumcision solution in Africa will increase HIV infections. *J Publ Health Afr*. 2011;2:e4. URL: https://pdfs.semanticscholar.org/95fc/7ac56662cb1a8309ea0f520dfe509aba3a5e.pdf, Accessed 21 December 2018.

that "researchers' personal biases and the dominant circumcision practices of their respective countries may influence their interpretation of findings."[284]

- Participant expectation bias − The majority of participants were convinced that circumcision would reduce their risk of HIV infection.[285]
- Lead time bias − Men randomized to the intervention arm of the trials (the group that was circumcised) were considered to be at risk for becoming infected from the time of the surgery, even though they were told to avoid sexual activity during the period of wound healing. Men in the control arm (the ones who were not circumcised) were able to be sexually active from the beginning of the study.
- Selection bias − Only men who were interested in a free circumcision were eligible to participate, and therefore may not have been representative of the general population.
- Attrition bias − For every man who became infected with HIV during the trials, 3.5−7.4 men were lost to follow-up. This is a serious methodological problem that could alter the statistical significance of the findings.[286]
- Early termination bias − Studies that are terminated early are more likely to overestimate any treatment effect.[287] [288]
- Duration bias − Because men who were not initially circumcised were circumcised at the end of the study, long-term comparison of the effects cannot be accurately extrapolated, as some modelers have proposed.[289]
- Source of infection unknown − If the studies were designed to determine whether circumcision reduced the risk of heterosexually-transmitted HIV, the investigators

[284] Siegfried N, Muller M, Volmink J, Deeks J, Egger M, Low N, *et al*. Male circumcision for prevention of heterosexual acquisition of HIV in men. *Cochrane Database Syst Rev*. 2003;3:CD003362.
[285] Wilson NL, Xiong W, Mattson CL. Is sex like driving? HIV prevention and risk compensation. *J Dev Econ*. 2014;106: 78–91. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4794434/, Accessed 21 December 2018.
[286] Akl EA, Briel M, You JJ, Sun X, Johnston BC, Busse JW, *et al*. Potential impact on estimated treatment effects of information lost to follow-up in randomised controlled trials (LOST-IT): systematic review. *BMJ*. 2012;344: e2809. URL: https://www.bmj.com/content/344/bmj.e2809, Accessed 21 December 2018.
[287] Pocock S, White I. Trials stopped early: too good to be true? *Lancet*. 1999;353: 943–4. URL: https://www.thelancet.com/action/captchaChallenge?redirectUri=%2Fjournals%2Flancet%2Farticle%2FPIIS0140-6736%2898%2900379-1%2Ffulltext%3Fcode%3Dlancet-site, Accessed 21 December 2018.
[288] Bassler D, Briel M, Montori VM, Lane M, Glasziou P, Zhou Q, *et al*. Stopping randomized trials early for benefit and estimation of treatment effects: systematic review and meta-regression analysis. *JAMA*. 2010;303: 1180–7. URL: https://jamanetwork.com/journals/jama/article-abstract/185591, Accessed 21 December 2018.
[289] Williams BG, Lloyd-Smith JO, Gouws E, Hankins C, Getz WM, Hargrove J, *et al*. The potential impact of male circumcision on HIV in sub-Saharan Africa. *PLoS Med*. 2006;3: e262. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1489185/, Accessed 1 January 2019.

should have confirmed that the infections were indeed transmitted through heterosexual sexual contact. They did not. Using the data reported, it is estimated that about half of the infections of the men in these studies were *not* sexually transmitted.[290]

The cumulative treatment effect in these trials – which claimed a 38-66% *relative* risk reduction[291] – was an *absolute* risk reduction of 1.3%.[292] This is a very small effect, which could easily have resulted from the various forms of bias, rather than being a true treatment effect. The findings are not robust, given that all of the trials had nearly identical methodologies and nearly identical results.

In any case, it appears that these trials were unnecessary in the first place. Data released before the trials began found a number of African countries where the prevalence of HIV infection was *greater in circumcised men* than in intact men.[293] [294] More HIV infection has recently been reported in circumcised men than in intact men.[295]

It should be noted that circumcised men are less likely to use condoms due to the lack of sensation.[296] [297]

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[290] Van Howe RS, Storms MR. How the circumcision solution in Africa will increase HIV infections. *J Publ Health Afr*. 2011;2: e4. URL: https://pdfs.semanticscholar.org/95fc/7ac56662cb1a8309ea0f520dfe509aba3a5e.pdf, Accessed 21 December 2018.

[291] Siegfried N, Muller M, Deeks JJ, Volmink J. Male circumcision for prevention of heterosexual acquisition of HIV in men. *Cochrane Database Syst Rev*. 2009;2: CD003362. URL: https://www.researchgate.net/publication/24281586_Male_circumcision_for_prevention_of_heterosexual_acquisition_of_HIV_in_men_Cochrane_Review, Accessed 21 December 2018.

[292] Boyle GJ, Hill G. Sub-Saharan African randomised clinical trial in male circumcision and HIV transmission: methodological, ethical and legal concerns. *J Law Med*. 2011;19: 316–34. URL: http://www.salem-news.com/fms/pdf/2011-12_JLM-Boyle-Hill.pdf, Accessed 27 December 2018.

[293] Mishra V, Medley A, Hong R, Yuan Gu Y, Robey B. Levels and spread of HIV seroprevalence and associated factors: evidence from national household surveys. DHS Comparative Reports No. 22. Calverton (MD): Macro International Inc; 2009. URL: https://www.dhsprogram.com/pubs/pdf/CR22/CR22.pdf, Accessed 21 December 2018.

[294] Garenne M. Long-term population effect of male circumcision in generalised HIV epidemics in sub-Saharan Africa. *Afr J AIDS Res*. 2008;7: 1–8. URL: http://www.circumstitions.com/Docs/garenne-2.pdf, Accessed 21 December 2018.

[295] Big blow as circumcision of Luo Men fails to reduce HIV/AIDS infections in Nyanza. *The Kenyan Daily Post*, Nairobi, September 11, 2013. URL: https://www.standardmedia.co.ke/article/2000093293/push-for-male-circumcision-in-nyanza-fails-to-reduce-infections, Accessed 10 June 2018.

[296] Crosby R, Charnigo RJ. A comparison of condom use perceptions and behaviours between circumcised and intact men attending sexually transmitted disease clinics in the United States. *Int J STD AIDS*. 2013;24(3): 175–8. URL: https://journals.sagepub.com/doi/abs/10.1177/0956462412472444, Accessed 20 December 2018.

[297] Hammond T, Carmack A. Long-term adverse outcomes from neonatal circumcision as reported in a survey of 1,008 men: an overview of human rights implications. *The International Journal of Human Rights*. 2017. URL: http://dx.doi.org/10.1080/13642987.2016.1260007, Accessed 12 January 2019.

Unfortunately, the results from the three RCTs provided the impetus for the WHO to bypass the usual step of performing pilot studies to determine if circumcision was effective outside of a research setting. Instead, it recommended programs to circumcise millions of men in sub-Saharan Africa as quickly as possible. (These programs measure success by the number of males circumcised rather than by their impact on HIV incidence. Since the mass circumcision campaigns began in Uganda and Kenya, the incidence of new cases of HIV in both countries has increased.[298] [299] [300]) The WHO recommendations included that circumcision programs should be voluntary, free of coercion, and targeted to areas where the HIV prevalence is high (>15% of the population) and circumcision rates are low (<20%).[301] None of these criteria apply to the situation of newborn babies (who cannot voluntarily consent) in the epidemiological setting of the United States (low HIV prevalence, and already high circumcision rate, as well as a much higher standard of living than Africa).

As with other STIs, there is no evidence that circumcision has had any impact on lowering the incidence of HIV infection in the United States. Of the eight HIV studies in

[298] Ministry of Health, ICF International, Centers for Disease Control and Prevention, U.S. Agency for International Development, WHO Uganda. Uganda AIDS Indicator Survey 2011. Kampala (Uganda): Ministry of Health; 2012. URL: https://health.go.ug/docs/UAIS_2011_REPORT.pdf, Accessed 21 December 2018.
[299] National AIDS Control Council, National AIDS and STD Control Programme. The Kenya AIDS epidemic: update 2011. Nairobi (Kenya): National AIDS Control Council; 2012.
[300] Orido G. Push for male circumcision in Nyanza fails to reduce infections. Standard (Kenya) website. 2013 Sep 11.
[301] WHO/UNAIDS Technical Consultation. Male circumcision and HIV prevention: research implications for policy and programming. Conclusions and recommendations. 2007 March. URL: http://www.comminit.com/hiv-aids/content/new-data-male-circumcision-and-hiv-prevention-policy-and-programme-implications, Accessed 21 December 2018.

North American heterosexual men,[302] [303] [304] [305] [306] [307] [308] [309] only one has found a significant association between circumcision and HIV infection risk: it actually found that circumcised men were at *greater risk* of HIV infection.[310] Furthermore, the HIV epidemic in the United States is concentrated among men who have sex with men (MSM) and injecting drug users. A meta-analysis of the studies published on this topic by the Centers for Disease Control and Prevention (CDC) found that the risk for HIV infection in MSM is the same in intact and circumcised men.[311] A subsequent study yielded similar results.[312]

While some authors have theorized that Langerhans cells present in the foreskin are a significant portal for HIV infection, and have used this as a rationale for circumcision as a preventative,[313] evidence now shows that these cells produce a protein, *langerin*, that is

[302] Mishra V, Medley A, Hong R, Yuan Gu Y, Robey B. Levels and spread of HIV seroprevalence and associated factors: evidence from national household surveys. DHS Comparative Reports No. 22. Calverton (MD): Macro International Inc; 2009. URL: https://www.dhsprogram.com/pubs/pdf/CR22/CR22.pdf, Accessed 21 December 2018.
[303] Chiasson MA, Stoneburner RL, Hildebrandt DS, Ewing WE, Telzak EE, Jaffe HW. Heterosexual transmission of HIV-1 associated with the use of smokable freebase cocaine (crack). *AIDS*. 1991;5: 1121–6. URL: https://journals.lww.com/aidsonline/Citation/1991/09000/Heterosexual_transmission_of_HIV_1_associated_with.11.aspx, Accessed 21 December 2018.
[304] Telzak EE, Chiasson MA, Bevier PJ, Stoneburner RL, Castro KG, Jaffe HW. HIV-1 seroconversion in patients with and without genital ulcer disease. *Ann Intern Med.* 1993;119: 1181–6. URL: http://annals.org/aim/article-abstract/706947/hiv-1-seroconversion-patients-without-genital-ulcer-disease-prospective-study, Accessed 21 December 2018.
[305] Laumann EO, Masi CM, Zuckerman EW. Circumcision in the United States: prevalence, prophylactic effects, and sexual practice. *JAMA*. 1997;277: 1052–7. URL: https://jamanetwork.com/journals/jama/article-abstract/414922, Accessed 21 December 2018.
[306] Thomas AG, Bakhireva LN, Brodline SK Shaffer RA. Prevalence of circumcision and its association with HIV and sexually transmitted infections in a male US Navy population. San Diego (CA): Naval Health Research Center. Report No. 04-10; 2004. URL: https://www.researchgate.net/publication/235159656_Prevalence_of_Circumcision_and_its_Association_With_HIV_and_Sexually_Transmitted_Infections_in_a_Male_US_Navy_Population, Accessed 21 December 2018.
[307] Mor Z, Kent CK, Kohn RP, Klausner JD. Declining rates in male circumcision amidst increasing evidence of its public health benefit. *PLoS ONE*. 2007;2(9):e861. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1955830/, Accessed 21 December 2018.
[308] Warner L, Ghanem KG, Newman DR, Macaluso M, Sullivan PS, Erbelding EJ. Male circumcision and risk of HIV infection among heterosexual African American men attending Baltimore sexually transmitted disease clinics. *J Infect Dis*. 2009;199:59–65. URL: https://academic.oup.com/jid/article/199/1/59/919210, Accessed 21 December 2018.
[309] Rodriguez-Diaz CE, Clatts MC, Jovet-Toledo GG, Vargas-Molina RL, Goldsamt LA, García H. More than foreskin: circumcision status, history of HIV/STI, and sexual risk in a clinic-based sample of men in Puerto Rico. *J Sex Med*. 2012;9: 2933–7. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1743-6109.2012.02871.x, Accessed 21 December 2018.
[310] Ibid.
[311] Millett GA, Flores SA, Marks G, Reed JB, Herbst JH. Circumcision status and risk of HIV and sexually transmitted infections among men who have sex with men. *JAMA*. 2008;300: 1674-84. Errata *JAMA*. 2009;301:1126–9. URL: https://jamanetwork.com/journals/jama/article-abstract/279008, Accessed 21 December 2018.
[312] Crosby RA, Graham CA, Mena L, Yarber WL, Sanders SA, Milhausen RR, *et al.* Circumcision status is not associated with condom use and prevalence of sexually transmitted infections among young black MSM. *AIDS Behav*. 2015 Oct 7. Epub ahead of print. URL: https://rd.springer.com/article/10.1007%2Fs10461-015-1212-x, Accessed 21 December 2018.
[313] Szabo R, Short RV. How does male circumcision protect against HIV infection? *BMJ*. 2000; 320(7249):1592–4. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1127372/, Accessed 21 December 2018.

actually protective against the virus.[314] The authors of the langerin study argue that "strategies to combat [HIV] infection must enhance, preserve or, at the very least, not interfere with langerin expression and function [in the Langerhans cells of the foreskin]."[315]

RCTs carried out among adults in Africa are not relevant to children anywhere, since children are not sexually active and therefore are not at risk of HIV infection by sexual transmission. For adults, condoms are an effective means of preventing sexually transmitted infections, including HIV.[316] Other preventative interventions, such as "treatment as prevention" and pre-exposure prophylaxis, are more effective, less expensive, and less injurious than circumcision.[317] [318]

Prostate Cancer

The best-established correlates of prostate cancer are advancing age, a family history of prostate cancer, and African ancestry.[319] [320] Claims that circumcision is protective against prostate cancer have been made and subsequently refuted in the medical literature

[314] de Witte L, Nabatov A, Pion M, Fluitsma D, de Jong MAWP, de Gruijl T, *et al*. Langerin is a natural barrier to HIV-1 transmission by Langerhans cells. *Nat Med.* 2007;3: 367–71. URL: http://icgi.org/Downloads/IAS/de_Witte.pdf, Accessed 21 December 2018.
[315] Ibid.
[316] de Vincenzi I. A longitudinal study of human immunodeficiency virus transmission by heterosexual partners. *N Engl J Med.* 1994;331(6): 341–6. URL: https://www.nejm.org/doi/full/10.1056/NEJM199408113310601, Accessed 21 December 2018.
[317] Lima V, Anema A, Wood R, Moore D, Harrigan R, Mills E, *et al*. The combined impact of male circumcision, condom use and HAART coverage on the HIV-1 epidemic in South Africa: a mathematical model. 5th IAS Conference on HIV Treatment, Pathogenesis and Prevention, Cape Town, abstract WECA105; 2009.
[318] Donnell D, Baeten JM, Kiarie J, Thomas KK, Stevens W, Cohen CR, *et al*. Heterosexual HIV-1 transmission after initiation of antiretroviral therapy: a prospective cohort analysis. *Lancet*. 2010;375(9731): 2092–8. URL: https://bixbycenter.ucsf.edu/sites/bixbycenter.ucsf.edu/files/Heterosexual%20HIV-1%20transmission%20after%20initiation%20of%20antiretroviral%20therapy.pdf, Accessed 21 December 2018.
[319] Gann PH. Risk factors for prostate cancer. *Rev Urol*. 2002;4(Suppl 5): S3–S10. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1476014/, Accessed 1 January 2019.
[320] Rebbeck TR, Devesa SS, Chang BL, Bunker CH, Cheng I, Cooney K, *et al*. Global patterns of prostate cancer incidence, aggressiveness, and mortality in men of African descent. *Prostate Cancer*. 2013;2013: 560857. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3583061/, Accessed 1 January 2019.

since 1942.[321][e.g.] Two recent studies received wide media attention, yet their results are not compelling.[322] [323] These two studies are discussed below.

In a large case-control study from Washington State, Wright *et al.* (2011) found that, overall, circumcision status was not associated with the presence of prostate cancer.[324] In this study, men circumcised after first sexual intercourse actually had a slightly higher (though non-statistically-significant) rate of prostate cancer than never-circumcised men. Only by combining this group (with its higher risk rate) with the never-circumcised men, were the investigators barely able to reach statistical significance, claiming a small relative risk reduction of 15% for the remaining men who had been circumcised before sexual debut.

Spence *et al.*, (2014) using a similar case-control design with a large population in Canada, also found no overall association of circumcision status with prostate cancer rates.[325] When stratifying the results by racial ancestry, the investigators found a reduced rate only for Black men, but not for any other racial groups. Contrary to Wright *et al*., Spence *et al.* found a reduced rate of prostate cancer in men circumcised after the age of 35, but no significant difference for any other age group. Both groups of investigators assumed that the control group (men who had never been diagnosed with prostate cancer) did not actually have prostate cancer. In fact, however, prostate cancer has been shown to be present upon autopsy in one-third of undiagnosed men,[326] a factor which could negate any of the above results.

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[321] Wynder EL, Mabuchi K, Whitmore WF. Epidemiology of cancer of the prostate. *Cancer*. 1971;28: 344–60. URL: https://www.researchgate.net/publication/18060282_Epidemiology_of_Cancer_of_the_prostate, Accessed 23 December 2018.
[322] Wright JL, Lin DW, Stanford JL. Circumcision and the risk of prostate cancer. *Cancer*. 2012;118: 4437–43. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3376675/, Accessed 23 December 2018.
[323] Spence AR, Rousseau MC, Karakiewicz PI, Parent ME. Circumcision and prostate cancer: a population-based case-control study in Montreal, Canada. *BJU Int*. 2014;114: E90–8. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4309483/, Accessed 23 December 2018.
[324] Wright JL, Lin DW, Stanford JL. Circumcision and the risk of prostate cancer. *Cancer*. 2012;118: 4437–43. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3376675/, Accessed 23 December 2018.
[325] Spence AR, Rousseau MC, Karakiewicz PI, Parent ME. Circumcision and prostate cancer: a population-based case-control study in Montreal, Canada. *BJU Int*. 2014;114: E90–8. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4309483/, Accessed 23 December 2018.
[326] Yatani R, Chigusa I, Akazaki K, Stemmermann GN, Welsh RA, Correa P. Geographic pathology of latent prostatic carcinoma. *Int J Cancer*. 1982;29(6): 611–6. URL: https://www.onlinelibrary.wiley.com/doi/10.1002/ijc.2910290602, Accessed 23 December 2018.

Both of these studies were based on several tenuous assumptions. The first assumption is that the risk of prostate cancer is increased by sexually transmitted infections. However, the medical literature is mixed on this point. For example, some populations at low risk for STIs (e.g. Catholic priests) have shown a greater risk for prostate cancer compared to the general population,[327] while others at high risk for STIs (e.g. men with HIV) have decreased rates of prostate cancer.[328] Neither Wright *et al*. nor Spence *et al*. found any significant association between prostate cancer and a history of STIs, undermining their own working hypotheses.[329] [330] The second assumption is that genitally intact men are at higher risk for STI. As seen above, the literature does not support this contention. Instead the literature indicates that circumcised men are at an overall greater risk of STIs.[331]

If circumcision were actually to reduce the risk of prostate cancer, one would expect rates to have dropped in correlation to the rise in circumcision rates in the U.S. during the 20th century. In fact, the opposite has occurred.[332] Likewise, one would expect to see an elevated incidence in non-circumcising Europe, compared to the circumcising U.S., and again, this has not been demonstrated.[333] Finally, no association has been demonstrated between PSA levels (an indicator of likely prostate cancer) and circumcision status.[334]

Cancer of the Penis

[327] Giles GG, Severi G, English DR, McCredie MRE, Borland R, Boyle P, *et al.* Sexual factors and prostate cancer. *BJU Int*. 2003;92: 211–6. URL: https://www.onlinelibrary.wiley.com/doi/10.1002/ijc.2910290602
[328] Grulich AE, van Leeuwen MT, Falster MO, Vajdic CM. Incidence of cancers in people with HIV/AIDS compared with immunosuppressed transplant recipients: a meta-analysis. *Lancet*. 2007;370: 59067. URL: ttps://www.thelancet.com/action/captchaChallenge?redirectUri=%2Fjournals%2Flancet%2Farticle%2FPIIS0140-6736(07)61050-2%2Ffulltext, Accessed 25 December 2018.
[329] Wright JL, Lin DW, Stanford JL. Circumcision and the risk of prostate cancer. *Cancer*. 2012;118: 4437–43. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3376675/, Accessed 23 December 2018.
[330] Spence AR, Rousseau MC, Karakiewicz PI, Parent ME. Circumcision and prostate cancer: a population-based case-control study in Montreal, Canada. *BJU Int*. 2014;114: E90–8. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4309483/, Accessed 23 December 2018.
[331] Van Howe RS. Sexually transmitted infections and male circumcision: a systematic review and meta-analysis. *ISRN Urol*. 2013: 109846. URL: https://www.hindawi.com/journals/isrn/2013/109846/, Accessed 23 December 2018.
[332] Stanford JL, Stephenson RA, Coyle LM, Cerhan J, Correa R, Eley JW, *et al*. Prostate Cancer Trends 1973-1995, SEER Program, National Cancer Institute. NIH Pub. No. 99-4543. Bethesda (MD); 1999. URL: https://seer.cancer.gov/archive/publications/prostate/prostate_monograph.pdf, Accessed 23 December 2018.
[333] Tretli S, Engeland A, Hadorsen T, Hakulinen T, Hörte LG, Luostarinen T, *et al*. Prostate cancer — look at Denmark? *J Natl Cancer Inst*. 1996;88: 128. URL: https://academic.oup.com/jnci/article/88/2/128/867248, Accessed 23 December 2018.
[334] Oliver JC, Oliver RTD, Ballard RC. Influence of circumcision and sexual behavior on PSA levels in patients attending a sexually transmitted disease (STD) clinic. *Prostate Cancer Prostatic Dis*. 2001;4: 228–31. URL: https://www.nature.com/articles/4500535, Accessed 23 December 2018.

American physician Abraham Wolbarst was also responsible for promoting the erroneous notion that circumcised men were immune to cancer of the penis. His opinion piece published in *Lancet* in 1932[335] − a time when the causes of cancer were not understood − has been erroneously cited as fact ever since.

It was not long, however, before doctors started to report cases of cancer in circumcised men.[336] Maden *et al*. (1993) studied a population of 110 men with penile cancer, and found that 41 cases were in circumcised men.[337] Despite these cases, the researchers claimed that not being circumcised was a risk factor for penile cancer.[338] However, when Maden's data were properly adjusted for age, there was no difference in the risk for circumcised and non-circumcised men.[339]

Two subsequent case-control studies found that being diagnosed with pathological phimosis was an important risk factor for penile cancer. When the data were controlled for phimosis, not having been circumcised as an infant was not a significant risk factor. Other risk factors include genital warts/HPV infection, tobacco use, and an increased number of lifetime sex partners.[340] [341] [342]

DNA from human papillomavirus (HPV, which is contracted by sexual contact) has been identified in penile cancer cells in about half the cases of penile cancer, so these

[335] Wolbarst A. Circumcision and penile cancer. *Lancet*. 1932;1(5655): 150–3.
[336] Boczko S, Freed S. Penile carcinoma in circumcised males. *N Y State J Med*. 1979;79(12): 1903–4.
[337] Maden C, Sherman KJ, Beckmann AM, Hislop TG, Teh CZ, Ashley RL, *et al*. History of circumcision, medical conditions, and sexual activity and risk of penile cancer. *J Natl Cancer Inst*. 1993;85(1): 19–24. URL: https://www.researchgate.net/publication/14819367_History_of_Circumcision_Medical_Conditions_and_Sexual_Activity_and_Risk_of_Penile_Cancer, Accessed 25 December 2018.
[338] Ibid.
[339] Cold CR, Storms MR, Van Howe RS. Carcinoma in situ of the penis in a 76-year-old circumcised man. *J Fam Pract*. 1997;44: 407–10. URL: https://www.researchgate.net/publication/14108966_Carcinoma_in_situ_of_the_penis_in_a_76-year-old_circumcised_man, Accessed 25 December 2018.
[340] Maden C, Sherman KJ, Beckmann AM, Hislop TG, Teh CZ, Ashley RL, *et al*. History of circumcision, medical conditions, and sexual activity and risk of penile cancer. *J Natl Cancer Inst*. 1993;85(1): 19–24. URL: https://www.researchgate.net/publication/14819367_History_of_Circumcision_Medical_Conditions_and_Sexual_Activity_and_Risk_of_Penile_Cancer, Accessed 25 December 2018.
[341] Daling JR, Madeleine MM, Johnson LG, Schwartz SM, Shera KA, Wurscher MA, *et al*. Penile cancer: importance of circumcision, human papillomavirus and smoking in in situ and invasive disease. *Int J Cancer*. 2005;116: 606–16.
[342] Harish K, Ravi R. The role of tobacco in penile carcinoma. *Br J Urol*. 1995;75(3): 375–7. URL: https://onlinelibrary.wiley.com/doi/full/10.1002/ijc.21009, Accessed 25 December 2018.

infections are an important risk factor.[343] [344] Half of penile cancers may be linked to balanitis xerotica obliterans (BXO), which is increasingly being identified as a precancerous condition, and whose cause is not fully understood.[345] [346] [347]

Based on numbers provided in the 2012 American Academy of Pediatrics Circumcision Task Force report,[348] the number of circumcisions needed to prevent one case of penile cancer is between 4237 and 7184. With the average reimbursement for infant circumcision being $285 paid at the time of the procedure, the cost at the time of the procedure would be between $1.21 million and $2.01 million. But this is not the true cost, because the opportunity costs of not having the money available for the 80 years before penile cancer usually occurs has not been considered. Typically, the opportunity costs are between 3% and 5% per annum. With this taken into account, using circumcision to prevent one case of penile cancer would cost between $12.85 million and $101.47 million.

Cancer of the penis is a rare disease of elderly men (occurring in the U.S. in less than 1 in 100,000 men,[349] with an average age of diagnosis of 68 years[350]). (Breast cancer is actually more common in men than cancer of the penis.[351]) To prevent penile cancer, the American Cancer Society does not recommend circumcision for all males, rather it recommends avoiding exposure to HPV and HIV, not smoking, and good genital hygiene.[352]

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[343] Ibid.
[344] McCance DJ, Kalache A, Ashdown K, Andrade L, Menezes F, Smith P, *et al*. Human papillomavirus types 16 and 18 in carcinomas of the penis from Brazil. *Int J Cancer*. 1986;37(1): 55–9. URL: https://onlinelibrary.wiley.com/doi/abs/10.1002/ijc.291037011, Accessed 25 December 2018.
[345] Edwards SK, Bunker CB, Ziller F, van der Meijden WI. 2013 European guideline for the management of balanoposthitis. *Int J STD AIDS*. 2014;25(9): 615–26. URL: https://www.huidziekten.nl/richtlijnen/european-guideline-balanoposthitis-2013.pdf, Accessed 25 December 2018.
[346] Jamieson NV, Bullock KN, Barker TH. Adenosquamous carcinoma of the penis associated with balanitis xerotica obliterans. *Br J Urol*. 1986;58: 730–1. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1464-410X.1986.tb05926.x, Accessed 25 December 2018.
[347] Powell J, Robson A, Cranston D, Wojnarowska F, Turner R. High incidence of lichen sclerosus in patients with squamous cell carcinoma of the penis. *Br J Dermatol*. 2001;145: 85–9. URL: https://onlinelibrary.wiley.com/doi/10.1046/j.1365-2133.2001.04287.x, Accessed 25 December 2018.
[348] American Academy of Pediatrics Task Force on Circumcision. Male circumcision. *Pediatrics*. 2012;130(3): e756–85. URL: http://pediatrics.aappublications.org/content/pediatrics/130/3/e756.full.pdf, Accessed, 25 December 2018.
[349] What are the key statistics about penile cancer? American Cancer Society website. Last revised 2016 Feb 9. URL: https://www.cancer.org/cancer/penile-cancer/about/key-statistics.html, Accessed 25 December 2018.
[350] What are the risk factors for penile cancer? American Cancer Society website. Last revised 2016 Feb 9. URL: https://www.cancer.org/cancer/penile-cancer/causes-risks-prevention/risk-factors.html, Accessed 25 December 2018.
[351] What are the key statistics about breast cancer in men? American Cancer Society website. Last revised 2016 Jan 26. URL: https://cancerstatisticscenter.cancer.org/#!/cancer-site/Breast, Accessed 25 December 2018.
[352] Can penile cancer be prevented? American Cancer Society website. Last revised 2016 Feb 9. URL: https://www.cancer.org/cancer/penile-cancer/causes-risks-prevention/prevention.html, Accessed 25 December 2018.

Health authorities now advocate vaccination of boys against HPV, prior to sexual debut, to prevent HPV infection, genital warts, oropharyngeal cancer, penile cancer, anal cancer, and to increase herd immunity.[353] [354] Dosages for younger patients have been reduced to two doses and the falling cost of vaccines improve the economics.[355] The British National Health Service (NHS) (2018) intends to vaccinate boys against HPV infection.[356] The Centers for Disease Control (CDC) has changed its recommendations regarding HPV vaccination to include boys, aged 11-12.[357] Medicaid and CHIP should provide payment for vaccinations of both girls and boys to meet current recommendations.

Cervical Cancer

It is now known that the primary risk factor for cancer of the cervix is infection with human papilloma virus (HPV).[358] Only a handful of the hundred or so types of HPV are carcinogenic, with HPV 16 and HPV 18 associate67d with 70% of cervical cancers.[359] Behavioral risks such as age at sexual debut, the number of partners, and partners' sexual

[353] Elbasha EH, Dasbach EJ. Impact of vaccinating boys and men against HPV in the United States. Vaccine 2010;28(42): 6858–67. URL: https://www.sciencedirect.com/science/article/pii/S0264410X10011758, Accessed 29 December 2018.
[354] Rossi C, Vanhomwegen C, Laurent F. [HPV vaccination in boys and men: update and recommendations]. *Rev Med Brux*. 2018;39(4):352–58.
[355] Sinisgalli E, Bellini I, Indiani L, Sala A, *et al*. HPV vaccination for boys? A systematic review of economic studies. *Epidemiol Prev* 2015;39(4) Suppl 1: 51–8. URL: http://www.epiprev.it/materiali/2015/EP2015_I4S1_051.pdf, Accessed 29 December 2018.
[356] Teenage boys in England will be vaccinated against HPV, which causes deadly cervical, oral, throat and anal cancers, health minister announces. *Daily Mail*, 24 July 2018. URL: https://www.dailymail.co.uk/health/article-5986323/Teenage-boys-England-vaccinated-against-HPV-health-minister-announces.html, Accessed 29 December 2018.
[357] Vaccines and Preventable Diseases. CDC, 15 December 2016. URL: https://www.cdc.gov/vaccines/vpd/hpv/hcp/recommendations.html, Accessed 29 December 2018.
[358] Bosch FX, Lorincz A, Muñoz N, Meijer CJM, Shah KV. The causal relation between human papillomavirus and cervical cancer. *J Clin Pathol*. 2002;55: 244–65. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1769629/, Accessed 26 December 2018.
[359] HPV and cancer. National Cancer Institute website. Reviewed 2015 Feb 19. URL: https://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-fact-sheet, Accessed 26 December 2018.

behavior are associated with an increased risk of HPV infection.[360] [361] Smoking is an important co-factor.[362]

The HIM (HPV Infection in Men) study showed that HPV is just as prevalent in circumcised as in intact males.[363] In this study, intact males showed faster clearance of the oncogenic (cancer-causing) HPV strains than did circumcised males, which could correlate to decreased transmission of oncogenic HPV from intact males to females.

There is no clear evidence that male circumcision decreases the risk of HPV infection in female partners, as studies have produced conflicting results. In a study of female university students in Washington State, circumcision status of the male partner was not associated with incident HPV infection over a mean follow-up time of 41 months.[364] A subsequent study, carried out in Uganda in conjunction with the HIV RCTs, found a lower rate of "high-risk" HPV strains, at 24 months, in women whose partners were circumcised at the beginning of the trial versus those whose partners had not been circumcised.[365] Although cervical cancer was not tracked as an outcome, this study has been used to support the claims of circumcision as a preventative for cervical cancer. The Ugandan HPV study suffers from numerous methodological flaws.[366] As with the HIV trials, these include lead-

[360] Chelimo C, Wouldes TA, Cameron LD, Elwood JM. Risk factors for and prevention of human papillomaviruses (HPV), genital warts and cervical cancer. *J Infect*. 2013;66(3):207–17. URL: https://www.researchgate.net/publication/232719790_Risk_Factors_For_And_Prevention_Of_Human_Papillomaviruses_Hpv_Genital_Warts_And_Cervical_Cancer, Accessed 26 December 2018.
[361] Ribeiro AA, Costa MC, Alves RR, Villa LL, Saddi VA, Carneiro MA, *et al*. HPV infection and cervical neoplasia: associated risk factors. *Infect Agent Cancer*. 2015;10: 16. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4524198/, Accessed 26 December 2018.
[362] Roura E, Castellsagué X, Pawlita M, Travier N, Waterboer T, Margall N, *et al*. Smoking as a major risk factor for cervical cancer and pre-cancer: results from the EPIC cohort. *Int J Cancer*. 2014;135(2): 453–66. URL: https://onlinelibrary.wiley.com/doi/full/10.1002/ijc.28666, Accessed 26 December 2018.
[363] Albero G, Castellsagué X, Lin HY, Fulp W, Villa LL, Lazcano-Ponce E, *et al*. Male circumcision and the incidence and clearance of genital human papillomavirus (HPV) infection in men: the HPV Infection in men (HIM) cohort study. *BMC Infect Dis*. 2014;14: 75. URL: https://www.researchgate.net/publication/260147945_Male_circumcision_and_the_incidence_and_clearance_of_genital_human_papillomavirus_HPV_infection_in_men_The_HPV_Infection_in_men_HIM_cohort_study, Accessed 26 December 2018.
[364] Winer RL, Lee S-K, Hughes JP, Adam DE, Kiviat NB, Koutsky LA. Genital human papillomavirus infection: incidence and risk factors in a cohort of female university students. *Am J Epidemiol*. 2003;157: 218–26. Errata 2003;157:858. URL: https://academic.oup.com/aje/article/157/3/218/71005, Accessed 26 December 2018.
[365] Wawer MJ, Tobian AAR, Kigozi G, Kong X, Gravitt PE, Serwadda D, et al. Effect of circumcision of HIV-negative men on transmission of human papillomavirus to HIV-negative women: a randomised trial in Rakai, Uganda. *Lancet*. 2011;377: 209–18. URL: https://www.sciencedirect.com/science/article/pii/S0140673610619678, Accessed 26 December 2018.
[366] Van Howe RS. Human papillomavirus and circumcision: the story beyond the tip. Academia website. Presented at the 13th International Symposium on Genital Autonomy and Children's Rights, Boulder (CO); 2014 Jul 24. URL: http://www.academia.edu/13846777/Human_Papillomavirus_and_Circumcision_The_Story_Beyond_the_Tip, Accessed 26 December 2018.

time bias and a high rate of loss to follow-up. The vaginal swabs analyzed were self-collected, a sub-standard technique potentially increasing rates of false positives and false negatives. Most tellingly, the study found no association between the male partner's circumcision status and the presence of HPV types 16 and 18, the ones most likely to cause cervical cancer.

Sixteen studies have attempted to demonstrate a connection between cervical cancer in women and the circumcision status of their male sexual partners; all of them have

failed.[367] [368] [369] [370] [371] [372] [373] [374] [375] [376] [377] [378] [379] [380] [381] One of these, by Castellsagué *et al*. (2002),[382] has been repeatedly cited as proof of the connection between circumcision status and cervical cancer. Yet, in fact, the study was unable to show a significant association, except in a small subset of women who had partners with high-risk sexual behaviors.

[367] Castellsagué X, Bosch FX, Muñoz N, Meijer CJ, Shah KV, de Sanjose S, *et al*. Male circumcision, penile human papillomavirus infection, and cervical cancer in female partners. *N Engl J Med*. 2002;346: 1105–12. URL: https://www.nejm.org/doi/full/10.1056/NEJMoa011688, Accessed 26 December 2018.
[368] Connon AF. Cancer detection survey gynaecological and epidemiological data. *Med J Aust*. 1972;1: 738–41.
[369] Aitken-Swan J, Baird D. Cancer of the uterine cervix in Aberdeenshire. Aetiological aspects. *Br J Cancer*. 1966;20: 642–59. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2008154/pdf/brjcancer00485-0050.pdf, Accessed 26 December 2018.
[370] Abou-Daoud KT. Epidemiology of carcinoma of the cervix uteri in Lebanese Christians and Moslems. *Cancer*. 1967;20: 1706–14. URL: https://onlinelibrary.wiley.com/doi/epdf/10.1002/1097-0142%28196710%2920%3A10%3C1706%3A%3AAID-CNCR2820201021%3E3.0.CO%3B2-F, Accessed 26 December 2018.
[371] Wahi PN, Luthra UK, Mali S, Mitra AB. Religion and cervical carcinoma in Agra. *Indian J Cancer*. 1972;9: 210–5. URL: https://www.popline.org/node/480794, Accessed 26 December 2018.
[372] Zarkovic G. Alterations of cervical cytology and steroid contraceptive use. *Int J Epidemiol*. 1985;14: 369–77. URL: https://academic.oup.com/ije/article-abstract/14/3/369/968135?, Accessed 26 December 2018.
[373] Boyd JT, Doll RA. A study of the aetiology of carcinoma of the cervix uteri. *Br J Cancer*. 1964;18: 419–34. URL:. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2071087/, Accessed 26 December 2018.
[374] Jussawalla DJ, Yeole BB, Natekar MV. Cancer in Indian Moslems. *Cancer*. 1985;55: 1149–58. URL: https://onlinelibrary.wiley.com/doi/abs/10.1002/1097-0142%2819850301%2955%3A5%3C1149%3A%3AAID-CNCR2820550534%3E3.0.CO%3B2-D, Accessed 26 December 2018.
[375] Kjaer SK, de Villiers EM, Dahl C, Engholm G, Bock JE, Vestergaard BF, *et al*. Case-control study of risk factors for cervical neoplasia in Denmark. I: Role of the “male factor” in women with one lifetime sexual partner. *Int J Cancer*. 1991;48: 39–44. URL: https://www.researchgate.net/publication/21135468_Case-control_study_of_risk_factors_for_cervical_neoplasia_in_Denmark_I_Role_of_the_'male_factor'_in_women_with_one_lifetime_sexual_partner, Accessed 26 December 2018.
[376] Brinton LA, Reeves WC, Brenes MM, Herrero R, Gaitan E, Tenorio F, *et al*. The male factor in the etiology of cervical cancer among sexually monogamous women. *Int J Cancer*. 1989;44: 199–203. URL: http://www.academia.edu/10329303/The_ma_le_factor_in_the_etiology_of_cervical_cancer_among_sexually_monogamous_women, Accessed 27 December 2018.
[377] Terris M, Wilson F, Nelson JH. Relation of circumcision to cancer of the cervix. *Am J Obstet Gynecol*. 1973;117: 1056–66. URL: https://www.sciencedirect.com/science/article/pii/0002937873907540, Accessed 27 December 2018.
[378] Agarwal SS, Sehgal A, Sardana S, Kumar A, Luthra UK. Role of male behavior in cervical carcinogenesis among women with one lifetime sexual partner. *Cancer*. 1993;72: 1666–9. URL: http://www.academia.edu/13883424/Role_of_male_behavior_in_cervical_carcinogenesis_among_women_with_one_lifetime_sexual_partner, Accessed 27 December 2018.
[379] Rotkin ID. A comparison review of key epidemiological studies in cervical cancer related to current searches for transmissible agents. *Cancer Res*. 1973;33: 1353–67. URL: http://cancerres.aacrjournals.org/content/33/6/1353, Accessed 27 December 2018.
166. Stern E, Dixon WJ. Cancer of the cervix — a biometric approach to etiology. *Cancer*. 1961;14: 153–60. URL: https://www.researchgate.net/publication/17167624_Cancer_of_the_Uterine_cervix_II_A_biometric_approach_to_etiology, Accessed 27 December 2018.
[380] Kmet J, Damjanovski L, Stucin M, Bonta S, Cakmakov A. Circumcision and carcinoma colli uteri in Macedonia, Yugoslavia. Results from a field study. *Br J Cancer*. 1963;17: 391–9. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2071038/pdf/brjcancer00496-0014.pdf, Accessed 27 December 2018.
[381] Jones EG, MacDonald I, Breslow L. A study of epidemiologic factors in carcinoma of the uterine cervix. *Am J Obstet Gynecol*. 1958;76: 1–10 URL: https://www.sciencedirect.com/science/article/pii/S0002937816368570, Accessed 27 December 2018.
[382] Castellsagué X, Bosch FX, Muñoz N, Meijer CJ, Shah KV, de Sanjose S, *et al*. Male circumcision, penile human papillomavirus infection, and cervical cancer in female partners. *N Engl J Med*. 2002;346: 1105–12. URL:.https://www.nejm.org/doi/full/10.1056/NEJMoa011688, Accessed 26 December 2018.

Again, serious methodological problems were present, with inappropriate design elements and analysis (described elsewhere[383] [384]), further undermining the results.

Given all of the above, it is safe to say that cervical cancer has no appreciable link to male circumcision status. Furthermore, safe and effective vaccines are now available for adolescent and young adult females and males to help protect against HPV and, subsequently, cervical cancer in women, and various other cancers in men.[385] But even if the claims about the presence of the foreskin causing cervical cancer were true, it would be ethically and legally impermissible to circumcise non-consenting minors on this account, because the person bearing the risk would not be the person receiving the benefit.[386] [387] [388]

[383] Van Howe RS. Human papillomavirus and circumcision: a meta-analysis. *J Infect*. 2007;54(5): 490–6. URL: http://www.academia.edu/6991948/Human_papillomavirus_and_circumcision_A_meta-analysis, Accessed 27 December 2018.
[384] Van Howe RS. Human papillomavirus and circumcision: the story beyond the tip. Academia website. Presented at the 13th International Symposium on Genital Autonomy and Children's Rights, Boulder (CO); 2014 Jul 24. URL: http://www.academia.edu/13846777/Human_Papillomavirus_and_Circumcision_The_Story_Beyond_the_Tip, Accessed 26 December 2018.
[385] The Future II Study Group. Quadrivalent vaccine against human papillomavirus to prevent high-grade cervical lesions. *New Engl J Med*. 2007;356(19): 1915–27. URL: https://www.nejm.org/doi/full/10.1056/NEJMoa061741, Accessed 26 December 2018.
[386] Waldeck SE. Using male circumcision to understand social norms as multipliers. 72 *University of Cincinnati L. Rev*. 455 (2003). URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1024777, Accessed 26 December 2018.
[387] Peter W. Adler. Is circumcision legal? XVI:iii Richmond Journal of Law and the Public Interest 439 at 466. URL: https://scholarship.richmond.edu/cgi/viewcontent.cgi?article=1265&context=jolpi, Accessed 18 October 2018.
[388] World Medical Association. *Declaration of Helsinki. Ethical principles for medical research involving human subjects.* Ferney-Voltaire (France): World Medical Association; 2013. URL: https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/, Accessed 26 December 2018.

Bacterial vaginosis

Bacterial vaginosis (BV) is an overgrowth of certain bacteria in the vagina. It occurs most frequently in women aged 15 to 44.[389] Studies has indicated that the circumcision status of male partners is not a risk factor for BV.[390] [391] [392]

The Task Force on Circumcision (2012) of the American Academy of Pediatrics (AAP) advanced non-therapeutic circumcision of boys as a measure to prevent BV in adult women.[393] No other authority has made such a claim.

The AAP has based this claim primarily on one African study, carried out by well-known circumcision advocates,[394] in which researcher bias was rampant. The study evidently was carried out with the intent of "proving" that male circumcision would prevent BV, just as these same researchers claimed to have "proved" that circumcision would reduce HIV infection,[395] a claim about which there is now considerable doubt because of numerous flaws and severe overstatement of the effects.[396] (See HIV section above.) The study was carried out in Uganda, which is a developing nation. It may not be applicable to the United States, a developed nation. The paper reported a 15 percent relative risk, however, the actual absolute difference was only an insignificant 0.034.[397] The AAP preferred this

[389] *Bacterial Vaginosis – CDC Fact Sheet*. URL: https://www.cdc.gov/std/bv/stdfact-bacterial-vaginosis.htm, Accessed 28 December 2018.
[390] Ibid.
[391] Zenilman JM, Fresia A, Berger B, *et al*. Bacterial vaginosis is not associated with circumcision status of the current male partner. *Sex Trans Infect* 1999; 75:347–48. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1758232/pdf/v075p00347.pdf, Accessed 28 December 2018.
[392] Bukosi EA, Cohen CR, Meter AS, *et al*. Bacterial vaginosis: Risk factors among Kenyan women and their male partners. *Sex Trans Dis* 2006; 33:361–67. URL: https://www.researchgate.net/publication/7232359_Bacterial_Vaginosis_Risk_Factors_Among_Kenyan_Women_and_Their_Male_Partners, Accessed 28 December 2018.
[393] Task Force on Circumcision. Male circumcision. *Pediatrics.* 2012;130: e756-e785. DOI: 10.1542/peds.2012-1990, URL: http://pediatrics.aappublications.org/content/pediatrics/130/3/e756.full.pdf, Accessed 27 December 2018.
[394] Gray RH, Kigozi G, Serwadda D, *et al*. The effects of male circumcision on female partners genital tract symptoms and vaginal infections in a randomized trial in Rakai, Uganda. *Am J Obstet Gynecol*. 2009; 200(1): 42.e1–e7. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2727852/, Accessed 27 December 2018.
[395] Gray RH, Kigozi G, Serwadda D, Makumbi F, Watya S, Nalugoda F, Kiwanuka N, Moulton LH, Chaudhary MA, Chen MZ, Sewankambo NK, Wabwire-Mangen F, Bacon MC, Williams CF, Opendi P, Reynolds SJ, Laeyendecker O, Quinn TC, Wawer MJ. Male circumcision for HIV prevention in men in Rakai, Uganda: a randomized trial. *Lancet*. 2007;369(9562):657–66. URL: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2807%2960313-4/fulltext, Accessed 28 December 2018.
[396] Boyle GJ, Hill G. Sub-Saharan African randomised clinical trial in male circumcision and HIV transmission: methodological, ethical and legal concerns. *J Law Med*. 2011;19: 316–34. URL: http://www.salem-news.com/fms/pdf/2011-12_JLM-Boyle-Hill.pdf, Accessed 27 December 2018.
[397] Van Howe RS. (2018) Personal communication.

study over an American study,[398] which is clearly applicable to the United States and another African study, neither of which found male partner circumcision status to be relevant.[399]

The CDC (2015) advises BV is successfully treated with antibiotics. Treatment or circumcision of sex partners is not recommended.[400] [401]

The AAP evidently included BV in its report on non-therapeutic child circumcision as a measure to bolster support for its advocacy of third-party payment to its doctor members who perform medically-unnecessary, non-therapeutic circumcision.[402] (Medicaid is prohibited by law from paying for non-therapeutic procedures.[403] See Chapter IX.)

Such irreversible non-therapeutic amputations on non-consenting boys for the benefit of another person (in this case adult women) are completely unethical and may be unlawful.[404] [405] [406] [407]

Conclusion

[398] Zenilman JM, Fresia A, Berger B, *et al*. Bacterial vaginosis is not associated with circumcision status of the current male partner. *Sex Trans Infect.* 1999; 75: 347–48. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1758232/pdf/v075p00347.pdf, Accessed 28 December 2018.
[399] Bukosi EA, Cohen CR, Meter AS, *et al*. Bacterial vaginosis: Risk factors among Kenyan women and their male partners. *Sex Trans Dis.* 2006; 33: 361–67. URL: https://www.researchgate.net/publication/7232359_Bacterial_Vaginosis_Risk_Factors_Among_Kenyan_Women_and_Their_Male_Partners, Accessed 28 December 2018.
[400] Centers for Disease Control and Prevention. *2015 Treatment Guidelines: Bacterial Vaginosis*. URL: https://www.cdc.gov/std/tg2015/bv.htm, Accessed 27 December 2018.
[401] Zenilman JM, Fresia A, Berger B, *et al*. Bacterial vaginosis is not associated with circumcision status of the current male partner. *Sex Trans Infect* 1999; 75: 347–48. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1758232/pdf/v075p00347.pdf, Accessed 28 December 2018.
[402] Task Force on Circumcision. Male circumcision. *Pediatrics.* 2012;130: e756–85. DOI: 10.1542/peds.2012-1990, URL: http://pediatrics.aappublications.org/content/pediatrics/130/3/e756.full.pdf, Accessed 27 December 2018.
[403] Peter W. Adler. Is it lawful to use Medicaid to pay for circumcision? 19 *J Law Med* 335 (2011). URL: https://pdfs.semanticscholar.org/94dc/dbe3fb878c82d071573d0e6630b4ca049634.pdf, Accessed 4 October 2018.
[404] Beauchamp, Tom L., and Childress, James F. *Principles of Biomedical Ethics*. New York: Oxford University Press; 2001.
[405] World Medical Association. *Declaration of Helsinki. Ethical principles for medical research involving human subjects.* Ferney-Voltaire (France): World Medical Association; 2013. URL: https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/, Accessed 26 December 2018.
[406] Waldeck SE. Using male circumcision to understand social norms as multipliers. 72 *University of Cincinnati L. Rev*. 455 (2003). URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1024777, Accessed 26 December 2018.
[407] Peter W. Adler. Is circumcision legal? XVI:iii *Richmond Journal of Law and the Public Interest* 439 at 466. URL: https://scholarship.richmond.edu/cgi/viewcontent.cgi?article=1265&context=jolpi, Accessed 18 October 2018.

None of the alleged prophylactic benefits discussed in this chapter justify non-therapeutic circumcision of healthy males.

Doctors Opposing Circumcision thanks Robert S. Van Howe, MD, MS, FAAP, Professor of Pediatrics at Central Michigan University Medical School, for his contributions to the text of this chapter.

VI. Adverse Events

Every circumcision ablates a functional structure and is inherently injurious and harmful to every child and adult.[408] [409] [410] [411] [412] [413] [414] Circumcision *per se* diminishes or eliminates numerous foreskin functions.[415]

Non-therapeutic male circumcision results in a wide variety of medical issues arising from the surgery. The most immediate issues are hemorrhage, infection, and surgical misadventure.[416] Leith (1970) reported complications in 15.5 percent of patients.[417] El-Bahnasawy & El-Sherbiny (2002) reported that circumcision is the most frequent cause of penile trauma.[418] Lau *et al*. (2018) report that 11.5 percent of circumcised boys in Utah have a complication.[419]

[408] Hammond T. A preliminary poll of men circumcised in infancy or childhood. *BJU Int* 1999;83 Suppl 1:85–92. URL: https://onlinelibrary.wiley.com/doi/epdf/10.1046/j.1464-410x.1999.0830s1085.x, Accessed 11 January 2019.
[409] Hill G. The case against circumcision. *J Men's Health and Gender.* 2007;4(3): 318–23. URL: https://www.sciencedirect.com/science/article/pii/S1571891307001112, Accessed 25 October 2018.
[410] Green LW, McAllister RG, Peterson KW, Travis JW. Medicaid coverage of circumcision spreads harm to the poor. *Am J Pub Health*. 2009;99(4): 584. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2661476/, Accessed 1 January 2019.
[411] Peter W. Adler. Is it lawful to use Medicaid to pay for circumcision? 19 *J Law Med.* 335 (2011). URL: https://pdfs.semanticscholar.org/94dc/dbe3fb878c82d071573d0e6630b4ca049634.pdf Accessed 4 October 2018.
[412] Peter W. Adler. Is circumcision legal? XVI:iii *Richmond Journal of Law and the Public Interest.* 439 at 466. URL: https://scholarship.richmond.edu/cgi/viewcontent.cgi?article=1265&context=jolpi, Accessed 18 October 2018.
[413] Domashevskiy JA, Domashevskiy AV. Ethics pertaining to the legalities of male routine infant circumcision and surrogate consent to non-therapeutic surgery. *J Clin Res Bioeth.* 2016;7: 1000276. doi:10.4172/2155-9627.1000276 URL: https://www.researchgate.net/publication/308123848_Ethics_Pertaining_to_the_Legalities_of_Male_Routine_Infant_Circumcision_and_Surrogate_Consent_to_Non-Therapeutic_Surgery, Accessed 18 October 2018.
[414] Purpura V, Bondioli E, Cunningham EJ, *et al*. The development of a decellularized extracellular matrix–based biomaterial scaffold derived from human foreskin for the purpose of foreskin reconstruction in circumcised males. *Journal of Tissue Engineering* 2018;9:1–11 DOI: 10.1177/2041731418812613. URL: https://journals.sagepub.com/doi/full/10.1177/2041731418812613, Accessed 1 January 2019.
[415] Hammond T, Carmack A. Long-term adverse outcomes from neonatal circumcision as reported in a survey of 1,008 men: an overview of human rights implications. *The International Journal of Human Rights*. 2017. URL: http://dx.doi.org/10.1080/13642987.2016.1260007, Accessed 12 January 2019.
[416] Williams N, Kapila L. Complications of circumcision. *Brit J Surg.* 1993;80: 1231–6. doi; 10.1002/bjs.1800801005 URL: http://onlinelibrary.wiley.com/doi/10.1002/bjs.1800801005/abstract, Accessed 29 October 2017.
[417] Leitch IOW. Circumcision - a continuing enigma. *Aust Paediatr J.* 1970;6: 59–65. URL: https://www.deepdyve.com/lp/wiley/circumcision-a-continuing-enigma-1Bb92FRxN0, Accessed 26 October 2018.
[418] El-Bahnasawy MS, El-Sherbiny MT. Penile pediatric trauma. *BJU Int.* 2002;90: 92–6. URL: https://onlinelibrary.wiley.com/doi/full/10.1046/j.1464-410X.2002.02741.x, Accessed 26 October 2018.
[419] Lau G, Kim J, Schaeffer A. Identification of circumcision complications using a regional claims database. *The Societies for Pediatric Urology* 2018. URL: http://spuonline.org/abstracts/2018/P21.cgi, Accessed 7 January 2018.

Bleeding and hemorrhage

Bleeding is common. Williams & Kapila (1993) reported an incidence as high as 35 percent of cases.[420] Hemorrhage is extremely serious when it occurs in the newborn because of the very limited supply of blood in the infant's body. Elhaik (2016) reports that an infant undergoing circumcision may lose 1 to 2 ounces of blood out of an available supply of 11 ounces.[421] The infant may bleed out very quickly, causing exsanguination and hypovolemic shock, which will lead to death.[422] [423] [424]

Infection

Williams & Kapila (1993) report infection occurs with enormous variety in as much as 10 percent of cases.[425] Krill *et al*. (2011) report severe infections after Plastibell™ circumcisions,[426] including a case of necrotizing fasciitis.[427] Cases of post-circumcision necrotizing fasciitis has been reported that required extreme debridement of tissue for survival.[428] Survival is not guaranteed in such cases. Cleary & Kohl (1979) reported the death of an infant after a post-circumcision infection.[429] The Chief Coroner of Ontario reported a case of infection following a Plastibell circumcision that went wrong, resulting in

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[420] Williams N, Kapila L. Complications of circumcision. *Brit J Surg.* 1993;80: 1231–6. doi; 10.1002/bjs.1800801005 URL: http://onlinelibrary.wiley.com/doi/10.1002/bjs.1800801005/abstract, Accessed 29 October 2017.
[421] Elhaik E. A "wear and tear" hypothesis to explain sudden infant death syndrome. *Front Neurol* 2016;7: 180. doi. 10.3389/fneur.2016.00180 URL: https://eprints.whiterose.ac.uk/107491/1/fneur-07-00180.pdf, Accessed 15 January 2019.
[422] Ibid.
[423] Hiss J, Horowitz A, Kahana T. Fatal haemorrhage following male ritual circumcision. *J Clin Forensic Med.* 2000;7: 32–4. doi: http://dx.doi.org/10.1054/jcfm.1999.0340 URL: http://www.jflmjournal.org/article/S1353-1131(99)90340-1/pdf. Accessed 29 October 2017.
[419] Newell TEC. *Judgement of inquiry into the death of McWillis, Ryleigh Roman Bryan*. Burnaby, B.C.: British Columbia Coroner's Service, Monday, 19 January 2004.
[425] Williams N, Kapila L. Complications of circumcision. *Brit J Surg.* 1993;80: 1231–6. doi; 10.1002/bjs.1800801005 URL: http://onlinelibrary.wiley.com/doi/10.1002/bjs.1800801005/abstract, Accessed 29 October 2017.
[426] Krill AJ, Palmer LS, Palmer JS. Complications of circumcision. *Scientific World Journal.* 2011;11:.2058–68. doi: 10.1100/2011/373829 URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3253617/.
[427] Bliss DP, Healey PJ, Waldhausen JHT. Necrotizing fasciitis after Plastibell circumcision. *Journal of Pediatrics*. 1997;131(3):459–462. doi: http://www.sciencedirect.com/science/article/pii/S0022347697800789 URL: http://www.sciencedirect.com/science/article/pii/S0022347697800789
[428] Woodside, Jeffrey R. Necrotizing Fasciitis After Neonatal Circumcision. *Am J Dis Child.* (Chicago) 1980:134(3): 301–2. doi:10.1001/archpedi.1980.02130150055015 URL: https://jamanetwork.com/journals/jamapediatrics/article-abstract/509094, Accessed 29 October 2017.
[429] Cleary TG, Kohl S. Overwhelming infection with group B beta-hemolytic streptococcus associated with circumcision. *Pediatrics* 1979;64(3):301–3. URL: http://pediatrics.aappublications.org/content/64/3/301

urinary retention, infection with Escherichia coli, intravascular coagulation, purpura fulminans, septic shock, and death.[430]

Staphylococcal infections, which disproportionately infect circumcised male infants,[431] are also common with scalded skin syndrome,[432] [433] staphylococcal pyoderma,[434] and impetigo[435] being reported.

Many other varieties of infection are reported, including septicemia,[436] meningitis,[437] and Fournier's syndrome.[438]

Surgical misadventure

The most common surgical error of circumcision the removal of an incorrect amount of skin. Either too little or too much skin may be removed. If too little skin is removed, then the patient looks uncircumcised, but is otherwise fine. Parents will frequently elect a re-circumcision at additional cost.

On the other hand, if too much skin is removed, there is insufficient skin to allow the penile shaft to expand fully during erection, with the result being painful erections. In

[430] Cairns J. Circumcision: a minor procedure? *Paediatrics and Child Health*. 2007;12(4): 311–2. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2528673/, Accessed 26 October 2018.
[431] Enzenauer RW, Dotson CR, Leonard T, et al. Male predominance in persistent staphylococcal colonization and infection of the newborn. *Hawaii Med J.* 1985;44(9):389–90, 392, 394–6.
[432] Curran JP, Al-Salihi FL. Neonatal staphylococcal scalded skin syndrome: massive outbreak due to an unusual phage type. *Pediatrics.* 1980;66(2):285–90. URL: http://pediatrics.aappublications.org/content/66/2/285. Accessed 29 October 2017.
[433] Anday EK, Kobori J. Staphylococcal scalded skin syndrome: a complication of circumcision. *Clin Pediatr Phila.* 1982; 132(12): 1187–8. doi:10.1001/archpedi.1978.02120370035008 URL: https://jamanetwork.com/journals/jamapediatrics/article-abstract/508235, Accessed 29 October 2017.
[434] Enzenauer RW *et al.* Increased Incidence of neonatal staphylococcal pyoderma in males. *Military Medicine* 1984;47: 408.
[435] Stranko J, Ryan ME, Bowman AM. Impetigo in newborn infants associated with a plastic bell clamp circumcision. *Pediatr Infect Dis.* 1986;5: 597–9 URL: http://journals.lww.com/pidj/Citation/1986/09000/IMPETIGO_IN_NEWBORN_INFANTS_ASSOCIATED_WITH_A.27.aspx, Accessed 29 October 2017.
[436] Kirkpatrick BV, Eitzman DV. Neonatal septicemia after circumcision. *Clin Pediatr.* 1974;13: 767–8. URL: http://journals.sagepub.com/doi/abs/10.1177/000992287401300914, Accessed 29 October 2019.
[437] Scurlock JM, Pemberton PJ. Neonatal meningitis and circumcision. *Med J Aust.* 1977;1: 332–4. URL: https://www.researchgate.net/publication/22813369_Neonatal_meningitis_and_circumcision, Accessed 29 October 2017.
[438] Sussman SJ, Schiller RP, Shashikumar VL. Fournier's syndrome. Report of three cases and review of the literature. *Am J Dis Child.* 1978;132(12): 1189–91. doi:10.1001/archpedi.1978.02120370037009 URL: https://jamanetwork.com/journals/jamapediatrics/article-abstract/508236, Accessed 29 October 2017.

extreme cases, penile denudation may result, with immediate management necessary to care for the wound. Severe cases require skin grafting,[439] once again at additional cost.

Other surgical mishaps include surgical bivalving of the glans penis,[440] denudation,[441] [442] glanular injuries,[443] urinary retention,[444] and urinary fistula.[445] [446] A more serious and disfiguring operation is the amputation of all or part of the glans penis. Such amputations are more common when circumcision is performed with the Mogen clamp or the Sheldon clamp.[447] [448] In some cases the glans penis may be reattached,[449] undoubtedly at substantial additional expense to the health insurance provider.

Lau *et al.* (2018) report that 6.9 percent of circumcised boys in Utah develop post-circumcision phimosis.[450]

Circumcision operations are subject to a wide variety of surgical complications. Some are rare but can be unspeakably tragic when they occur, especially when the circumcision was not carried out in response to treatment of disease or deformity.

David Reimer of Manitoba, Canada had his penis destroyed during a non-therapeutic circumcision operation by electrocautery. It was decided that he should be sexually

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[439] Sotolongo JR, Hoffman S, Gribetz ME. Penile denudation injuries after circumcision. *J Urol.* 1985;133: 102–3. URL: https://www.jurology.com/article/S0022-5347(17)48807-0/pdf?code=juro-site, Accessed 26 October 2018.
[440] McGowan Jr AW. A complication of circumcision. *JAMA.* 1969;207(11): 2104. URL: https://jamanetwork.com/journals/jama/article-abstract/344480, Accessed 26 October 2018.
[441] Wilson CL, Wilson, MC. Plastic repair of the denuded penis. *South Med J.* 1959:52: 288–90.
[442] Kendall AR, Karafin L. Repair of the denuded penis. *J Urol.* 1967;98(4): 484–6. URL: https://www.sciencedirect.com/science/article/pii/S0022534717629173, Accessed 26 October 2018.
[443] Patel HI, Moriarty KP, Brisson PA, Feins NR. Genitourinary injuries in the newborn. *J Pediatr Surg.* 2001;36(1): 235–9. URL: http://www.pediatricsurgicalservices.com/docs/Genitourinary.pdf, Accessed 26 October 2018.
[444] Pearce I. Retention of urine: an unusual complication of the Plastibell device. *BJU Int.* 2000; 85(4): 560–1. URL: https://onlinelibrary.wiley.com/doi/epdf/10.1046/j.1464-410x.1999.00300.x, Accessed 31 October 2018.
[445] Limaye RD, Hancock RA. Penile urethral fistula as a complication of circumcision. *J. Pediatr.* 1968; 72(1): 105–6. URL: https://www.sciencedirect.com/science/article/pii/S002234766880410X, Accessed 26 October 2018.
[446] Lau JTK, Ong GB. Subglandular urethral fistula following circumcision: repair by the advancement method. *J Urol.* 1981;126: 702–3. URL: https://www.sciencedirect.com/science/article/pii/S0022534717546984, Accessed 31 October 2018.
[447] Strimling BS. Partial amputation of glans penis during Mogen clamp circumcision. *Pediatrics.* 1996;97(6): 906–7. URL: http://pediatrics.aappublications.org/content/97/6/906, Accessed 27 October 2018.
[448] Neulander E, Walfisch S. Kaneti J. Amputation of distal penile glans during neonatal ritual circumcision – a rare complication. *Br J Urol.* 1996; 77: 924–5. URL: https://onlinelibrary.wiley.com/doi/pdf/10.1046/j.1464-410X.1996.06934.x, Accessed 27 October 2018.
[449] Gluckman GR, Stoller ML, Jacobs MM, Kogan BA. Newborn penile glans amputation during circumcision and successful reattachment. *J Urol.* 1995 133(3) Part 1 :778–9. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3045722/, Accessed 27 October 2018.
[450] Lau G, Kim J, Schaeffer A. Identification of circumcision complications using a regional claims database. *The Societies for Pediatric Urology* 2018. URL: http://spuonline.org/abstracts/2018/P21.cgi, Accessed 7 January 2018.

reassigned to the female gender but it did not work and he returned to his birth gender, though without a penis. He eventually committed suicide at age 38.[451] [452]

Miscellaneous complications include urinary retention,[453] [454] [455] venous stasis,[456] penile ischema,[457] pulmonary embolism,[458] silica granuloma[459] tachycardia, and heart failure.[460]

Late appearing complications

Some complications of circumcision appear later.

Penile adhesions occur when the cut raw edges heal to the also raw glans penis.[461] [462] [463] [464] Penile adhesions frequently require the attention of a urologist.[465]

[451] Bradley SJ, Oliver GD, Chernick AB. Experiment of nurture: ablatio penis at 2 months, sex reassignment at 7 months, and a psychosexual follow-up in young adulthood. *Pediatrics.* 1998;102(1): e9. URL: http://pediatrics.aappublications.org/content/102/1/e9, Accessed 27 October 2018.
[452] Colapinto, John (2001). *As Nature Made Him: The Boy Who Was Raised as a Girl*. Harper Collins. ISBN 0-06-019211-9. OCLC 42080126
[453] Lee LD, Millar AJW. Ruptured bladder following circumcision using Plasticbell device. *Br J Urol.* 1990;65: 216–17. URL: https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1464-410X.1990.tb14709.x, Accessed 28 October 2018.
[454].Craig JC, Grigor WG, Knight JF. Acute obstructive uropathy—a rare complication of circumcision. *Eur J Pediatr.* 1994;153: 369–71. URL: https://www.researchgate.net/profile/Jf_Knight/publication/15165176_Acute_obstructive_uropathy_-a_rare_complication_of_circumcision/links/0f31753aa312329ce5000000/Acute-obstructive-uropathy-a-rare-complication-of-circumcision.pdf, Accessed 28 October 2018.
[455] Mihssin N, Moorthy K, Houghton PW. Retention of urine: an unusual complication of the Plastibell device. *BJU Int.* 1999;84(6): 745. URL: https://onlinelibrary.wiley.com/doi/full/10.1046/j.1464-410x.1999.00300.x, Accessed 28 October 2018.
[456] Ly L, Sankaran K. Acute venous stasis and swelling of the abdomen after circumcision. *Can Med Assoc J.* 2003;169(3): 216–7. URL: http://www.cmaj.ca/content/cmaj/169/3/216.full.pdf, Accessed 28 October 2018.
[457] Smith DJ, Handy FC, Chapple CR. An uncommon complication of circumcision. *Br J Urol.* 1994; 73: 459–60. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1464-410X.1994.tb07618.x, Accessed 28 October 2018.
[458] Curtis JE. Circumcision complicated by pulmonary embolism. *Nurs Mirror Midwives J.* 1971; 132: 28–30.
[459]Michelowski R. Silica granuloma at the site of circumcision for phimosis; a case report. *Dermatologica.* 1983;166: 261–3. URL: https://www.karger.com/Article/Abstract/249882, Accessed 28 October 2018.
[460] Mor A, Eshel G, Aladjem M, *et al*. Tachycardia and heart failure after circumcision. *Arch Dis Child.* 1987; 62: 80–81. https://www.researchgate.net/publication/19347581_Tachycardia_and_heart_failure_after_circumcision, Accessed 28 October 2018.
[461] Marks MB. Preputial adhesions in the circumcised penis. *Arch Pediatr.* 1939; 56: 458–9.
[462] Gracely-Kilgore KA. Penile adhesion: the hidden complication of circumcision. *Nurse Pract.* 1984; 9: 22–4. URL: https://www.researchgate.net/publication/16471309_Penile_adhesion_The_hidden_complication_of_circumcision, Accessed 28 October 2018.
[463] Attalla MF, Taweela MN. Pathogenesis of post-circumcision adhesions. *Pediatr Surg Int.* 1994;9: 103–5. URL: https://link.springer.com/article/10.1007%2FBF001761, Accessed 28 October 2018.
[464] Ponsky LE, Ross JH, Knipper N, Kay R. Penile adhesions after neonatal circumcision. *J Urol.* 2000;164(2): 495–6.
[465] Gracely-Kilgore KA. Penile adhesion: the hidden complication of circumcision. *Nurse Pract* 1984; 9: 22–4 URL: https://www.researchgate.net/publication/16471309_Penile_adhesion_The_hidden_complication_of_circumcision, Accessed 28 October 2018.

About ten to twenty percent of circumcised boys, who have lost the protection of the foreskin, develop a urethral stricture at the meatus.[466] [467] [468] [469] [470] [471] Meatotomy is usually required.[472]

Lymphoedema occurs after circumcision.[473] [474] [475]

Deaths occur secondary to circumcision,[476] but in the absence of a registry of circumcision deaths, we rely on estimates of the number. Gairdner (1949) reported ten to sixteen deaths per year in the United Kingdom in the 1940s.[477] Post-circumcision hemorrhage claims other lives,[478] [479] and infection others. Gellis (1978) stated that there are more deaths from circumcision than from cancer of the penis.[480] Baker (1979) calculated 229 deaths per year in the United States from non-therapeutic circumcision.[481] Bollinger

[466] Mastin WM. Infantile circumcision: a cause of contraction of the external urethral meatus. *Ann Anatomy Surg.* 1881;4: 123–8.
[467] Thompson AR. Stricture of the external urinary meatus. *Lancet.* 1935;1: 1373–7. URL: https://www.sciencedirect.com/search/advanced?qs=%22Stricture%20of%20the%20external%20urinary%20meatus%22&show=25&sortBy=relevance, Accessed 28 October 2018.
[468] Campbell MF. Stenosis of the external urethral meatus. *J Urol.* 1943;50: 740–6. URL: https://www.sciencedirect.com/science/article/pii/S002253471770506X, Accessed 28 October 2018.
[469] Steg A, Allouch G. Stenose du meat et circoncision. [Meatal stenosis and circumcision] *J Urol Nephrol Paris.* 1979; 85: 727–9. URL: https://www.researchgate.net/publication/22605434_Meatal_stenosis_and_circumcision, Accessed 28 October 2018.
[470] Persad R; Sharma S; McTavish J; Imber C; Mouriquand PD. Clinical presentation and pathophysiology of meatal stenosis following circumcision. *British Journal of Urology* 1995; 75(1):91–93. URL: https://www.researchgate.net/publication/15349535_Clinical_presentation_and_pathophysiology_of_meatal_stenosis_following_circumcision, Accessed 28 October 2018.
[471] Frisch M, Simonsen J. Cultural background, non-therapeutic circumcision and the risk of meatal stenosis and other urethral stricture disease: Two nationwide register-based cohort studies in Denmark 1977–2013. *The Surgeon*. 2016. doi: 10.1016/j.surge.2016.11.002 Published online ahead of print. URL: http://www.thesurgeon.net/article/S1479-666X(16)30179-2/fulltext, Accessed 4 November 2017.
[472] Kunz HV. Circumcision and meatotomy. *Prim Care.* 1986;13(3): 513–25.
[473] Shulman, J. Ben-Hur, N., and Neuman, Z.: Surgical complications of circumcision. *Am. J. Dis. Child*.1964; 127:149. URL: https://jamanetwork.com/journals/jamapediatrics/article-abstract/500844, Accessed 28 October 2018.
[474] Yildirim S, Taylan G, Akoz T. Circumcision as an unusual cause of penile lymphedema (letter). *Ann Plast Surg.* 2003;50(6):665–6. URL: https://www.researchgate.net/publication/10728796_Circumcision_as_an_unusual_cause_of_penile_lymphedema_3, Accessed 28 October 2018.
[475] Lau G, Kim J, Schaeffer A. Identification of circumcision complications using a regional claims database. *The Societies for Pediatric Urology* 2018. URL: http://spuonline.org/abstracts/2018/P21.cgi, Accessed 7 January 2018.
[476] Paediatric Death Review Committee: Office of the Chief Coroner of Ontario. Circumcision: a minor procedure? *Paediatr Child Health* 2007;12(4): 311–2. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2528673/, Accessed 13 January 2019.
[477] Gairdner D. The fate of the foreskin: a study of circumcision. *Br Med J.* 1949;2: 1433–7. URL: http://europepmc.org/backend/ptpmcrender.fcgi?accid=PMC2051968&blobtype=pdf, Accessed 28 October 2018.
[478] Hiss J., Horowitz A., Kahana T. Fatal haemorrhage following male ritual circumcision. *J Clin Forensic Med.* 2000;7: 32–4.
[479] Newell TEC. *Judgement of inquiry into the death of McWillis, Ryleigh Roman Bryan*. Burnaby, B.C.: British Columbia Coroner's Service, Monday, 19 January 2004.
[480] Gellis SS. Circumcision. *Am J Dis Child.* 1978;132: 1168. URL: https://jamanetwork.com/journals/jamapediatrics/article-abstract/508227, Accessed 31 October 2018.
[481] Baker RL. Newborn male circumcision: needless and dangerous. *Sexual Medicine Today.* 1979;3(11): 35–6.

(2010) estimated 117 deaths annually from medically unnecessary, non-therapeutic infant circumcision in the United States.[482]

Sudden Infant Death Syndrome (SIDS) is the leading cause of death among US infants, accounting for about 2,700 deaths per year. There is significant male predominance in the deaths with a 60:40 ratio, which suggests that male infant circumcision may somehow be involved.[483]

Elhaik (2016) hypothesized that stress from various stressors experienced *in utero* and in early childhood accumulate. When the total stress reaches a certain level, the infant is subject to succumbing to SIDS, according to Elhaik's theory. Elhaik reports that the incidence of SIDS in the United Kingdom, where infant male circumcision is very rare, is 0.38 per 1000, while in the United States, where most boys are circumcised, it is 0.55 per 1000. Circumcision adds to the stress level or allostatic load for several reasons, including pain, blood loss, infection, increased heart rate, cyanosis, apnea, and tissue damage. In some cases, Elhaik argues, the additional stress imposed by circumcision is enough to trigger sudden infant death.[484]

Elhaik (2018) collected data from fifteen nations and forty US states regarding the incidence of male neonatal circumcision (MNC) the incidence of prematurity, and the incidence of SIDS. Elhaik found a "high positive correlation between the MNC and SIDS gender ratio." Elhaik also reported "that US states where Medicaid covers NMC have significantly higher NMC, unexplained mortality rates, and SIDS male bias than other states."[485]

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[482] Bollinger D. Lost boys: An estimate of U.S. circumcision-related infant deaths. *THYMOS: Journal of Boyhood Studies* 2010;4(1):78–90. URL: http://www.academia.edu/6394940/Lost_Boys_An_Estimate_of_U.S._Circumcision-Related_Infant_Deaths, Accessed 1 January 2019.

[483] Elhaik E. A "wear and tear" hypothesis to explain sudden infant death syndrome. *Front Neurol* 2016;7: 180. doi. 10.3389/fneur.2016.00180 URL: https://eprints.whiterose.ac.uk/107491/1/fneur-07-00180.pdf, Accessed 15 January 2019.

[484] Ibid

[485] Elhaik E. Neonatal circumcision and prematurity are associated with sudden infant death syndrome (SIDS). *Journal of Translational Research* 2018;4(2): Published online first. 10 January 2019. DOI: https://www.jctres.com/en/04.201802.005/. URL: https://www.jctres.com/media/filer_public/94/aa/94aafcfa-dbe0-4275-8f7c-fb149ab0daf9/elhaik2018jclintranslres_epub.pdf, Accessed 15 January 2019.

Psychological and sexual issues also appear later in life. These will be discussed separately.

Treatment and repair of these many complications of circumcision drive up medical costs and consume medical resources. Pieretti *et al* (2010) reported a survey of pediatric urology activities at Mass General Hospital over a five-year period;

> A total of 8,967 children were operated during the study period, of which 424 (4.7%) were for complications resulting from previous neonatal circumcision. Penile adhesions, skin bridges, meatal stenosis, redundant foreskin (incomplete circumcision with uncircumcised appearance), recurrent phimosis, buried penis and penile rotation were the most frequent complications. At the outpatient clinic of the Section of Pediatric Urology, 127 boys with concerns following newborn circumcision were evaluated, representing 7.4% of the total volume of cases seen in this clinic.[486] Lau *et al*. (2018) report a complication rate of 11.5 percent in Utah.[487]

Krill *et al*. (2011) estimated the cost of these same complications at $1,617 per redo procedure per patient for a total cost of $137,122 per year.[488] When these costs are extrapolated nationwide, the total cost of treating and repairing the damage caused by the large number of adverse events must be substantial indeed.

When a Medicaid patient has a circumcision and an adverse event occurs, Medicaid Is obliged to pay the additional costs for treatment of the adverse event. Fewer non-therapeutic circumcisions would logically mean reduced costs for treatment of adverse events.

[486] Pieretti RV, Allan M. Goldstein M, Pieretti-Vanmarke R. Late complications of newborn circumcision: a common and avoidable problem. *Pediatr Surg International* 2010:26(5); 515–8. doi: https://doi.org/10.1007/s00383-010-2566-9 URL: https://link.springer.com/article/10.1007/s00383-010-2566-9, Accessed 7 November 2017.
[487] Lau G, Kim J, Schaeffer A. Identification of circumcision complications using a regional claims database. *The Societies for Pediatric Urology* 2018. URL: http://spuonline.org/abstracts/2018/P21.cgi, Accessed 7 January 2018.
[488] Krill AJ, Palmer LS, Palmer JS. Complications of circumcision. *Scientific World Journal*. 2011;11: 2058–68. doi: 10.1100/2011/373829 URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3253617/, Accessed 7 November 2017.

VII. Sexual Issues

In the beginning

The human foreskin was once thought to have little or no sexual function. Sex researcher Alfred C. Kinsey (1948) placed no importance on the presence or absence of the foreskin.[489]

Masters & Johnson (1966) in their book, *Human Sexual Response*, showed little interest or understanding of the human foreskin. One illustration, labelled normal penis anatomy, showed a drawing of a penis without a foreskin. A listing of penile pathology in their book included "uncircumcised penis"! Their work was done in St. Louis, located in the highly circumcised Midwest, and almost all of their subjects were circumcised. Their testing was quite limited. With regard to the foreskin, they said only:

> Routine neurologic testing for both exteroceptive and light tactile discrimination were conducted on the ventral and dorsal surfaces of the penile body, with particular attention directed toward the glans.[490]

Therefore, it appears that Masters & Johnson performed little or no testing on the foreskins of their few intact and normal subjects and provided no useful information.[491] [492]

Appalling medical ignorance existed relevant to the sexual function of the foreskin when Medicaid was formed in 1965. Research into the nature of the foreskin was in its infancy.

Since that time, much research has been done, which has produced a completely new and different understanding of the sexual functions of the foreskin.

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[489] Kinsey, AC, Pomeroy WB, Martin WC. *Sexual behavior in the human male*. W.B. Saunders, 1948.
[490] Masters WL, Johnson V. *Human sexual response*. New York: Bantam Books, 1966.
[491] Frisch M, Lindholm, Grønbæk M. Male circumcision and sexual function in men and women: a survey-based, cross-sectional study in Denmark. *Int J Epidemiol*. 2011;40(5): 1367–81. doi:10.1093/ije/dyr104 URL: http://www.i2re-searchhub.org/wp-content/uploads/storage/2NJRBTCK/Frisch%20et%20al.%20-%202011%20-%20Male%20circumci-sion%20and%20sexual%20function%20in%20men%20and%20women.pdf, Accessed 17 November 2017.
[492] Bronselaer GA, Schober JM, Meyer-Bahlburg HFL, *et al*. Male circumcision decreases penile sensitivity as measured in a large cohort. *BJU Int*. 2013;111(5): 820–7. doi: 10.1111/j.1464-410X.2012.11761.x URL: http://onlineli-brary.wiley.com/doi/10.1111/j.1464-410X.2012.11761.x/full, Accessed 18 November 2017.

Research into the sexual nature of the foreskin

Winkelmann (1959) published a little-noticed paper in the internal journal of Mayo Clinic proceedings, that identified the prepuce (foreskin) with its muco-cutaneous boundary as a "specific erogenous zone".[493]

Dr. William Keith Morgan (1965) wrote an opinion piece for the *Journal of the American Medical Association* (JAMA) in which he decried the practice of non-therapeutic circumcision. With regard to the sexual function, he stated:

> During the act of coitus the uncircumcised phallus penetrates smoothly and without friction, the prepuce gradually retracting as the organ advances. In contrast, when the circumcised organ is introduced during coitus, friction develops between the glans and vaginal mucosa. Penetration in the circumcised man has been compared to thrusting the foot into a sock held open at the top, while, on the other hand, in the intact counterpart it has been likened to slipping the foot into a sock that has been previously rolled up.[494]

Morgan published a second letter in the *Medical Journal of Australia* in 1967 in which he repeated his original comment and further stated:

> Coitus without a prepuce in analogous to a colour-blind person viewing a Renoir or Van Gogh painting.[495]

The matter rested there until Dr. C. J. Falliers (1970) wrote a letter to *JAMA* in response to a paper by Preston in which he stated:

> The sensory pleasure induced by tactile stimulation of the foreskin is almost totally lost after its surgical removal.[496]

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[493] Winkelmann RK. The erogenous zones: their nerve supply and significance. *Mayo Clin Proc* 1959;34(2): 39–47. URL: https://www.mysciencework.com/publication/show/erogenous-zones-nerve-supply-its-significance-6467caf7, Accessed 18 November 2017.
[494] Morgan WKC. The rape of the phallus. *JAMA.* 1965;193: 123–4. URL: https://jamanetwork.com/journals/jama/article-abstract/656072, Accessed 18 November 2017.
[495] Morgan WKC. Penile plunder. *Med J Aust.* 1967;1: 1102–3.
[496] Falliers CJ. Circumcision (letter). *JAMA.* 1970;214(12): 2194. URL: https://jamanetwork.com/journals/jama/article-abstract/358730, Accessed 18 November 2017.

The ancients practiced circumcision[497] to excise the pleasure of sex.[498] Foreskin restoration had been a practice among some circumcised men in ancient times,[499] [500] but the technique had been lost. Some circumcised American men rediscovered the process in the 1970s and the practice of non-surgical foreskin restoration was reborn.[501] It was discovered that even a false foreskin produced by tissue expansion of residual shaft skin was able to restore much of the lost sexual sensation.[502]

Lakshamanan & Parkash (1980) studied the prepuce and reported:

> The presence of smooth muscle fibres in the prepuce has been reported in most of the text books of histology. However the mosaic pattern of arrangement of this tissue, its abundance in the younger individuals and an increase in the elastic fibres in adults appears to be a significant observation. The normal tone of the muscle arranged in this fashion and supplemented by elastic tissue offers a legitimate explanation for the close fit of the prepuce through the ages. The inner lining of the prepuce is thicker and firmer, which again is in accordance with its function, since it impinges against the corona, during erection and coitus. The outer layer of the prepuce in common with the skin of the shaft of the penis glides freely in a to and fro fashion and has to be delicate and thin, as was observed in this study. The tight frenulum helps to retain the obliquely placed loop of retracted prepuce in position. The inner lining of the projecting tubular part has the structure of the outer layer and adds to the thin gliding skin when retracted.[503]

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[497] Tushmet L. Uncircumcision. *Medical Times.* 1965;93(6): 588–93.
[498] Hall RG. Epispasm: circumcision in reverse. *Bible Review.* 1992; August: 52–7. URL: http://cojs.org/robert-g-hall-epispasm-circumcision-in-reverse-bible-review-8-4-1992/, Accessed 18 November 2017.
[499] Ibid.
[500] Schultheiss D, Truss MC, Stief CG, Jonas U. Uncircumcision: a historical review of preputial restoration. *Plast Reconstr Surg.* 1998;101(7): 1990–8. doi: DOI: 10.1097/00006534-199806000-00037 URL: https://www.researchgate.net/publication/13660370_Uncircumcision_A_Historical_Review_of_Preputial_Restoration, Accessed 18 November 2017.
[501] Jim Bigelow, Ph.D. Uncircumcising: undoing the effects of an ancient practice in a modern world. *Mothering.* 1994; Summer: 56–61.
[502] Ibid.
[503] Lakshmanan S, Prakash S. Human prepuce: some aspects of structure and function. *Indian J Surg.* 1980;44: 134–7. URL: https://www.researchgate.net/publication/286998210_Human_prepuce_-_some_aspects_of_structure_and_function, Accessed 18 November 2017.

Money & Davison (1983), in a preliminary report of five cases found:

- Pain in two cases.
- Loss of sensitivity in four cases.
- Prolonged time to orgasm in five cases.

and postulated the existence of stretch receptors in the foreskin.[504]

Taylor *et al*. (1996) carried out an anatomical and histological study of the foreskin. They discovered a previously undescribed band of ridged tissue just inside the tip of the foreskin. The ridges of the ridged band were found to be highly innervated and richly endowed with Meissner's corpuscles. Meissner's corpuscles respond to deformation and stretching by transmitting a signal. This structure with the Meissner's corpuscles is mounted on an elastic, stretchable matrix of dartos muscle fiber, which facilitates stimulation.

Taylor *et al*. found that male circumcision removes 51 percent or more of the epithelium of the penis, which includes the ridged band. The ridged band is entirely removed with every circumcision.

Taylor and colleagues viewed the ridged band as being sensory tissue mounted on a movable platform (the foreskin), which moved to the deployed position when the foreskin retracted.[505]

Cold & Taylor (1998) provided a comprehensive, even magisterial survey of the literature regarding the prepuce. They reviewed the extensive and varied innervation of the prepuce and compared it to that of the glans penis. They discussed the connection of the preputial innervation to the autonomic nervous system.

[504] Money J, Davison J. Adult penile circumcision: erotosexual and cosmetic sequelae. *J Sex Res.* 1983;19(3): 289–92. doi: 10.1080/00224499109551600 URL: http://www.tandfonline.com/doi/abs/10.1080/00224499109551600, Accessed 15 November 2017.
[505] Taylor JR, Lockwood AP, Taylor AJ. The prepuce: specialized mucosa of the penis and its loss to circumcision. *Br J Urol.* 1996;77: 291–5. URL: http://www.arclaw.org/sites/default/files/primer/Taylor%20Prepuce%20Spec-Mucosa%20BJU%201996.pdf, Accessed 18 November 2017.

With regard to the sexual function, they stated:

> The prepuce is primary, erogenous tissue necessary for normal sexual function. The complex interaction between the protopathic sensitivity of the corpuscular receptor-deficient glans penis and the corpuscular receptor-rich ridged band of the male prepuce is required for normal copulatory behaviour. …Clearly, amputation of the prepuce causes changes in sexual behaviour in human males and females.[506]

Adverse sexual effects of circumcision

Circumcision excises more than fifty percent of the epithelium of the penis, including the highly innervated ridged band area found near the tip of the prepuce.[507] The reduction in available epithelium tightens the remainder of the skin and destroys the natural gliding action,[508] [509] provided to facilitate coitus,[510] and conserves lubricating vaginal moisture.[511] The sensation from the foreskin nerves is lost forever.[512]

Circumcision has been shown to adversely affect erectile capability. Glover (1929) reported a case of post-circumcision impotence.[513] Stinson (1973) reported five cases of impotence. Coursey *et al.* (2001) reported that the degradation in sexual function after circumcision is equivalent to the degradation in function experienced after anterior urethroplasty.[514] Fink *et al*. (2002) reported a statistically significant decrease in erectile function

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[506] Cold CJ, Taylor JR. The prepuce. *BJU Int.* 1999;83 Suppl. 1: 34–44. doi: 10.1046/j.1464-410x.1999.0830s1034.x URL: http://onlinelibrary.wiley.com/doi/10.1046/j.1464-410x.1999.0830s1034.x/abstract

[507] Taylor JR, Lockwood AP, Taylor AJ. The prepuce: specialized mucosa of the penis and its loss to circumcision. *Br J Urol.* 1996;77: 291–5. URL: http://www.arclaw.org/sites/default/files/primer/Taylor%20Prepuce%20Spec-Mucosa%20BJU%201996.pdf, Accessed 29 October 2018.

[508] Lakshmanan S., Prakash S. Human prepuce: some aspects of structure and function. *Indian J Surg.* 1980;44: 134–7. URL: https://www.researchgate.net/publication/286998210_Human_prepuce_-_some_aspects_of_structure_and_function, Accessed 29, October 2018.

[509] Hammond T, Carmack A. Long-term adverse outcomes from neonatal circumcision as reported in a survey of 1,008 men: an overview of human rights implications. *The International Journal of Human Rights*. 2017. URL: http://dx.doi.org/10.1080/13642987.2016.1260007, Accessed 12 January 2019.

[510] Taves D. The intromission function of the foreskin. *Med Hypotheses.* 2002;59(2): 180. URL: https://www.sciencedirect.com/science/article/pii/S0306987702002505, Accessed 29 October 2018.

[511] Warren J, Bigelow J. The case against circumcision. *Br J Sex Med.* 1994; Sept/Oct: 6–8.

[512] Boyle GJ. Circumcision of infants and children: short-term trauma and long-term psychosexual harm. *Advances in Sexual Medicine.* 2015;5: 22–38. URL: http://file.scirp.org/pdf/ASM_2015041614065853.pdf, Accessed 29 October 2018.

[513] Glover E. The 'screening' function of traumatic memories. *Int J Psychoanal.* 1929; 10:90–3. URL: https://www.scribd.com/document/349267449/The-Screening-Function-of-Traumatic-Memories, Accessed 31 October 2018.

[514] Coursey JW, Morey AF, McAninch JW*, et al*. Erectile function after anterior urethroplasty. *J Urol.* 2001;166(6):2273–6. URL: https://www.jurology.com/article/S0022-5347(05)65549-8/abstract?code=juro-site, Accessed 31 October 2018.

after circumcision in men circumcised as adults.[515] Shen *et al*. (2004) reported erectile dysfunction in 28 percent of men circumcised as adults.[516]

Circumcision also adversely impacts ejaculatory function. Taylor (2007) suggested that the "real importance of the ridged band to sexual intercourse lies in an ability to trigger a reflex contraction of muscles responsible for ejaculation."[517] Frisch *et al*. (2011) reported "circumcised men (11%) were around three times more likely than uncircumcised men (4%) to report frequent orgasm difficulties."[518] Podnar (2011) studied the elicitability of the penilo-cavernosus reflex (causing ejaculation) in foreskinned and circumcised men. His study reported:

> The present study confirmed my previous observations [6,8,9] that the penilo-cavernosus reflex is more difficult to elicit clinically in circumcised men. Furthermore, the study also showed a similar result in men with persistent foreskin retraction…The probable reason for this finding in circumcised men is the elimination of the most sensitive part of the penis (i.e. the foreskin), and to a lesser extent, desensitization of sensory receptors in the penile glans.[519]

Frisch *et al*. (2011) carried out an extremely large-scale survey in Denmark of both men and women. They reported that circumcised men were three times more likely to experience orgasm difficulties, and more likely to have more than ten life-time sexual partners as compared with intact men.[520]

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[515] Fink KS, Carson CC, DeVellis RF. Adult circumcision outcomes study: Effect on erectile function, penile sensitivity, sexual activity and satisfaction. *J Urol.* 2002;167(5): 2113–6. URL: https://www.jurology.com/article/S0022-5347(05)65098-7/fulltext, Accessed 31 October 2018.

[516] Shen Z, Chen S, Zhu C, *et al*. [Erectile function evaluation after adult circumcision]. *Zhonghua Nan Ke Xue* 2004;10(1): 18–9. URL: https://www.researchgate.net/publication/8686520_Erectile_Function_Evaluation_after_Adult_Circumcision, Accessed 31 October 2018.

[517] Taylor JR. Fine touch pressure thresholds in the adult penis. *BJU Int.* 2007;100(1): 218. URL: https://onlinelibrary.wiley.com/doi/full/10.1111/j.1464-410X.2007.07026_4.x, Accessed 31 October 2018.

[518] Frisch M, Lindholm, Grønbæk M. Male circumcision and sexual function in men and women: a survey-based, cross-sectional study in Denmark. *Int J Epidemiol*. 2011;40(5):1367–81. doi:10.1093/ije/dyr104 URL: http://www.i2re-searchhub.org/wp-content/uploads/storage/2NJRBTCK/Frisch%20et%20al.%20-%202011%20-%20Male%20circumcision%20and%20sexual%20function%20in%20men%20and%20women.pdf, Accessed 17 November 2017.

[519] Podnar S. Clinical elicitation of the penilo-cavernosus reflex in circumcised men. *BJU Int*. 2011;209: 582–5. doi:10.1111/j.1464-410X.2011.10364.x URL: http://onlinelibrary.wiley.com/doi/10.1111/j.1464-410X.2011.10364.x/full, Accessed 17 November 2017.

[520] Frisch M, Lindholm, Grønbæk M. Male circumcision and sexual function in men and women: a survey-based, cross-sectional study in Denmark. *Int J Epidemiol*. 2011;40(5): 1367–81. doi:10.1093/ije/dyr104 URL: http://www.i2re-searchhub.org/wp-content/uploads/storage/2NJRBTCK/Frisch%20et%20al.%20-%202011%20-%20Male%20circumcision%20and%20sexual%20function%20in%20men%20and%20women.pdf, Accessed 17 November 2017.

Bronselaer *et al*. (2013) carried out a large-scale study in Belgium to compare penile sensitivity in circumcised and uncircumcised men. The study found that the foreskin provides a significant portion of the total sensation. The study reported that uncircumcised men experience mild to very strong sexual pleasure from the foreskin. Circumcised men, on the other hand, showed a significantly lower level of pleasure from the glans. They also needed a stronger effort to obtain orgasm than the uncircumcised group. A significantly larger percentage of circumcised men reported numbness at the glans. The findings underline the important role played by the foreskin for penile sensitivity and functioning and for men's overall sexual satisfaction.[521]

Bossio *et al*. (2014) measured penile sensitivity in circumcised and intact men in a small-scale study. They reported the foreskin is more sensitive to tactile stimulation than other sites on the penis,[522] thereby confirming the findings of Sorrells *et al*. (2007).[523]

Hammond & Carmark (2017) report circumcised men experience more frequent orgasm difficulties than intact men and that female partners of circumcised men also experience negative outcomes to health and sexuality, notably orgasm difficulties, dyspareunia, and a sense of incomplete sexual needs fulfilment.[524]

[521] Bronselaer GA, Schober JM, Meyer-Bahlburg HFL, *et al*. Male circumcision decreases penile sensitivity as measured in a large cohort. *BJU Int*. 2013;111(5): 820–7. doi: 10.1111/j.1464-410X.2012.11761.x URL: http://onlinelibrary.wiley.com/doi/10.1111/j.1464-410X.2012.11761.x/full, Accessed 18 November 2017.
[522] Bossio JA, Pukall CF, Steele SS. Examining penile sensitivity in neonatally circumcised and intact men using quantitative sensory testing. *J Urol.* 2016;195: 1848-53. doi: 10.1016/j.jurol.2015.12.080 URL: https://www.researchgate.net/publication/288056254_Examining_Penile_Sensitivity_in_Neonatally_Circumcised_and_Intact_Men_Using_Quantitative_Sensory_Testing, Accessed 22 November 2017.
[523] Sorrells ML, Snyder JL, Reiss MD, *et al.* Fine-touch pressure thresholds in the adult penis. *BJU Int.* 2007;99:864 –9. doi: 10.1111/j.1464-410X.2006.06685.x URL: http://onlinelibrary.wiley.com/doi/10.1111/j.1464-410X.2006.06685.x/full.
[524] Hammond T, Carmack A. Long-term adverse outcomes from neonatal circumcision as reported in a survey of 1,008 men: an overview of human rights implications. *The International Journal of Human Rights*. 2017. URL: http://dx.doi.org/10.1080/13642987.2016.1260007, Accessed 12 January 2019.

Adverse effects of male circumcision upon female sexuality

Male circumcision adversely affects the sexual experience of the *female* sexual partner. The value of the complete penis with foreskin for female pleasure and satisfaction was recognized by the Rabbi Isaac ben Yedaia in the thirteenth century.[525] Warren & Bigelow (1994) commented that the gliding action of the foreskin reduces vaginal abrasions and conserves vaginal lubrication.[526]

O'Hara & O'Hara (1999) surveyed 138 sexually experienced women. Of that group, 20 (14.5%) preferred non-intact circumcised sexual partners while 118 or (85.5%) preferred intact non-circumcised sexual partners. They reported that women are more likely to have a vaginal orgasm with a non-circumcised natural male partner. Furthermore, the women reported that their circumcised sexual partners are more likely to experience premature ejaculation. The study concluded, "Clearly, the anatomically complete penis offers a more rewarding experience for the female partner during coitus."[527]

Bensley & Boyle (2003) surveyed 35 sexually experienced women in Australia. The women reported they were significantly more likely to experience vaginal dryness with a circumcised partner. This survey confirms the hypothesis of Warren & Bigelow and the findings of O'Hara & O'Hara. Bensley & Boyle hypothesized "'female arousal disorder' is but a normal female response to coitus with a man with an iatrogenically deficient penis."[528]

Frisch *et al.* (2011) reported that women with circumcised partners were more likely to report orgasm difficulties, dyspareunia, vaginismus, and a sense of incomplete needs fulfilment.[529]

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[525] Rabbi Isaac ben Yedaiah. Translation in: Marc Saperstein. *Decoding the Rabbis: A Thirteenth-Century Commentary on the Aggadah*. Cambridge, Mass, and London, England: Harvard University Press, 1980: pp.97–98.
[526] Warren J, Bigelow J. The case against circumcision. *Br J Sex Med.* 1994; Sept/Oct: 6—8.
[527] O'Hara K, O'Hara J. The effect of male circumcision on the sexual enjoyment of the female partner. *BJU Int.* 1999;83 Suppl 1:79–84. URL: http://www.i2researchhub.org/wp-content/uploads/storage/U3SR6H9A/The%20effect%20of%20male%20circumcision%20on%20the%20sexual%20enjoyment%20of%20the%20female%20partner.pdf, Accessed 18 November 2017.
[528] Bensley GA, Boyle GJ. Effects of male circumcision on female arousal and orgasm. *N Z Med J*. 2003;116(1181):595–6. URL: http://www.nzma.org.nz/__data/assets/pdf_file/0010/17974/Vol-116-No-1181-12-September-2003.pdf, Accessed 17 November 2017.
[529] Frisch M, Lindholm, Grønbæk M. Male circumcision and sexual function in men and women: a survey-based, cross-sectional study in Denmark. *Int J Epidemiol*. 2011;40(5):1367–81. doi:10.1093/ije/dyr104 URL: http://www.i2researchhub.org/wp-content/uploads/storage/2NJRBTCK/Frisch%20et%20al.%20-%202011%20-%20Male%20circumcision%20and%20sexual%20function%20in%20men%20and%20women.pdf, Accessed 17 November 2017.

Adverse effect of male circumcision upon marital relationship

Male circumcision also adversely affects the marital relationship. Solinis & Yiannaki (2007) surveyed men in Greece who had been circumcised as adults to determine how circumcision had affected the sexual life and enjoyment of men and their partners. They concluded:

> There was a decrease in couple's sexual life after circumcision indicating that adult circumcision adversely affects sexual function in many men or/and their partners, possibly because of complications of surgery and loss of nerve endings.[530]

Conclusion

The studies by Podnar (2011),[531] Frisch *et al*. (2011),[532] and Bronselaer *et al*.[533] (2013) are definitive and conclusive. There can no longer be any reasonable doubt that male circumcision impairs sexual sensation and functioning in both men and women. It is clear that circumcised men do feel sexual pleasure, but their pleasure is necessarily limited by the absence of the movable foreskin and its highly-innervated ridged band at the muco-cutaneous boundary, which has been identified as a specific erogenous zone.[534] [535]

At the time that Medicaid started (1965), virtually nothing in this section was known to medical or psychological science. The anatomical, histological, and physiological understanding of the foreskin and its role in sexuality has been transformed since 1965 when Medicaid was formed. It is now clear that intact males and their spouses enjoy a more

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[530] Solinis I, Yiannaki A. Does circumcision improve couple's sex life? *Journal of Men's Health and Gender* 2007;4(3): 361. URL: https://www.sciencedirect.com/science/article/pii/S1571891307001288, Accessed 31 October 2018.
[531] Podnar S. Clinical elicitation of the penilo-cavernosus reflex in circumcised men. *BJU Int*. 2011;209: 582–5. doi:10.1111/j.1464-410X.2011.10364.x URL: http://onlinelibrary.wiley.com/doi/10.1111/j.1464-410X.2011.10364.x/full, Accessed 17 November 2017.
[532] Frisch M, Lindholm, Grønbæk M. Male circumcision and sexual function in men and women: a survey-based, cross-sectional study in Denmark. *Int J Epidemiol*. 2011;40(5): 1367–81. doi:10.1093/ije/dyr104 URL: http://www.i2re-searchhub.org/wp-content/uploads/storage/2NJRBTCK/Frisch%20et%20al.%20-%202011%20-%20Male%20circumci-sion%20and%20sexual%20function%20in%20men%20and%20women.pdf, Accessed 17 November 2017.
[533] Bronselaer GA, Schober JM, Meyer-Bahlburg HFL, *et al*. Male circumcision decreases penile sensitivity as meas-ured in a large cohort. *BJU Int*. 2013;111(5): 820–7. doi: 10.1111/j.1464-410X.2012.11761.x URL: http://onlineli-brary.wiley.com/doi/10.1111/j.1464-410X.2012.11761.x/full, Accessed 18 November 2017.
[534] Winkelmann RK. The erogenous zones: their nerve supply and significance. *Mayo Clin Proc.* 1959;34(2): 39–47. URL: https://www.mysciencework.com/publication/show/erogenous-zones-nerve-supply-its-significance-6467caf7, Ac-cessed 18 November 2017.
[535] Falliers CJ. Circumcision (letter). *JAMA.* 1970;214(12):2194. URL: https://jamanetwork.com/journals/jama/article-abstract/358730, Accessed 18 November 2017.

satisfactory and rewarding sexual life.[536] Laumann *et al*. (1997) report a very large percentage of adult males in the United States are circumcised.[537] These men and their spouses may be believed to having a less satisfactory sexual life due their lack of a foreskin. It follows that Americans are more sexually disadvantaged than the citizens of other nations where the prevalence of circumcision is less and is not supported by government heath insurance.[538]

It is reasonable to conclude that Medicaid support and encouragement of non-therapeutic circumcision contributes to the impairment of sexual life of Americans.

[536] Solinis I, Yiannaki A. Does circumcision improve couple's sex life? *Journal of Men's Health and Gender* 2007;4(3): 361. URL: https://www.sciencedirect.com/science/article/pii/S1571891307001288, Accessed 31 October 2018.
[537] Laumann, EO, Masi CM, Zuckerman EW. Circumcision in the United States. *JAMA*. 1997;277(13): 1052–7. doi: 10.1001/jama.1997.03540370042034 URL: https://jamanetwork.com/journals/jama/article-abstract/414922, Accessed 19 November 2017.
[538] Boyle GJ. Circumcision of infants and children: short-term trauma and long-term psychosexual harm. *Advances in Sexual Medicine* 2015;5: 22–38. URL: http://file.scirp.org/pdf/ASM_2015041614065853.pdf, Accessed 29 October 2018.

VIII. Psychological Issues

The circumcision procedure introduced into medical practice in the nineteenth century was based on the ritual circumcision used by the Hebrew people for several thousand years. The purpose of ritual circumcision was to produce behavioral change. The goal was to bring about a reduction in sexual intercourse and to make the male more spiritual.[539] We should not be surprised to learn that circumcision causes behavioral and psychological issues.

Levy (1945) was the first to investigate the psychic trauma of surgical operations on children. Levy studied children who had suffered psychically from various surgical operations, including circumcision. Levy made several recommendations, including postponement of the operation when possible at least to the age of three years. He noted that small children have a "keener response to pain."[540]

The famed child psychologist, Anna Freud, the daughter of Sigmund Freud, in 1952, expressed concern over the effect of surgical operations on the mental life of children.[541]

Lack of knowledge at time of founding of Medicaid

Nevertheless, there was little understanding in the medical community of the nature of the infant boy on whom circumcision is usually performed. The renowned British paediatrician, Douglas Gairdner (1949), in his landmark paper on infant circumcision, made no mention of pain or behavioral issues.[542]

There was no understanding that infants could feel pain. It was thought that the nerves of the newborn infant were not yet 'myelinated', so the infant could not feel pain.[543]

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[539] Maimonides, Moses. *The Guide of the Perplexed.* Translated by Shlomo Pines. Chicago: The University of Chicago Press, 1963, p. 609–11.
[540] Levy D. Psychic trauma of operations in children: and a note on combat neurosis. *Am J Dis Child*. 1945;69: 7–25. URL: https://jamanetwork.com/journals/jamapediatrics/article-abstract/1180027, Accessed 14 September 2018.
[541] Freud A. The role of bodily illness in the mental life of children. *Psychoanalytic Study of the Child.* 1952; 7: 69–81. URl: https://www.tandfonline.com/doi/pdf/10.1080/00797308.1952.11823153 Accessed 14 September 2014
[542] Gairdner D. The fate of the foreskin: a study of circumcision. *Br Med J* 1949;2: 1433–7. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2019851/pdf/archdisch01557-0066.pdf Accessed 14 September 2018.
[543] Cope DK. Neonatal pain: the evolution of an idea. *The American Association of Anesthesiologists Newsletter*, September 1998.

No consideration was given to the psychic and emotional sequelae to infant male circumcision. The American Academy of Pediatrics (1975) made no mention of pain, pain control, psychological, or behavioral issues in its circumcision policy statement.[544] The Canadian Paediatric Society statement on circumcision (1975) also made no mention of pain, pain control, psychological, or behavioral issues.[545] This was the state of medical knowledge or lack thereof that existed in 1965 when Medicaid was created.

Increasing awareness

Our understanding of the behavioral changes and psychological issues caused by circumcision has dramatically increased over the last five decades since Medicaid was instituted.

Cansever (1965) studied twelve Turkish boys between the ages of four and seven. Cansever reported disturbances in sexual identification, declines in IQ scores, a tendency to regress toward more infantile and primitive modes of expression and an increase in aggression. Cansever said:

> The results obtained for the different psychological tests indicate that circumcision is perceived by the child as an aggressive attack on his body, which damaged, mutilated and in some cases totally destroyed him. … The main reaction to the operation is an increase in aggressive drives. Not only does the child feel attacked, but also, as a reaction strives to attack those who have mutilated him.[546]

Cansever's paper was published in Britain in the same year (1965) that Medicaid was created.

[544] Thompson HC, King LR, Knox E, *et al.* Report of the ad hoc task force on circumcision. *Pediatrics.* 1975;56(4): 610–1. URL: http://pediatrics.aappublications.org/content/pediatrics/84/2/388.full.pdf Accessed 14 September 2018
[545] Foetus and Newborn Committee. FN 75-01 Circumcision in the newborn period. *CPS News Bull Suppl* 1975; 8(2): 1–2.
[546] Cansever G. Psychological effects of circumcision. *Brit J Med Psychol.* 1965;38: 321–31. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.2044-8341.1965.tb01314.x Accessed 14 September 2018.

Richards *et al*. (1975) postulated that behavioral differences between males and females are caused by circumcision and called for more research.[547]

Anand & Hickey (1987), in a landmark paper, conclusively established that, not only do newborn infants feel pain, but, moreover, they feel it more intensely than adults.[548] Hepper (1996) showed that memory starts to operate while the infant is still in the womb and continues through the birth process.[549] All factors necessary for creation of posttraumatic stress disorder are present in the newborn male.[550]

Hammond & Carmack (2017) surveyed 1,008 men. The men reported significant psychological and emotional issues resulting from their circumcision.[551]

Posttraumatic stress disorder

"The essential feature of Posttraumatic Stress Disorder is the development of characteristic symptoms following exposure to an extreme traumatic stress involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity;…," according to the American Psychiatric Association.[552]

Taddio *et al.* (1997) compared the behavior of three groups of boys at the time of vaccination: 1) boys who had not been circumcised, 2) boys who had been treated with Emla topical anesthetic prior to circumcision and 3) boys who had been treated with a placebo.

[547] Richards MPM, Bernal, JF, Brackbill Y. Early behavioral differences: gender or circumcision? *Dev Psychobiol.* 1976;9(1): 89–95. URL: https://onlinelibrary.wiley.com/doi/pdf/10.1002/dev.420090112, Accessed 30 October 2018.
[548] Anand KJS, Hickey PR. Pain and its effects in the human neonate and fetus. *New Engl J Med.* 1987;317(21): 1321–9. URL: https://www.nejm.org/doi/full/10.1056/NEJM198711193172105 Accessed 14 September 2018,
[549] Hepper PG. Fetal memory: Does it exist? What does it do? *Acta Pædiatr.* (Stockholm) 1996; Suppl 416: 16–20. URL: https://www.slideshare.net/BARRYSTANLEY2fasd/fetal-memory-does-it-exist, Accessed 14 September 2018.
[550] Boyle GJ. Circumcision of infants and children: short-term trauma and long-term psychological harm. *Advances in Sexual Medicine.* 2015;5: 22–38. URL: http://file.scirp.org/pdf/ASM_2015041614065853.pdf, Accessed 30 October 2018.
[551] Hammond T, Carmack A. Long-term adverse outcomes from neonatal circumcision as reported in a survey of 1,008 men: an overview of human rights implications. *The International Journal of Human Rights*. 2017. URL: http://dx.doi.org/10.1080/13642987.2016.1260007, Accessed 12 January 2019.
[552] American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, 4th edn. Washington, DC 1994: 424.

The authors reported:

> This study showed that neonatal circumcision in male infants is associated with increased pain response in vaccination 4-6 months after surgery. The results support our previous finding of a higher pain response in circumcised than uncircumcised male infants during routine vaccination.

The authors concluded:

> It is, therefore, possible that the greater vaccination response in the infants circumcised without anaesthesia may represent an infant analogue of a post-traumatic stress disorder triggered by a traumatic and painful event and re-experienced under similar circumstances of pain during vaccination.[553]

Goldman (1999) emphasized:

> From the perspective of the infant, all the elements in the DSM-IV description of traumatic events apply to circumcision; the procedure involves being forcibly restrained, having part of the penis cut off, and experiencing extreme pain. Based on the nature of the experience and considering the extreme physiological and behavioural responses, circumcision traumatizes the infant.[554]

Rhinehart (1999) encountered numerous cases of posttraumatic stress disorder among adult males in his clinical psychiatric practice. He concluded:

> Circumcision of the newborn male child consists of removal of the penile foreskin, a normal, functional part of the child's body. The United States is now the only industrialized country in the world that continues to circumcise the majority of its newborn male children for non-religious reasons. In my client population of adult men, serious and sometimes disabling lifelong consequences appear to have resulted from this procedure, and long-term psychotherapy focusing on early trauma resolution

[553] Taddio A, Katz J, Ilersich AL, Koren G. Effect of neonatal circumcision on pain response during subsequent routine vaccination. *Lancet.* 1997;349(9052): 599–603. URL: https://www.sciencedirect.com/science/article/pii/S0140673696103160, Accessed 14 September 2018.
[554] Goldman R. The psychological impact of circumcision. *BJU Int.* 1999;83 Suppl. 1: 93–103. URL: https://onlinelibrary.wiley.com/doi/epdf/10.1046/j.1464-410x.1999.0830s1093.x, Accessed 19 September 2018.

> appears to be effective in dealing with these consequences. Early prevention by eliminating the practice of routine circumcision is seen as desirable.

Ramos & Boyle (2001) studied circumcised boys in the Philippine Islands. They reported PTSD in 70 percent of boys who experienced ritual circumcision (*tuli*) and 51 percent of boys who experienced medical circumcision.[555]

Alexithymia

Alexithymia is the inability to identify and express or describe one's feelings.[556]

Bollinger & Van Howe (2011) tested 300 men for alexithymia. The circumcised men were significantly more likely to have a higher test score for alexithymia than the intact men.[557]

Autism spectrum disorder

Frisch & Simonsen (2015), in a large-scale study, report an association of autism spectrum disorder and ritual circumcision.[558]

Hyperactivity

Frisch & Simonsen (2015) also reported an association of ritual circumcision with hyperactivity and called for more study.[559]

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[555] Ramos S, Boyle GJ. Ritual and medical circumcision among Filipino boys: Evidence of post-traumatic stress disorder. In G. C. Denniston. F. M. Hodges, and M. F Milos (Eds)., *Understanding circumcision: multidisciplinary approach to a multi-disciplinary problem.* New York: Kluwer/Plenum, 2001.
[556] Merriam-Webster. URL: https://www.merriam-webster.com/medical/alexithymia, Accessed 13 January 2019.
[557] Bollinger D, Van Howe RS. Alexithymia and circumcision trauma: A preliminary investigation. *International Journal of Men's Health* 2011;10(2): 184–95. URL: https://www.researchgate.net/publication/270190401_Alexithymia_and_Circumcision_Trauma_A_Preliminary_Investigation, Accessed 13 January 2019.
[558] Frist M, Simonsen J. Research Ritual circumcision and risk of autism spectrum disorder in 0- to 9-year-old boys: national cohort study in Denmark. *Journal of the Royal Society of Medicine.* 2015; 108(7): 266–79. DOI: 10.1177/0141076814565942 URL: https://journals.sagepub.com/doi/pdf/10.1177/0141076814565942, Accessed 17 November 2018.
[559] Ibid.

The compulsion to repeat the trauma

Van der Kolk (1989) reports that many traumatized persons have a compulsion to repeat the trauma:

> Trauma can be repeated on behavioral, emotional, physiologic, and neuroendocriniologic levels. Repetition on these different levels causes a large variety of individual and social suffering. Anger directed against the self or others is always a central problem in the lives of people who have been violated and this is itself a repetitive re-enactment of real events from the past.[560]

Trauma, according to van der Kolk *et al*, also causes self-destructive behavior as traumatized persons, inflict trauma on themselves.[561] [562]

Repetition of the trauma frequently results in injury to oneself or to others. Medical doctors who have been circumcised are more likely to recommend circumcision than non-circumcised doctors. LeBourdais (1995) reports:

> In the 1990s, the likelihood of a baby being circumcised is influenced by an expanding array of usually nonmedical factors: circumcision status of the father, attitude of the mother, age of the attending physician, sex and circumcision status of the physician, geographic location and religion — factors that have little to do with the baby himself.[563]

Circumcised fathers frequently irrationally demand that a son be circumcised, even when it is contrary to medical advice. This phenomenon has been named *adamant father*

[560] Van der Kolk BA. The compulsion to repeat the trauma: re-enactment, revictimization, and masochism. *Psychiatr Clin North Am.* 1989;12(2): 389–411. URL: https://www.sciencedirect.com/science/article/pii/S0193953X18304398, Accessed 22 September 2018.
[561] Ibid.
[562] van der Kolk BA, Perry JC, Herman JL. Childhood origins of self-destructive behavior. *Am J Psychiatry.* 1991; 148; 1665–71. URL: http://eqi.org/p1/abuse/vanderkolk_childhood_origins_of_self_destructive_behavior_1991.pdf, Accessed 30 October 2018.
[563] LeBourdais E. Circumcision no longer a "routine" surgical procedure. *Can Med Assoc J.* 1995;152(11): 1873–6. URL: http://europepmc.org/backend/ptpmcrender.fcgi?accid=PMC1337997&blobtype=pdf Accessed 20 Septeber 2018.

syndrome.[564] [565] [566] The most important factor in the circumcision decision is the circumcision status of the father.[567] [568]

Boyle (2015) comments:

> Moreover, in the USA context, the sheer ubiquity of circumcision suggests that any altered personality and/or behavior of circumcised males may be viewed as "normal".[569]

Furthermore, psychological and emotional issues make it nearly impossible for medical trade associations in circumcised societies, where most male physicians are themselves neonatally circumcised, to produce a responsible non-therapeutic circumcision policy.[570] [571] Circumcision practitioners may perform circumcisions as a matter of course, both because of parental/society demand and the concomitant financial reward.[572]

The compulsion to repeat the trauma may also bias the American medical literature in favor of circumcision. Foley (1966) explained:

> For 60 years, a powerful and articulate minority in our profession has tried to enforce a tabu against any objective discussion of the merits or demerits of circumcision. Over in Great Britain the climate of opinion is decidedly against routine circumcision, but here the operation has become a sacrament: To question

[564] Hill G. The case against circumcision. *J Men's Health and Gender.* 2007;4(3): 318–23. URL: https://www.sciencedirect.com/science/article/pii/S1571891307001112, Accessed 25 October 2018.
[565] Boyle GJ. Circumcision of infants and children: short-term trauma and long-term psychological harm. *Advances in Sexual Medicine* 2015;5:22–38. URL: http://file.scirp.org/pdf/ASM_2015041614065853.pdf, Accessed 30 October 2018.
[566] Domashevskiy JA, Domashevskiy AV (2016) Ethics pertaining to the legalities of male routine infant circumcision and surrogate consent to non-therapeutic surgery. *J Clin Res Bioeth.* 2016;7: 1000276. doi:10.4172/2155-9627.1000276 URL: https://www.researchgate.net/publication/308123848_Ethics_Pertaining_to_the_Legalities_of_Male_Routine_Infant_Circumcision_and_Surrogate_Consent_to_Non-Therapeutic_Surgery
[567] Brown MD, Brown CA. Circumcision decision: prominence of social concerns. *Pediatrics.* 1987;80(2): 215–9. URL: http://pediatrics.aappublications.org/content/80/2/215 Accessed 22 September 2018,
[568] Rediger C, Muller AJ. Parents' rationale for male circumcision. *Can Fam Physician*. 2013;59(2): e110–5. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3576965/ Accessed 22 September 2018.
[569] Boyle GJ. Circumcision of infants and children: short-term trauma and long-term psychological harm. *Advances in Sexual Medicine.* 2015;5: 22–38. URL: http://file.scirp.org/pdf/ASM_2015041614065853.pdf, Accessed 30 October 2018.
[570] Goldman R. Circumcision policy: a psychosocial perpective. *Paediatr Child Health.* 2004;9(9): 630–3. URL: https://www.researchgate.net/publication/308123848_Ethics_Pertaining_to_the_Legalities_of_Male_Routine_Infant_Circumcision_and_Surrogate_Consent_to_Non-Therapeutic_Surgery http://archive.is/DoDXZ Accessed 16 October 2018.
[571] Hill G. The case against circumcision. *Journal of Men's Health and Gender.* 2007;4(3): 318–23. URL: https://www.sciencedirect.com/science/article/pii/S1571891307001112, Accessed 25 October 2018.
[572] Boyle GJ. Circumcision of infants and children: short-term trauma and long-term psychological harm. *Advances in Sexual Medicine.* 2015;5: 22–38. URL: http://file.scirp.org/pdf/ASM_2015041614065853.pdf, Accessed 30 October 2018.

> its value has become all but unthinkable. The medical literature is virtually closed except to those who drool over the operation's alleged advantages.[573]

Foley (1966) pointed out certain groups who are likely to be in favor of circumcision and included, "All men, *including physicians*, who have already been circumcised." (Emphasis added.)[574]

Frisch and many other European physicians (2013) blamed the many flaws in the American Academy of Pediatrics 2012 position statement on male circumcision on "cultural bias",[575] but it may just as well have been the compulsion to repeat the trauma with which so many circumcised American males are burdened, as it is believed that all of the male doctors on the 'task force' were circumcised.

Failure to grieve the loss of foreskin and sensory function.

Taylor *et al.* (1996) showed the foreskin to be a highly innervated sensory organ.[576] Sorrells *et al.* (2007) clearly established that the penile areas of greatest sensation are all located on the foreskin.[577] Winkelmann (1959) identified the prepuce as a "*specific erogenous zone*". A specific erogenous zone is an area in the mucocutaneous regions where acute erotic sensations are produced.[578] Sexual sensation is greatly diminished by circumcision so the individual frequently feels a very great loss.

The nature of the foreskin and its many valuable functions have been set forth in detail in the section on the foreskin, so it is clear that the loss of the foreskin to circumcision is a very real, genuine loss to the individual.

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[573] Foley JM. The unkindest cut of all. *Fact* 1966;3(4): 2–9. URL: http://whale.to/a/foley.html Accessed 22 September 2018.
[574] Ibid.
[575] Frisch M, Aigrain Y, Barauskas V, *et al.* Cultural bias in the AAP's 2012 technical report and policy statement on male circumcision. *Pediatrics.* 2013;131(4): 1–5. doi:10.1542/peds.2012-2896 URL: http://pediatrics.aappublications.org/content/pediatrics/early/2013/03/12/peds.2012-2896.full.pdf Accessed 22 September 2018.
[576] Taylor JR, Lockwood AP, Taylor AJ. The prepuce: specialized mucosa of the penis and its loss to circumcision. *Br J Urol.* 1996;77: 291–5 URL:. http://www.arclaw.org/sites/default/files/primer/Taylor%20Prepuce%20Spec-Mucosa%20BJU%201996.pdf, Accessed 21 September 2019.
[577] Sorrells ML, Snyder JL, Reiss MD, *et al.* Fine-touch pressure thresholds in the adult penis. *BJU Int.* 2007;99: 864–9. URL: http https://onlinelibrary.wiley.com/doi/full/10.1111/j.1464-410X.2006.06685.x s://onlinelibrary.wiley.com/doi/full/10.1111/j.1464-410X.2006.06685.x Accessed 22 September 2018.
[578] Winkelmann R K. The erogenous zones: their nerve supply and significance. *Mayo Clin Proc.* 1959;34(2): 39–47.

Maguire & Parkes (1998) report losses must be recognized and grieved.[579] Failure to recognize and accept loss places one in a state of denial of loss and makes treatment more difficult.

Denial of loss

Goldman (1999) reports that circumcised doctors who deny their loss write scientifically flawed medical articles in support of circumcision. As a result, the medical literature regarding male circumcision has become a battleground of contradictory views. There is a sharp contrast between the usually pro-circumcision literature of America and the usually anti-circumcision literature of Europe.[580]

It should be mentioned that the United States Centers for Disease Control is another source of biased material.

Recognition of loss

Watson & Golden (2017) have explored the issue of circumcision grief.[581] When men cease to deny their loss and accept circumcision grief, some become deeply resentful and seethe with anger at the injustice they suffered as a child. The Internet is causing more men to become aware of their loss, so the problem is increasing.

There are two methods of helping men with their circumcision grief. One is non-surgical tissue expansion of residual shaft skin to form a new foreskin. This is a slow process that takes several years.

Others may seek counseling to help them with their emotions. Watson & Golden found that "therapists were reluctant to accept that the grief was real, were unaware of foreskin functions, denied circumcision had physical or psychological sequelae and minimized patient grief using humor, cultural aesthetics, controversial health benefits, sexism

[579] Maguire P, Parks CM. Coping with loss: surgery and loss of body parts. *BMJ.* 1998;316(7137): 1086–8. URL: https://www.bmj.com/content/316/7137/1086, Accessed 22 September 2018.
[580] Goldman R. The psychological impact of circumcision. *BJU Int.* 1999;83 Suppl 1: 93–103. URL: https://onlinelibrary.wiley.com/doi/epdf/10.1046/j.1464-410x.1999.0830s1093.x Accessed 22 September 2018.
[581] Watson L, Golden T. Male circumcision grief: Effective and in effective therapeutic approaches. *New Male Studies: An International Journal.* 2017;6(2): 109–25. URL: http://newmalestudies.com/OJS/index.php/nms/article/view/261/317 Accessed 22 September 2019.

and an erroneous understanding of penile anatomy and sexual function. Male therapists were more likely to deny that circumcision is harmful and to be less empathetic than female therapists".[582] There was a lack of knowledge of foreskin functions and a general disbelief that grief was real. Male therapists were more likely to deny that circumcision is harmful. Treatment for circumcision grief is substantially unavailable.[583]

Boyle (2015) comments:

> Moreover, in the USA context, the sheer ubiquity of circumcision suggests that any altered personality and/or behavior of circumcised males may be viewed as "normal".[584]

Furthermore, we reiterate, psychological and emotional issues make it nearly impossible for medical trade associations in circumcised societies, where most male physicians are themselves neonatally circumcised, to produce a responsible non-therapeutic circumcision policy.[585] Circumcision practitioners may perform circumcisions as a matter of course, both because of parental/society demand and the concomitant financial reward.[586]

Two forces, the desire to avoid the pain of loss and the compulsion to re-enact the trauma, cause the trauma to be re-enacted from generation to generation, creating a never-ending, repetitive cycle of, physical, sexual, and emotional trauma, harm, and injury.

At the time that Medicaid started (1965), virtually nothing in this section was known to medical or psychological science. It should now be clear that many American males have psychological and/or emotional issues caused by their medical-unnecessary, non-therapeutic circumcision to which they did not grant consent. This alone should be sufficient grounds to start a review of Medicaid policy regarding male circumcision. A re-

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[582] Ibid.
[583] Ibid.
[584] Boyle GJ. Circumcision of infants and children: short-term trauma and long-term psychological harm. *Advances in Sexual Medicine.* 2015;5: 22–38. URL: http://file.scirp.org/pdf/ASM_2015041614065853.pdf, Accessed 30 October 2018.
[585] Goldman R. Circumcision policy: a psychosocial perpective. *Paediatr Child Health.* 2004;9(9): 630–3. URL: https://www.researchgate.net/publication/308123848_Ethics_Pertaining_to_the_Legalities_of_Male_Routine_Infant_Circumcision_and_Surrogate_Consent_to_Non-Therapeutic_Surgery http://archive.is/DoDXZ Accessed 16 October 2018.
[586] Boyle GJ. Circumcision of infants and children: short-term trauma and long-term psychological harm. *Advances in Sexual Medicine* 2015;5: 22–38. URL: http://file.scirp.org/pdf/ASM_2015041614065853.pdf, Accessed 30 October 2018.

appraisal of Medicaid circumcision policy in the light of today's knowledge is appropriate and necessary.

IX. Circumcision Policies of Other Nations

When determining government policy, it frequently is helpful to see what other governments are doing. DOC has surveyed the policy of selected other nations to determine their policy.

The policy of other nations with regard to payment for non-therapeutic circumcision by national health plans varies.

English-Speaking Nations

The United Kingdom provides health care through its National Health Service (NHS), which was formed in the postwar years and commenced operation in July 1948. The NHS has never provided free non-therapeutic circumcision; it provides circumcision only for a therapeutic purpose.[587]

Canada has fourteen public health insurance plans. All Canadian public health insurance plans discontinued coverage of non-therapeutic circumcision years ago. Public health insurance coverage of non-therapeutic circumcision by provincial health insurance plans is not presently available in Canada.[588] [589]

New Zealand, like other English-speaking nations, once practiced non-therapeutic circumcision, but it started to die out after about 1950 and was essentially discontinued by 1995.[590] The New Zealand Health Funding Authority provides circumcision payment only for medical reasons.[591]

[587] Nick M. Circumcision 12 May 2016 URL: https://patient.info/health/circumcision-leaflet, Accessed 25 October 2017.
[588] Sorokan ST, Finlay JC, Jefferies AL. Newborn male circumcision. *Paediatr Child Health.* 2015;20(6): 311–15 URL: https://www.cps.ca/en/documents/position/circumcision, Accessed 25 October 2017.
[589] Circumcision of baby boys: Information for parents. September 2015. URL: https://www.caringfork-ids.cps.ca/handouts/circumcision, Accessed 31 October 2018.
[590] McGrath, Ken, and Hugh Young, "A Review of Circumcision in New Zealand". In: *Understanding Circumcision*, George C. Denniston, Frederick Mansfield Hodges, and Marilyn Fayre Milos, eds. Kluwer Academic/Plenum Publishers, New York, 2001, 129–46.
[591] Kennedy E. Foreskin's lament. *The Dominion*, Wellington, New Zealand. 4 April 2000.

Australia's states all have state-funded public hospitals. Circumcision for non-therapeutic reasons is no longer available in public hospitals.[592] Australia's federal Medicare health insurance plan, for Australian political reasons,[593] pays AU$39.55 (about US$30.40) for a circumcision without regard to medical necessity. The actual cost is much higher so this payment covers only a small percentage of the total cost.[594]

Non English-Speaking Nations

In Mexico, the Instituto Mexicano Seguro Social (INSS) pays for circumcision only when medical indications are present.[595]

The Netherlands stopped paying for non-therapeutic circumcision some years ago.[596]

In Sweden, public health insurance does not pay for non-therapeutic circumcision.[597]

In Denmark, public health insurance does not pay for non-therapeutic circumcision.[598]

In France, public health insurance does not pay for non-therapeutic circumcision.[599]

In Germany, public health insurance does not pay for non-therapeutic circumcision.[600]

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[592] BUPA. *Facts about male circumcision*. 9 June 2015. URL: http://www.bupa.com.au/health-and-wellness/health-information/az-health-information/facts-about-male-circumcision#happening, Accessed 31 October 2018.

[593] Darby R. Scientific advice, traditional practices and the politics of health care: The Australian debate over the public funding of non-therapeutic circumcision, 1985. *Hygiea Internationalis: An Interdisciplinary Journal for the History of Public Health*. 2011;10: 53–73. URL: http://www.ep.liu.se/ej/hygiea/v10/i2/a04/hygiea11v10i2a04.pdf, Accessed 14 December 2018.

[594] Department of Health. *Medicare Benefits Schedul*e. URL: http://www9.health.gov.au/mbs/search.cfm?q=circumcision&Submit=&sopt=S, Accessed 25 October 2017.

[595] Gobierno Federal, Consejo de Salubridad General. *Circuncisión referencia rapida SSA-289-10*. URL: http://www.cenetec.salud.gob.mx/descargas/gpc/CatalogoMaestro/289_SSA_10_Circuncision/GRR_SSA_289_10.pdf, Accessed 25 October 2017.

[596] Comité consultatif de bioéthique de Belgique. *Avis n° 70 - aspects éthiques de la circoncision non médicale*. 8 May 2017. URL: https://www.health.belgium.be/fr/avis-ndeg-70-aspects-ethiques-de-la-circoncision-non-medicale, Accessed 25 October 2017.

[597] Ibid.

[598] Ibid.

[599] Ibid.

[600] Ibid.

In Italy, availability of payment by public health insurance for non-therapeutic circumcision varies by region.[601]

DOC believes that non-therapeutic circumcision is not covered by government health plans in Latin America.

Public health insurance in Turkey and Israel does pay for non-therapeutic ritual circumcision.[602] Turkey and Israel are nations with religious majorities that demand circumcision for religious reasons.

Conclusion

America is almost completely alone in using government health insurance to pay for harmful non-therapeutic male circumcision.

[601] Ibid.
[602] Ibid.

IX. Medicaid Law

There are several overarching matters that the Centers for Medicare and Medicaid Services (CMS) should consider as it reviews the matter of non-therapeutic circumcision.

Law

The CMS is subject to the laws of the United States, especially Title XIX of the United States Code, which created Medicaid in 1965.

Medicaid must provide only medical services “reasonable and medically necessary for the diagnosis and treatment of illness or injury or to improve functioning of a malformed body member,…”.[603]

The United States Supreme Court ruled (quoting *Harris v. McRae*, 448 U. S. 297, 448 U. S. 301) that Medicaid exists:

> "for the purpose of providing federal financial assistance to States that choose to reimburse certain costs of medical treatment for needy persons."[604]

The Eighth Circuit has ruled:

> Medicaid was not designed to fund risky, unproven procedures, but to provide the largest number of necessary medical services to the greatest number of needy people.[605]

The expenditure of scarce Medicaid funds on non-therapeutic medical services takes money away from necessary medical services and limits their availability to needy people. Such expenditures are not in keeping with the purpose and intent of the Medicaid law and are inappropriate and unlawful.

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[603] 42 CFR 476.71(a)(1). URL: https://www.gpo.gov/fdsys/pkg/CFR-2011-title42-vol4/pdf/CFR-2011-title42-vol4-sec476-71.pdf, Accessed 3 October 2018.
[604] *Schweiker v. Hogan*, 457 U.S. 569 (1982) URL: https://supreme.justia.com/cases/federal/us/457/569/, Accessed 12 December 2018.
[605] *Ellis v. Patterson* 859 F. 2d 52 at 55 (1988) URL: https://law.justia.com/cases/federal/appellate-courts/F2/859/52/126454/ Accessed 2 October 2018.

Therapeutic and Non-Therapeutic Circumcision

Male circumcisions are performed for many reasons. Some are therapeutic circumcisions intended to treat deformity or disease. Others are non-therapeutic, which are performed in the absence of any deformity of disease that requires treatment.

When Medicaid commenced operations in 1965, it was improperly assumed that all circumcisions have a therapeutic purpose, so the expense should be covered by Medicaid, however, that is *not* the case.

Medicaid provision of *therapeutic* circumcisions is unquestionably lawful and is not at issue.

Some non-therapeutic circumcisions are performed on healthy persons because of religious views. Such circumcisions should not be paid by the government because they are non-therapeutic, medically unnecessary, and also because the Establishment Clause of the First Amendment prohibits Congress from appropriating funds for a religious purpose.[606]

Many circumcisions are performed on healthy boys at the whim of the parents. The most frequent reason is that the father was circumcised.[607] [608] These circumcisions are also non-therapeutic and should not qualify for government payment.

Some adult males seek to be circumcised for personal preference, not because of the presence of injury, deformity, or disease. These are cosmetic circumcisions and also should not be covered by Medicaid.

The CMS should note that 18 states, starting with California in 1982, have delisted non-therapeutic circumcision as a covered procedure.[609]

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[606] United States Constitution, First Amendment (1791).
[607] Brown MD, Brown CA. Circumcision decision: prominence of social concerns. *Pediatrics.* 1987;80(2): 215-9. URL: http://pediatrics.aappublications.org/content/80/2/215, Accessed 22 September 2018,
[608] Rediger C, Muller AJ. Parents' rationale for male circumcision. *Can Fam Physician*. 2013;59(2): e110-5. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3576965/, Accessed 22 September 2018.
[609] Peter W. Adler. Is it lawful to use Medicaid to pay for circumcision? 19 *J Law Med* 335 (2011). URL: https://pdfs.semanticscholar.org/94dc/dbe3fb878c82d071573d0e6630b4ca049634.pdf, Accessed 4 October 2018.

The issue of provision of medically unnecessary, non-therapeutic circumcision by Medicaid has been thoroughly examined by Peter W. Adler (2011). He reports that Medicaid funded 351,548 circumcisions in 2003, so this is a significant issue. He estimates the cost to Medicaid in 2011 to be $528 million.[610]

Adler (2011) concluded:

> Tens of millions of boys have been circumcised under the Medicaid program since its inception in 1965, almost half a century ago. It has been assumed that physicians and hospitals have the right to do so, and that each State has the right to decide, as a policy matter, whether to continue or end Medicaid coverage of the surgery. These assumptions are mistaken.
>
> The fundamental principle of Medicaid law is that only necessary medical services are covered, while circumcising or operating on healthy boys is, by definition, unnecessary. Medicaid law requires that physicians and hospitals end the practice. Since they have not done so, federal and State Medicaid offices, otherwise the federal and State legislatures, are required by law to end the practice, to hold physicians and hospitals liable for false Medicaid claims, and to recoup their losses. This article calls upon the Federal Government and the remaining 32 States to stop making policy arguments and to enforce the law.
>
> This is no small matter, insofar as the tens of millions of boys circumcised under the Medicaid program at government expense since 1965 all had the right to be left alone and intact. The purpose of Medicaid is to treat the largest possible number of sick and injured people, in the most conservative and economical way possible, not to perform unnecessary surgery on millions of healthy boys, and injure them all, at very high and unnecessary expense. It is unlawful to circumcise healthy boys at the expense of the Federal and State Governments.[611]

[610] Ibid.
[611] Ibid.

The *Comité consultatif de bioéthique Belgique* (Belgian Consultative Bioethics Committee) has affirmed payment by government health insurance for non-therapeutic circumcision to be an unethical practice.[612]

Conclusion

The money inappropriately expended on medically unnecessary, non-therapeutic circumcision should be redirected to the provision of medical-necessary services to the needy. A reform of Medicaid policy regarding non-therapeutic circumcision is long overdue.

[612] Comité consultatif de bioéthique de Belgique. *Opinion no. 70 of 8 May 2017 on the ethical aspects of nonmedical circumcision.* 8 May 2017, https://erikbuys.files.wordpress.com/2018/07/opinion_70_web.pdf, Accessed 12 December 2018.

X. Human Rights

In this chapter, we will discuss the inherent violation of human rights when a non-consenting minor suffers a non-therapeutic circumcision.

History

The era of human rights may be considered to have started with the formation of the United Nations at San Francisco in 1945 because the *Charter of the United Nations* requires that body to promote universal respect and observance of human rights for all — without distinction as to race, sex, language, or religion.[613]

The General Assembly of the United Nations, acting to fulfill its obligations under the Charter, adopted the *Universal Declaration of Human Rights* (UDHR) in 1948.[614] The UDHR recognizes the rights of all to security of the person (Article 3), to freedom from inhuman, cruel, or degrading treatment (Article 5), and the rights of motherhood and childhood to special protection (Article 25.2), all of which are applicable to circumcision.

The General Assembly adopted the *International Covenant on Civil and Political Rights* (ICCPR) in 1966.[615] That *Covenant*, which is international law, has several provisions, which are applicable to the circumcision of children.

The United States ratified this *Covenant* on 8 September 1992 with various reservations, understandings, and declarations.[616] When the United States ratified this agreement it agreed to Article 2, which provides:

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[613] Chapter IX, Article 55. *Charter of the United Nations* (1945). URL: https://treaties.un.org/doc/Publication/CTC/uncharter.pdf, Accessed 5 October 2018.
[614] *Universal Declaration of Human Rights*, G.A. res. 217A (III), U.N. Doc A/810 at 71 (1948). URL: http://www.un.org/en/universal-declaration-human-rights/index.html, Accessed 28 November 2017.
[615] *International Covenant on Civil and Political Rights*. United Nations General Assembly Resolution 2200A [XX1]. 16 December 1966. URL: https://www.ohchr.org/EN/ProfessionalInterest/Pages/CCPR.aspx, Accessed 2 January 2019.
[616] Domashevskiy JA, Domashevskiy AV (2016) Ethics pertaining to the legalities of male routine infant circumcision and surrogate consent to non-therapeutic surgery. *J Clin Res Bioeth* 2016;7: 1000276. doi:10.4172/2155-9627.1000276 URL: https://www.researchgate.net/publication/308123848_Ethics_Pertaining_to_the_Legalities_of_Male_Routine_Infant_Circumcision_and_Surrogate_Consent_to_Non-Therapeutic_Surgery

Article 2

> 1. Each State Party to the present Covenant undertakes to respect and to ensure to all individuals within its territory and subject to its jurisdiction the rights recognized in the present Covenant, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.
>
> 2. Where not already provided for by existing legislative or other measures, each State Party to the present Covenant undertakes to take the necessary steps, in accordance with its constitutional processes and with the provisions of the present Covenant, to adopt such laws or other measures as may be necessary to give effect to the rights recognized in the present Covenant.

Each nation that is a state-party under the ICCPR, which took effect in 1976, pledges to enforce those rights for its citizens. The ICCPR is particularly relevant to the United States, given that it has been ratified by the United States Senate.[617]

Articles 7, 9, and 24 are applicable to circumcision The MSS has not taken the necessary steps to comply with Article 2 of the ICCPR and is not presently compliant with international law.

Violation of the human rights of America's children

These provisions of the ICCPR apply to non-therapeutic circumcision.:

Article 7 provides:

> No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment. In particular, no one shall be subjected without his free consent to medical or scientific experimentation.

[617] Svoboda JS, Adler PW, Van Howe RS. Circumcision is unethical and unlawful. *Journal of Law, Medicine & Ethics.* 2016;44(2): 263–82. DOI: 10.1177/1073110516654120 URL: https://www.readbyqxmd.com/read/27338602/circumcision-is-unethical-and-unlawful, Accessed 14 October 2018.

Article 9 provides:

> Everyone has the right to liberty and security of person.

Article 24 provides:

> Every child shall have, without any discrimination as to race, colour, sex, language, religion, national or social origin, property or birth, the right to such measures of protection as are required by his status as a minor, on the part of his family, society and the State.

Circumcision typically amputates more than fifty percent of the highly innervated epithelium of the penis.[618] The foreskin is the location of the most sensitive erogenous tissue of the penis.[619] [620] Circumcision degrades sexual function.[621] [622] This amputation is an obvious and inescapable violation of the prohibition of cruel, inhuman or degrading treatment and the right to security of the person. Non-therapeutic circumcision of male children violates these human rights because children are deemed legally incompetent, so they cannot grant consent to this violation.[623] Children are entitled to protection by the State from non-therapeutic circumcision.[624]

Commentary by human right authorities

Numerous authorities recognize non-therapeutic circumcision of children as a human rights violation. The Netherlands Institute of Human Rights at the University of

[618] Taylor JR, Lockwood AP, Taylor AJ. The prepuce: specialized mucosa of the penis and its loss to circumcision. *Br J Urol.* 1996;77: 291–5. doi: 10.1046/j.1464-410X.1996.85023.x URL: http://www.arclaw.org/sites/default/files/primer/Taylor%20Prepuce%20SpecMucosa%20BJU%201996.pdf, Accessed 5 December 2017.
[619] Winkelmann RK. The erogenous zones: their nerve supply and significance. *Mayo Clin Proc.* 1959;34(2): 39–47.
[620] Sorrells ML, Snyder JL, Reiss MD, *et al.* Fine-touch pressure thresholds in the adult penis. *BJU Int.* 2007;99: 864–9. doi: 10.1111/j.1464-410X.2006.06685.x URL: http://onlinelibrary.wiley.com/doi/10.1111/j.1464-410X.2006.06685.x/full, Accessed 7 December 2018.
[621] Frisch M, Lindholm, Grønbæk M. Male circumcision and sexual function in men and women: a survey-based, cross-sectional study in Denmark. *Int J Epidemiol.* 2011;40(5): 1367–81. doi:10.1093/ije/dyr104 URL: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.693.5364&rep=rep1&type=pdf, Accessed 28 October 2017.
[622] Bronselaer GA, Schober JM, Meyer-Bahlburg HFL, *et al.* Male circumcision decreases penile sensitivity as measured in a large cohort. *BJU Int.* 2013; 111(5): 820–7. doi: 10.1111/j.1464-410X.2012.11761.x URL: http://onlinelibrary.wiley.com/doi/10.1111/j.1464-410X.2012.11761.x/full, Accessed 7 December 2018.
[623] Svoboda JS, Adler PW, Van Howe RS. Circumcision is unethical and unlawful. *Journal of Law, Medicine & Ethics.* 2016;44(2): 263–82. doi: 10.1177/1073110516654120 URL: https://www.readbyqxmd.com/read/27338602/circumcision-is-unethical-and-unlawful, Accessed 14 October 2018.
[624] *International Covenant on Civil and Political Rights*. United Nations General Assembly Resolution 2200A [XX1]. 16 December 1966. URL: https://www.ohchr.org/EN/ProfessionalInterest/Pages/CCPR.aspx, Accessed 2 January 2019.

Utrecht (1998) has declared the circumcision of male children to be a human rights violation.[625]

Hodges *et al.* (2002) report:

> Routine circumcision fails to satisfy the criteria necessary to justify it either as a public health measure or a procedure performed in the best interest of the individual. The human rights burden posed to the individual is severe and is not outweighed by any appreciable public health gain.[626]

Helston (2004) stated:

> From a human rights perspective, both male and female genital mutilation, *particularly* when performed on infants or defenceless small children, and for non-therapeutic reasons can be clearly condemned as a violation of children's rights whether or not they cause direct pain. Parents' rights cannot override children's rights.[627]

Hill (2007) identified non-therapeutic child circumcision as a human rights violation.[628]

Svoboda (2013) reports that unnecessary non-therapeutic circumcision is a violation of bodily integrity and of the ICCPR.[629]

The Royal Dutch Medical Association (KNMG) (2010) has declared "Non-therapeutic circumcision of male minors conflicts with the child's right to autonomy and physical integrity."[630]

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[625] Jacqueline Smith. Male Circumcision and the Rights of the Child. In: Mielle Bulterman, Aart Hendriks and Jacqueline Smith (Eds.), *To Baehr in Our Minds: Essays in Human Rights from the Heart of the Netherlands* (SIM Special No. 21). Netherlands Institute of Human Rights (SIM), University of Utrecht, Utrecht, Netherlands, 1998: pp. 465–98.
[626] Hodges FM, Svoboda JS, Van Howe RS. Prophylactic interventions on children: balancing human rights with public health. *J Med Ethics.* 2002;28(1):10–16. URL: https://jme.bmj.com/content/28/1/10, Accessed 31 October 2018.
[627] Hellston SK. Rationalising circumcision: from tradition to fashion, from public health to individual freedom—critical notes on cultural persistence of the practice of genital mutilation. *J Med Ethics.* 2004;30: 248–53.
[628] Hill G. The case against circumcision. *Journal of Men's Health and Gender.* 2007;4(3): 318–23. URL: https://www.sciencedirect.com/science/article/pii/S1571891307001112, Accessed 25 October 2018.
[629] Svoboda JS. Circumcision as a human rights violation. *J Med Ethics.* 2013; 9(7): 469–74. doi: 10.1136/medethics-2012-101229
[630] *Non-therapeutic circumcision of male minors*. Utrecht, Royal Dutch Medical Association, 2010. URL: https://www.knmg.nl/web/file?uuid=4f46a948-1a37-4ee4-95be-976b541ec6ee&owner=5c945405-d6ca-4deb-aa16-7af2088aa173&contentid=286&elementid=1890370, Accessed 8 October 2018.

COUNCIL OF EUROPE

CONSEIL DE L'EUROPE

The Council of Europe, headquartered in Strasbourg, France, is composed of forty-seven European nations, of which 28 are members of the European Union. Its goal is to promote human rights, the rule of law, and democracy.

The Committee on Social Affairs, Health and Sustainable Development of the Parliamentary Assembly of the Council of Europe issued a Committee report on *Children's Right to Physical Integrity* in June 2013. Special Rapporteur Ms. Marlene Rupprecht wrote in her report:

2.1. Male circumcision of young boys

> 13. Male circumcision is the surgical removal of some or all of the foreskin (or prepuce) from the penis.
>
> 6 It is probably the oldest identified and the most frequently performed optional surgical procedure for males throughout the world. Neonatal circumcision or circumcision on young boys may be performed for medical, cultural or religious reasons. It is a widely observed religious practice performed almost universally in Jewish and Muslim communities.
>
> 14. However, the procedure is increasingly questioned and its perception is changing in the light of growing awareness for children's human rights. Even within religious communities, an increasing number of people have started questioning traditional but harmful practices and looking for alternatives.
>
> Having explored this issue in detail during the recent legislative debate in my own country, Germany, I would like to show why circumcision applied to young boys clearly is a human rights

> violation against children, although it is so widely performed both in the medical and in the religious context.[631]

The Parliamentary Assembly subsequently took two actions. The Assembly adopted Resolution 1952 *Children's Right to Physical Integrity* on 1 October 2013 which condemns the practices harmful to children's physical integrity, including "the circumcision of young boys for religious [non-therapeutic] reasons."[632] On the same date, the Parliamentary assembly issued a recommendation to the ministers to:

> 4.1. Take fully into account the issue of children's right to physical integrity when preparing and adopting its new strategy for the rights of the child as of 2015, in particular as regards the fight against all forms of violence against children and the promotion of child participation in decisions concerning them;
>
> 4.2. Consider the explicit inclusion of children's right to physical integrity, as well as their right to participate in any decision concerning them, into relevant Council of Europe standards and, to this end, to examine in a comprehensive manner in which Council of Europe instruments such rights should be included.[633]

[631] Committee on Social Affairs, Health and Sustainable Development. *Children's Right to Physical Integrity*, Doc. 13297. Parliamentary Assembly of the Council of Europe, URL: http://www.assembly.coe.int/CommitteeDocs/2013/Eintegritychildren2013 ,Accessed 12 October 2018.

[632] Parliamentary Assembly of the Council of Europe. *Children's Right to Physical Integrity*, Resolution 1952., Adopted Tuesday, 1 October 2013. URL: http://semantic-pace.net/tools/pdf.aspx?doc=aHR0cDovL2Fzc2VtYmx5LmNvZS5pbnQvbncveG1sL1hSZWY-vWDJILURXLWV4dHIuYXNwP2ZpbGVpZD0yMDE3NCZsYW5nPUVO&xsl=aHR0cDovL3NlbWFudGljcGFjZS5uZ-XQvWHNsdC9QZGYvWFJlZi1XRC1BVC1YTUwyUERGLnhzbA==&xsltparams=ZmlsZWlkPTIwMTc0, Accessed 12 October 2018.

[633] Parliamentary Assembly, Council of Europe. *Children's Right to Physical Integrity*, Recommendation 2023. Adopted Tuesday, 1 October 2013. URL: http://semantic-pace.net/tools/pdf.aspx?doc=aHR0cDovL2Fzc2VtYmx5LmNvZS5pbnQvbncveG1sL1hSZWY-vWDJILURXLWV4dHIuYXNwP2ZpbGVpZD0yMDE3NiZsYW5nPUVO&xsl=aHR0cDovL3NlbWFudGljcGFjZS5uZ-XQvWHNsdC9QZGYvWFJlZi1XRC1BVC1YTUwyUERGLnhzbA==&xsltparams=ZmlsZWlkPTIwMTc2, Accessed 12 October 2018.

Further human rights developments in Europe

The Nordic Association of Clinical Sexologists issued a statement regarding human rights violation inherent in non-therapeutic circumcision of boys, which stated in part:

> As clinical sexologists, we are concerned about the human rights aspects associated with the practice of non-therapeutic circumcision of young boys. To cut off the penile foreskin in a boy with normal, healthy genitalia deprives him of the right to grow up and make his own informed decision. Unless there are compelling medical reasons to operate before a boy reaches an age and a level of maturity at which he is capable of providing informed consent, the decision to alter the appearance, sensitivity, and functionality of the penis should be left to its owner, thus upholding his fundamental rights to protection and bodily integrity.[634]

All of the doctors at the Nørland Hospital in Kristiansand, Norway, have refused to perform ritual [non-therapeutic] circumcision on boys.[635]

The Danish Medical Association (*Lægeforeningen*) (2016) says that boys in Denmark who are under the age of 18 should only be circumcised when there is documented medical need. Lise Møller, chairwoman of the ethics board, stated:

> To be circumcised should be an informed, personal choice. It is most consistent with the individual's right to self-determination that parents not be allowed to make this decision but that it is left up to the individual when he has come of age.[636]

[634] Nordic Association of Clinical Sexologists. *Statement on non-therapeutic circumcision of boys*. Helsinki, October 10, 2013, URL: http://nacs.eu/data/press_release001.pdf, Accessed 14 October 2018.
[635] Hospital doctors in Southern Norway will not circumcise boys. *Norway Today*, 30 August 2016. URL: http://norwaytoday.info/news/hospital-doctors-southern-norway-will-not-circumcise-boys/, Accessed 14 October 2018.
[636] Danish doctors come out against circumcision. *The Local*, 5 December 2016. URL: https://www.thelocal.dk/20161205/danish-doctors-come-out-against-circumcision, Accessed 14 October 2018.

Presidential executive order regarding implementation of human rights

President William Jefferson Clinton issued EO 13107 on 10 December 1998, in compliance with Article 2 of the ICCPR, which requires federal agencies in the executive branch to implement the provisions of the human rights treaties to which the United States is a state-party.

The EO provides in part:

> Section 1.
>
> *Implementation of Human Rights Obligations.*
>
> (a) It shall be the policy and practice of the Government of the United States, being committed to the protection and promotion of human rights and fundamental freedoms, fully to respect and implement its obligations under the international human rights treaties to which it is a party, including the ICCPR, the CAT, and the CERD.[637]

When Medicaid provides matching funds for non-therapeutic male circumcision of a child, it places the CMS in the uncomfortable, inappropriate, and unlawful position of being an accessory before the fact to the violation of an American child's human rights and also of being in violation of EO 13107. Moreover, the protection of children required by Article 24 of the ICCPR is denied.

Abolishing payments for non-therapeutic circumcision of children by Medicaid would bring the CMS into compliance with EO 13107. It should be noted that abolishing Medicaid support for non-therapeutic circumcision of children would *not* prohibit the practice by those who wish to have it done to their child.

It should also be noted that the three American medical trade associations, whose members profit from the performance of non-therapeutic circumcision, have refused to consider the human rights violations inherent in non-therapeutic circumcision of children, have

[637] William Jefferson Clinton. *Executive Order 13107: Implementation of Human Rights Treaties*. December 10, 1998. URL https://www.gpo.gov/fdsys/pkg/WCPD-1998-12-14/pdf/WCPD-1998-12-14-Pg2459.pdf, Accessed 5 October 2018.

no position on human rights violations. We believe that consultation with these professional guilds, who have a vested interest would not be neither helpful nor necessary.[638]

Conclusion

The United States ranks far behind the advanced nations of the world in the protection of the human rights and physical integrity of children. Non-therapeutic circumcision harms and injures all males by amputating a functional, useful, protective body part.[639] [640] [641] [642] The United States, as a modern civilized nation, must do all in its power to cease human rights violations in its own land.[643] Cessation of financial support for injurious non-therapeutic circumcision of boys should be the bare minimum action to be taken.

[638] Frisch M, Aigrain Y, Barauskas V*, et al.* Cultural bias in the AAP's 2012 technical report and policy statement on male circumcision. *Pediatrics* 2013;131(4):1–5. doi:10.1542/peds.2012-2896 URL: http://pediatrics.aappublications.org/content/pediatrics/early/2013/03/12/peds.2012-2896.full.pdf, Accessed 14 October 2018.
[639] Hammond T. A preliminary poll of men circumcised in infancy or childhood. *BJU Int* 1999;83 Suppl 1:85–92. URL: https://onlinelibrary.wiley.com/doi/epdf/10.1046/j.1464-410x.1999.0830s1085.x, Accessed 11 January 2019.
[640] Peter W. Adler. Is it lawful to use Medicaid to pay for circumcision? 19 *J Law Med* 335 (2011). URL: https://pdfs.semanticscholar.org/94dc/dbe3fb878c82d071573d0e6630b4ca049634.pdf, Accessed 4 October 2018.
[641] Domashevskiy JA, Domashevskiy AV. Ethics pertaining to the legalities of male routine infant circumcision and surrogate consent to non-therapeutic surgery. *J Clin Res Bioeth* 2016;7: 1000276. doi:10.4172/2155-9627.1000276 URL: https://www.researchgate.net/publication/308123848_Ethics_P201rtaining_to_the_Legalities_of_Male_Routine_Infant_Circumcision_and_Surrogate_Consent_to_Non-Therapeutic_Surgery, Accessed 18 October 2018.
[642] Purpura V, Bondioli E, Cunningham EJ, *et al.* The development of a decellularized extracellular matrix–based biomaterial scaffold derived from human foreskin for the purpose of foreskin reconstruction in circumcised males. *Journal of Tissue Engineering* 2018;9: 1–11 DOI: 10.1177/2041731418812613. URL: https://journals.sagepub.com/doi/full/10.1177/2041731418812613, Accessed 1 January 2019.
[643] Ibid.

XII. Conclusion

Existing Policy

The existing policy of Medicaid related to male circumcision appears to be unchanged since the formation of Medicaid in 1965. At that time, medical doctors still believed that male circumcision absolutely prevented penile cancer. This belief appears have been to be based on a 1932 fabrication by Abraham Leo Wolbarst, MD, a New York physician,[644] who was an ardent advocate of child circumcision. Although required by law, no distinction was made between *therapeutic* circumcision, carried out for a *therapeutic* reason, to treat deformity, injury, or disease; and non-therapeutic circumcision, carried for a non-therapeutic reason on healthy persons, for religious or social reasons. The most common social reason is that the father was circumcised.[645] [646]

Later research has established that male circumcision does not prevent penile cancer,[647] [648] [649] [650] however the 1965 policy has not been changed, even though the 86-year-old claims of Wolbarst have long been disproved. (See Chapter III.)

Nothing was known of the sexual and emotional injury caused by non-therapeutic circumcision. (See Chapters VII and VIII.)

Policies of other nations

We found that, although most nations provide payment for therapeutic circumcision, support for non-therapeutic circumcision by public health insurance is rare. Turkey and Israel, where circumcision is performed ritually by a religious majority, pay for non-

[644] Wolbarst AL. Circumcision and penile cancer. *Lancet* 1932;219(5655): 150–3. doi: 10.1016/s0140-6736(01)24346-3 URL: http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(01)24346-3/abstract, Accessed 26 October 2017.
[645] Brown MD, Brown CA. Circumcision decision: prominence of social concerns. *Pediatrics* 1987;80(2):215-9. URL: http://pediatrics.aappublications.org/content/80/2/215 Accessed 22 September 2018,
[646] Rediger C, Muller AJ. Parents' rationale for male circumcision. *Can Fam Physician*. 2013;59(2):e110-5. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3576965/ Accessed 22 September 2018.
[647] Preston EN. Whither the foreskin. *JAMA* 1970; 213(11):1853–8. doi:10.1001/jama.1970.03170370037006 URL: https://jamanetwork.com/journals/jama/article-abstract/356609, Accessed 31 October 2017.
[648] Boczko S, Freed S. Penile carcinoma in circumcised males. *N Y State J Med* 1979; 79(12):1903–4.
[649] Frisch M, Friis S, Kjaer SK, Melbye M. Falling incidence of penis cancer in an uncircumcised population (Denmark 1943–90). *Br Med J* 1995; 311: 1471.
[650] Van Howe RS, Hodges FM. The carcinogenicity of smegma: debunking a myth. *J Eur Acad Dermatol Venereol* 2006;20(9):1046-54.

therapeutic ritual circumcision. However, that cannot be the case in the United States, where Congress can "make no law respecting an establishment of religion."[651]

If Medicaid or SCHIP were to pay for ritual [non-therapeutic] circumcision, then it would be in violation of the Establishment Clause of the First Amendment.

Among English-speaking nations coverage of non-therapeutic circumcision has greatly declined. Australia's Medicare pays a small rebate which is grossly insufficient to meet the cost, but Australia's public hospitals no longer offer non-therapeutic circumcision. Payment of or performance of non-therapeutic circumcision at government expense is not available in New Zealand, Canada, or the United Kingdom. United States Medicaid is an outlier in continuing to pay for a non-therapeutic procedure long after it has been rejected for payment by other nations. (See Chapter IX.)

Encouragement of doctors to perform injurious non-therapeutic circumcision.

The availability of a fee for performance of a medically unnecessary, non-therapeutic, injurious, and harmful operation provides American medical doctors an incentive to continue to promote this injurious and harmful practice. The incidence of injurious circumcision and the incidence of SIDS is higher in those states in which Medicaid pays for non-therapeutic circumcision.[652]

The medical specialties which perform the most circumcisions are pediatricians, obstetricians, and family practice doctors. Their trade associations are the American Academy of Pediatrics (AAP), the American College of Obstetricians and Gynecologists (ACOG) and the American Academy of Family Physicians (AAFP). These trade associations, under the leadership of the AAP, have developed a biased, self-serving, shape-shifting policy to support the continued performance of non-therapeutic circumcision and receipt of more income for their members.[653] [654] CMS should not rely on this policy since it is simply

[651] United States Constitution, First Amendment (1791).
[652] Elhaik E. Neonatal circumcision and prematurity are associated with sudden infant death syndrome (SIDS). *Journal of Translational Research* 2018;4(2): Published online first. 10 January 2019. DOI: https://www.jctres.com/en/04.201802.005/. URL: https://www.jctres.com/media/filer_public/94/aa/94aafcfa-dbe0-4275-8f7c-fb149ab0daf9/elhaik2018jclintranslres_epub.pdf, Accessed 15 January 2019.
[653] Task Force on Circumcision. Circumcision policy statement. *Pediatric*s 2012;130:585–6. doi: 10.1542/peds.2012-1989 URL: http://pediatrics.aappublications.org/content/pediatrics/130/3/585.full.pdf, Accessed 5 December 2017.
[654] Task Force on Circumcision. Male circumcision. *Pediatrics* 2012;130:e756–e785. doi: 10.1542/peds.2012-1990 URL: http://pediatrics.aappublications.org/content/pediatrics/130/3/e756.full.pdf, Accessed 5 December 2017.

intended to provide more third-party payment to physicians while not recognizing the human rights violation and inherent injury to American males.

American hospitals and birthing facilities continue to offer and subtly promote injurious, non-therapeutic circumcision, because there is money to be earned. (See Chapter III.)

Non-therapeutic circumcision harms patients

All circumcisions are harmful because they remove the foreskin — the part of the penis that provides physical protection, immunological protection, sexual sensation, and various mechanical sexual functions. (See Chapter II.)

When the foreskin is malformed, injured, or diseased, its amputation by circumcision *may* produce a net therapeutic benefit, but when the foreskin is healthy, circumcision is non-therapeutic and can only produce harm and certain injury. The alleged prophylactic benefits of non-therapeutic circumcision have historically been shown to be illusory or of insufficient effect. (See Chapter V.)

All circumcisions have a wide range of adverse events which may occur. The adverse events may be classified as:

- hemorrhage,
- infection,
- surgical misadventure,
- loss of penis,
- death.

DOC estimates, based on the 2,700 annual deaths from SIDS in the United States and the 60:40 male to female ratio reported by Elhaik,[655] that about 540 sudden infant deaths per year in the United States might be associated with MNC.

[655] Elhaik E. A "wear and tear" hypothesis to explain sudden infant death syndrome. *Front Neurol* 2016;7: 180. doi. 10.3389/fneur.2016.00180 URL: https://eprints.whiterose.ac.uk/107491/1/fneur-07-00180.pdf, Accessed 15 January 2019.

When the patient is covered by a U. S. Government heath program, then the government must bear the cost of treating the adverse event. There are a lot of adverse events so the cost of treatment must be quite high. (See Chapter VI.)

In addition to the adverse events, circumcision removes the physical and immunological protection of the foreskin, the sexual sensation from the foreskin, and destroys its mechanical functions. (See Chapter III.)

We now know that circumcision causes sexual and psychological injury and harm.

Sexual injury includes:

- Loss of sensation.
- Loss of gliding action.
- Decrease in erectile function.
- Decrease in ejaculatory function.
- Adverse effect on *female* sexuality.
- Adverse effect on marital relationship.

(The sexual harm and injury is fully documented in Chapter VII.)

Psychological harm may include:

- Posttraumatic Stress Disorder
- Autism Spectrum Disorder
- Hyperactivity Disorder
- Compulsion to Repeat the Trauma
- Failure to Grieve the Loss of the Foreskin and Sexual Function
- Denial of Loss

When circumcised men do recognize and accept their loss, they may need grief counseling, which may be mostly unavailable.[656] (See Chapter VIII)

[656] Watson L, Golden T. Male circumcision grief: Effective and in effective therapeutic approaches. *New Male Studies: An International Journal.* 2017;6(2): 109–25. URL: http://newmalestudies.com/OJS/index.php/nms/article/view/261/317 Accessed 22 September 2019.

Inappropriate and unlawful waste of government money

Government health care funds are by law supposed to be used for medically necessary therapeutic services. Hundreds of millions of dollars are being spent annually to provide medically unnecessary non-therapeutic circumcision, primarily by Medicaid, but also by Children's Health Insurance Program (CHIP), by the Indian Health Service, and by Medicare.[657]

To this cost must be added the cost of treating and repairing the numerous adverse events of male circumcision, which include physical, sexual, and psychological injury.[658]

Researchers and scientists are trying to develop regeneration of the human foreskin, which could then be surgically attached to replace foreskins destroyed by circumcision.[659] If foreskin regeneration eventually proves to be successful, then CMS could find itself burdened with the cost of foreskin regeneration for millions of needy males whose penis has been injured by the iatrogenic trauma of circumcision.

These funds saved by ceasing to pay for non-therapeutic circumcision should be redirected to medically-necessary services for the needy, including HPV vaccination of both girls and boys. (See Chapter IX.)

CMS is not in compliance with Medicaid law.

We have shown that CMS is in violation of Medicaid law with regard to payments to states and providers for non-therapeutic circumcision. (See Chapter IX.)

Non-therapeutic circumcision of children may be illicit surgery.

We also note that several legal commentators have argued strongly that effective consent for non-therapeutic circumcision of children is unavailable since children are legally

[657] Peter W. Adler. Is it lawful to use Medicaid to pay for circumcision? 19 *J Law Med* 335 (2011). URL: https://pdfs.semanticscholar.org/94dc/dbe3fb878c82d071573d0e6630b4ca049634.pdf Accessed 4 October 2018.
[658] Fetus and Newborn Committee, Canadian Paediatric Society. Neonatal circumcision revisited. *CMAJ.* 1996;154(6):769–80. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1487803/pdf/cmaj00090-0027.pdf, Accessed 26 November 2017.
[659] Purpura V, Bondioli E, Cunningham EJ, *et al*. The development of a decellularized extracellular matrix–based biomaterial scaffold derived from human foreskin for the purpose of foreskin reconstruction in circumcised males. *Journal of Tissue Engineering* 2018;9: 1–11 DOI: 10.1177/2041731418812613. URL: https://journals.sagepub.com/doi/full/10.1177/2041731418812613, Accessed 1 January 2019.

incapable of granting consent and parental consent does not extend to non-therapeutic surgeries.[660] [661] [662] [663] If that should prove to be the case, then CMS would be funding unlawful surgery on children.

Non-therapeutic circumcision of children violates their human rights

When the United States Congress formed Medicaid and Medicare in 1965, the United States was not under International Human Rights Law. This changed when the United States Senate ratified the United Nations *Covenant on Civil and Political Rights* (1966) on 8 September 1992.[664] President William Jefferson Clinton by executive order ordered all agencies of the executive branch to apply the provisions of the human rights treaties to which the United States had become a *state-party*.[665]

The human rights relevant to non-therapeutic circumcision of children are:

- right to freedom from cruel, inhuman or degrading treatment (Article Seven).
- right to security of person (Article Nine).
- the right to such measures of protection as are required by his status as a minor (Article 24).

Although the United States has a sovereign duty to protect the human rights of its citizens, and the agencies of the government have been ordered to do so, the CMS is paying medical doctors through Medicaid, CHIP, and Indian Health Service to violate those human rights. (See Chapter IX.)

Recommendations for policy changes

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[660] Ross Povenmire. Do parents have the legal authority to consent to the surgical amputation of normal, healthy tissue from their infant children?: The practice of circumcision in the United States. 7 *Journal of Gender, Social Policy & the Law.* 87 (1998-1999). URL: https://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1192&context=jgspl, Accessed 2 December 2018.
[661] Gregory J Boyle, J Steven Svoboda, Christopher P Price, J Neville Turner. Circumcision of healthy boys: Criminal assault? 7 *J Law Med.* 301 (2000). URL: https://www.researchgate.net/publication/27827262_Circumcision_of_Healthy_Boys_Criminal_Assault, Accessed 2 December 2018.
[662] Peter W. Adler. Is circumcision legal? 16(3) *Richmond J. L. & Pub. Int.* 439 (2013). URL: https://scholarship.richmond.edu/jolpi/vol16/iss3/3/, Accessed 2 December 2018.
[663] Domashevskiy JA, Domashevskiy AV (2016) Ethics Pertaining to the Legalities of Male Routine Infant Circumcision and Surrogate Consent to Non-Therapeutic Surgery. *J Clin Res Bioeth* 7: 1000276. doi:10.4172/2155-9627.1000276 URL: https://www.researchgate.net/publication/308123848_Ethics_Pertaining_to_the_Legalities_of_Male_Routine_Infant_Circumcision_and_Surrogate_Consent_to_Non-Therapeutic_Surgery, Accessed 2 December 2018.
[664] Ibid.
[665] William Jefferson Clinton. Executive Order 13107: *Implementation of Human Rights Treaties*. December 10, 1998. URL https://www.gpo.gov/fdsys/pkg/WCPD-1998-12-14/pdf/WCPD-1998-12-14-Pg2459.pdf, Accessed 5 October 2018.

Existing CMS policy regarding male circumcision has not been reviewed in more than half a century. It is completely outmoded and needs substantial changes. The payment by government for non-therapeutic circumcision has been declared to be unethical by the Belgian consultative committee on ethics.[666] The provision of funds by CMS to states for non-therapeutic circumcision falsely suggests to the public that non-therapeutic circumcision is a good and desirable practice. Cessation of support for harmful, injurious, non-therapeutic circumcision would generally improve the health and well-being of America's males. DOC's recommendations for proposed changes are set out below:

- Policies that would prohibit payment of matching funds to state Medicaid and CHIP for non-therapeutic circumcision should be promulgated immediately. Verification of clinical need for all circumcisions should be instituted. This should include a requirement for advance approval for every requested circumcision.
- Hospital set-up charges for non-therapeutic circumcision should not be covered. Medicaid should require proof of necessity.
- Some state Medicaid organizations are providing medical services by contract with managed care organizations. Typically, these organizations are allowed to provide non-therapeutic circumcisions as an incentive to join the managed care organization. This practice is contrary to Medicaid law, provides medically-unnecessary, non-therapeutic, injurious amputation of foreskins, for which, in the final analysis, Medicaid must pay, so it should be discontinued immediately by institution of policy changes.
- Circumcision is offensive to the culture of American Indians and Alaskan natives. These indigenous people have a human right to "enjoy their own culture." The Indian Health Service should cease providing non-therapeutic circumcision to Native Americans and Alaskan native people in accordance

[666] Comité consultatif de bioéthique de Belgique. *Opinion no. 70 of 8 May 2017 on the ethical aspects of nonmedical circumcision.* 8 May 2017, https://erikbuys.files.wordpress.com/2018/07/opinion_70_web.pdf, Accessed 12 December 2018.

with Article 27 of the ICCPR[667] and for the many other reasons stated in this document.

- Verification of clinical need for all circumcisions should be instituted. This should include a requirement for advance approval for every requested circumcision.
- DOC has received reports of incompetent elderly men who reside in nursing homes being carted to urologists for circumcision without their consent. DOC can neither confirm these reports nor disprove them. Medicare should institute a policy of paying only for therapeutic circumcision to prevent such abuses. A requirement for advance approval for therapeutic circumcision of older males, supported by proof of clinical necessity, should be promulgated.
- Medicaid and CHIP should pay 100 percent of cost of vaccination of girls and boys against HPV infection. This is to ensure that all needy children can be vaccinated.

When the CMS institutes these proposed policies, it will then be in compliance with federal law, international human rights law, generally accepted medical policies, and bioethics. Moreover, the CMS will save hundreds of millions of dollars every year.

[667] *International Covenant on Civil and Political Rights*. United Nations General Assembly Resolution 2200A [XX1]. 16 December 1966. URL: https://www.ohchr.org/EN/ProfessionalInterest/Pages/CCPR.aspx, Accessed 2 January 2019.