

A preliminary poll of men circumcised in infancy or childhood

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Introduction

An estimated 650 million males [1] and 100 million females [2] living today were genitally altered as children. Annually, 13 million boys and 2 million girls in developing and developed nations undergo customs of genital cutting, euphemistically termed 'circumcision'. These values are the estimated worldwide incidence of male circumcision (<http://www.noharmm.org/incidence-world.htm>, annualized from a ratio of 6.5 male circumcisions for each female circumcision, based on total and annual estimates of circumcision). The severity of mutilation differs among individuals, operators and cultures.

Most female and male genital mutilations occur under similar unsanitary conditions [3,4], although some procedures are conducted under medical conditions. Although 80% of the world's males remain genitally intact [5], male preputial excision has become diffused and entrenched through legitimisation by the medical community.

The last medically advanced nation to persist in circumcising most of its boys for no therapeutic or religious reason is the USA. The current national average circumcision rate in the USA is 60% (down from 85% in the 1970s) [6]. Over 1.25 million infants are circumcised annually, i.e. one child every 26 seconds; 80% of American men were circumcised in childhood, affecting an estimated 100 million adults to varying degrees. The medical community has never measured the long-term outcomes; this article explores the personal and interpersonal impact of childhood circumcision on men.

Assessing men's knowledge of genital anatomy and function

Accurate measurement of the effects of childhood circumcision on adult health and well-being requires a thorough understanding of the functions of the intact (non-circumcised) penis and knowledge of the complications of circumcision. The prepuce contributes to the pleasure and dynamics of movement, sensation and lubrication during masturbation, foreplay and intercourse [7]. However, in the medical community, 'articles and editorials on the advantages and disadvantages of circumcision consistently fail to discuss the prepuce as tissue worthy of preservation' [8].

Generally, men circumcised in childhood remain uninformed of its effects. Lilienfeld *et al.* [9] found that one-third of circumcised men were unaware they were circumcised. Schlossberger *et al.* [10] revealed that 34% of circumcised adolescents reported their status incorrectly; circumcised boys were more uncertain of their status than intact boys. Schlossberger *et al.* determined that, 'Factors affecting satisfaction with circumcision status are currently not known and need to be examined', emphasizing, 'Since the desire to be similar to peers typically fades during progression into later adolescence and adulthood, the effect of increasing age on satisfaction also needs to be examined' [10].

Examining these 'factors' and 'effects' is hindered by circumcised men's ignorance of natural penile physiology. Other limits to reliable assessment may include subjects' convictions that circumcision is beneficial or benign; unfamiliarity with identifying circumcision damage; assumptions that iatrogenic irregularities are 'normal' or 'a birth defect'; and defensive denial of harm. Also, the reorganization of erogenous zones is described in circumcised women [11]. If, after excision of the male prepuce its erogenous functions are assumed by other genital zones, this too may impede a thorough comprehension of the loss. Therefore, a man's silence, trivialization or defence of his circumcised condition does not indicate that circumcision is benign or that he will never fully comprehend the loss.

Documenting the consequences of circumcision

Assumptions that men circumcised in childhood are satisfied with or suffer no adverse effects from circumcision have no scientific foundation. The American Academy of Pediatrics reported that the exact incidence of postoperative complications is unknown [12]; Williams and Kapila assert that a realistic value is 2–10% [13]. Lacking accurate records of these complications, it is not surprising that the medical community has not documented degrees of severity or long-term consequences. Unrecognized outcomes in childhood may become more apparent and troublesome in adulthood. The Virginia Urologic Society's former president acknowledged, 'Often a poor surgical result is not recognized until years after the event. Adverse long-term consequences of infant circumcision on the sexual health

of American men must be recognized by physicians, parents and legislators' [14]. Determinants of circumcision severity include the method of circumcision, the skill of the circumciser, the amount of tissue removed and how the injury heals (scars can be erogenous, painful or numb).

In recent decades, circumcised men have protested about this genital surgery that they did not choose and anecdotal evidence of harm is increasing. In 1993, the National Organization to Halt the Abuse and Routine Mutilation of Males (NOHARMM) began a documentation project. A standardized questionnaire was formulated from details of circumcision damage reported by men who had contacted circumcision-related organizations. The questionnaires also contained an open-comment section and inquired about demographics and awareness of involvement in uncircumcision (foreskin restoration). Questionnaires were mailed to those men requesting information from circumcision-related organizations, and announcements were published in periodicals aimed at American men.

Findings of the preliminary poll

From 1993 to 1996, 546 men participated in the survey. Findings from the first 313 respondents were published in a report (*Awakenings: A Preliminary Poll of Circumcised Men*) with a synopsis presented at the Fourth International Symposium on Sexual Mutilations [15].

Among the participants, 94% were circumcised in infancy, 4% when aged 1–12 years, 0.5% aged 13–17 and 2% after age 18; 95% of respondents identified themselves as 'White', 1.5% were of diverse Asian origins, 1.5% identified as 'Other', 1% as Hispanic, 0.5% as African-American, and 0.5% as American Indian. Because the custom of circumcision in the USA originated among whites, this may account for their higher participation rate.

Although Christianity does not mandate circumcision, 77% of respondents were from Christian families; 18% identified themselves as 'Other' (atheist, Buddhist, etc.) and Jewish men accounted for 4.5% of respondents, although they represent 2% of American males. Muslim participation (0.5%) was too small for meaningful reporting.

At the time of the survey, 1% of respondents were under age 19 years, 15% were 20–29, 26% were 30–39, 31% were 40–49, 18% were 50–59, and 9% were over age 60. Survey analysts speculated that the greater participation by the 30–49 age group may reflect a stage of life when men generally reassess past experiences and assumptions. Uncritical acceptance of circumcision in youth may fade as the person becomes better informed.

Maturity may also bring greater recognition of progressive sensory deficit in the glans, caused or intensified by the cumulative effects of keratinization.

Physical consequences

Without appropriate research on outcome, presumptions of beneficial or even benign results from childhood circumcision are unjustified. Respondents reported wide-ranging physical consequences from their circumcisions. Among the most significant were prominent scarring (33%), insufficient penile skin for a comfortable erection (27%), erectile curvature from uneven skin loss (16%), pain and bleeding upon erection/manipulation (17%), painful skin bridges (12%), other, e.g. bevelling deformities of the glans, meatal stenosis, recurrent non-specific urethritis (20%).

Sexual consequences

By adulthood, the inner and outer surfaces of the prepuce constitute 64–90 cm² of tissue [16]. Typical North American neonatal circumcisions remove what would grow to become 51% of the penile skin [8], but there is little research about the sexual impact of infant circumcision on men. In 1966, Masters and Johnson [17] sought to disprove a prevailing myth that the circumcised glans was more sensitive than the glans of an intact penis. Their study tested for exteroceptive and light tactile discrimination on the ventral and dorsal aspects of the penile shaft and glans. It is unknown whether stimuli were standardized, whether the mucosal inner prepuce and frenulum of intact subjects were tested, or any intact subjects habitually kept their prepuces retracted (producing keratinization). Finding 'no clinically significant difference', the study upheld the presumed sensory equality of circumcised and intact penises. However, the mere ability of circumcised and intact men to detect tactile stimulation does not reveal the quality of perception or differences in sensual and pleasure components of response.

NOHARMM's preliminary poll is the first to systematically survey men about how childhood circumcision affects sensual responsiveness and sexual well-being. The reported sexual consequences included; progressive sensory deficit in the preputial remnant and glans (61%), causing sexual dysfunction (erectile problems, ejaculatory difficulties, and/or anorgasmia); extraordinary stimulation required for orgasm (40%), with many respondents reporting that vaginal sex offered inadequate stimulation for pleasure and/or orgasm; and sexual dysfunction resulting from emotional distress (see *Psychological consequences*).

These findings concur with those of Money and Davidson about the erotogenic consequences of adult

circumcision [18]. Outcomes included loss of proprioceptive stretch receptors of the prepuce and frenulum, diminished erotosexual response, increased penile pain and changes in masturbatory technique. They noted, 'Cosmetics become a problem when the body image becomes involved, and may affect the entire sense of well-being, work capability included, as well as erotosexual bonding and family life' [18].

While Masters and Johnson found that the circumcised penis is no more sensitive than the intact penis, respondents to the present survey indicated that it may be less so. The constantly exposed glans keratinizes to varying degrees, even among intact men with short foreskins and those who keep their foreskins retracted. Keratinization can cause desensitization, which some promoters of circumcision allege prolongs intercourse. Respondents reported the opposite effect; the subtle pleasures of genital foreplay afforded respondents negligible enjoyment. They often abandoned or bypassed foreplay, favouring immediate coitus and hurrying through intercourse to achieve sufficient stimulation for both pleasure and orgasm.

Other reports suggest that some circumcised individuals compensate for a diminished sexual response with either compulsive sexual behaviours [19] or those offering greater stimulation (masturbation, oral/anal sex) [20]. A desensitized glans and the absence of the fine-touch receptors [21,22] and erogenous mobility of the prepuce may necessitate inordinate stimulation of residual penile nerve endings to achieve pleasure and orgasm. Numerous respondents described needing to resort to extraordinary, often violent, thrusting during intercourse, with some respondents (or their wives) reporting genital dryness, abrasion, pain and bleeding.

Modern technology raises another profound concern about the potential impact of infant circumcision. Maternal ultrasonography reveals erections *in utero* [23]; sexologists assert that this shows that human 'sexual wiring' is in place before birth. When a newborn's penis is scrubbed before circumcision, often inducing an erection, the boy's pleasure response, followed by pain and trauma, become his first shared sexual experience. Developmental neuropsychologists contend that extraordinary exposure to stress hormones, as in infant circumcision, carries psychobiological consequences, potentially altering brain development, function and behaviour [24].

Psychological consequences

Recognizing the loss of body parts can produce grief for loss of body image, function, or both. Anxiety, depression and sexual problems correlate to the magnitude and type of loss, as well as personal vulnerability. Both avoidance

and obsessive preoccupation with loss can be problematic [25]. All respondents described emotional suffering after realizing they had been dispossessed of an irreplaceable part of their body. Respondents reported profound shifts in how they perceived their genitals, themselves and the society that imposed such a loss. Some revealed violent attitudes toward their circumciser and/or suicidal/homicidal feelings.

Emotional distress, manifesting as intrusive thoughts about one's circumcision, included feelings of mutilation (60%), low self-esteem/inferiority to intact men (50%), genital dysmorphia (55%), rage (52%), resentment/depression (59%), violation (46%), or parental betrayal (30%). Many respondents (41%) reported that their physical/emotional suffering impeded emotional intimacy with partner(s), resulting in sexual dysfunction. For some, lack of compassion from parents, siblings or friends fostered bitter interpersonal conflict or alienation. Almost a third of respondents (29%) reported dependence on substances or behaviours to relieve their suffering (tobacco, alcohol, drugs, food and/or sexual compulsivity).

Generally, most men have no acceptable outlet for serious feelings about circumcision. Predictably, 54% of respondents had not sought help for their suffering. The reasons given included; thinking no recourse was available (43%); embarrassment (19%); fear of ridicule (17%); and mistrust of doctors (11%).

Mistrust of physicians in circumcising societies may not be unreasonable. In the USA, Stein *et al.* [26] reported that 'Cultural, social and historical imperatives surrounding routine neonatal circumcision seem to be in control for both parents and physicians' and 'Routine neonatal circumcision was favoured more by older, male and circumcised physicians'. As emotional distress after circumcision is not yet acknowledged in circumcising societies, few mental health professionals are prepared to assist these men.

Foreskin restoration

Perhaps like no other surgery, circumcision produces patients who later invest time, money and effort to 'undo' the effects. Half of the respondents documented using non-surgical uncircumcision methods described by Warren and Bigelow [27,28]. Many respondents (and their wives) reported that restoration resolved the unnatural dryness of the circumcised penis, which caused abrasion, pain or bleeding during intercourse, and that restoration offered unique pleasures, which enhanced sexual intimacy.

Most respondents knew about the National Organization of Restoring Men (NORM, Appendix 1), an international network of self-help groups offering circumcised men moral and technical support to regain genital integrity. Nearly all respondents contemplating

restoration rejected surgery, citing awareness of unsatisfactory outcomes or mistrust of physicians. While restoration offers numerous physical and emotional benefits, other services may be needed for men uninterested in restoration, but who nonetheless experience physical disfigurement and emotional pain from involuntary genital alteration.

'Men's voices'

The open-comment section further revealed the impact of circumcision. Many respondents remarked that receiving factual information about circumcision and foreskin function affected them immediately and powerfully, while others gradually realised their loss. Their comments, and others [28], parallel those of individuals subjected to sexual violence. These potent views broaden and confront prevailing cultural ideas about circumcision and are a reminder of how assaults on male genitalia reflect misogyny, the origins of which are found in society and religion.

Religion can be a powerful influence in suppressing knowledge, and in promoting denial of sexual functioning and the consequences of circumcision. However, comments by religiously circumcised respondents indicate that ignorance and denial are being overcome. Debate over religious circumcision is visible and growing (City of Light Cyber Mosque, Appendix 1, and [29,30]).

Fringe or vanguard?

The survey respondents represent a self-selected population that is better educated than most men about genital anatomy and the effects of circumcision, and more open to acknowledging the harm. Random sampling might produce different results. Respondents may not currently represent the average male circumcised in childhood, but they may be a vanguard. Surveys of body-image consistently reveal significant dissatisfaction with circumcision. One report suggested that 20% of circumcised men were dissatisfied with their condition, while 18% of them would rather not have been circumcised [31]. Another survey [32] canvassed 197 intact and circumcised American men, who reported their perception of their genital condition. Of intact men, 80%, 3% and 17% were satisfied, dissatisfied or ambivalent, respectively, with their condition. Of the circumcised men, the respective values were 38%, 20% and 41%. Another report [33] revealed that half the respondents circumcised as infants were unhappy about it, compared with 3% of uncircumcised respondents who were unhappy being intact.

Why are men now protesting against circumcision? The magnitude of the practice in the USA renders American

men the largest population of circumcised males at any one time and place in history. These men matured at a time of increased public understanding of foreskin function and greater questioning of circumcision. Uncircumcision methods are in widespread use, allowing more circumcised men an 'ersatz' experience of the intact penis. Among current men in developed nations, there is greater personal introspection, many having been influenced by feminist and human rights movements asserting personal choice and body ownership. Physicians and religious/tribal leaders are under closer public scrutiny and there is increased scepticism that these groups always know 'what's best' for the individual.

The dynamics of power and control

Psychosexual mechanisms underlying male circumcision, and the consequences to individuals, families and society, cannot be ignored. Toubia [2] described the mechanisms underlying female circumcision, where for most girls and women, the psychological effects are more likely to be subtle, buried beneath layers of denial, mixed with resignation and acceptance of social norms. Miller offered further insight [34], suggesting that being unable to defend themselves as young girls, they were forced to repress their feelings, banishing 'consciousness', and even idealizing the custom, eventually justifying the procedure as harmless and necessary. These women cannot recall their repressed anger and have never grieved about what happened to them. Consequently, they inflict the same ordeal on their children without wishing to acknowledge their action. Miller also analysed male circumcision [35], suggesting that the circumcised man is bound to 'avenge himself' unless his subsequent life allows 'old wounds to heal in love', which is seldom the case, adding 'children who were once injured will later injure their own children, maintaining that their behaviour does no harm because their own loving parents did the same'.

Denial that circumcision damages the body or sexuality may cause some circumcised individuals to react sceptically towards others who report their own harm from circumcision. Many avoid any discussion of circumcision; others can discuss it only humorously. Some trivialize it, while others become angry when circumcision is challenged. To protect themselves from feelings of inferiority, many regard circumcision as 'something done for them, not to them' [36]. Circumcised fathers, when requesting their sons be circumcised for family/social conformity, may be projecting their own anxieties about feeling inferior to an intact son [37].

Wynter [38] asserts, 'We are socialized by "humanly devised procedures" to believe, as do the circumcisers, that we are "supernaturally" ordained (by the gods, the

ancestors) to follow these procedures.' Consequently, perceived superiority by circumcised individuals/groups often creates prejudice [39], discrimination regarding marriageability and property inheritance [4,40], and sometimes violence [41] against intact individuals.

As circumcision is often not a voluntary commitment to group identity, but is imposed on children by adults, this suggests that circumcision is a form of social control. The biocultural analysis by Immerman and Mackey [42] indicated that childhood circumcision, resulting in glans keratinization and neurological re-organization/atrophy of brain circuitry, was perhaps a primitive effort to produce a male who is less sexually excitable, less distracted by individual goals of amorous exchanges, and hence more amenable to group authority figures. They described circumcision as 'low-grade neurological castration'. Such psychosexual wounding is consistent with past human motivations. Religious commentators assert that circumcision controls male lust [43–45]. Victorian physicians sought to control children's sexuality with circumcision and other genital interventions [46,47]. However, diminishing sexual satisfaction does not reduce sexual drive; it can lead to compensatory and quite opposite behaviours, including sexual compulsivity [19], altered sexual practices [20] and other unforeseen personal/societal consequences [37].

As childhood circumcisions are one marker for more violent, warrior-like and patriarchal societies [48], the victims' visceral lesson in learned helplessness (which also lessens the power of women by overriding maternal instincts to protect their children) subjects both sexes to control by the dominant cultural authority. Rejecting circumcision's presumed virtues announces the limits of one's loyalty to group authority [49].

The genital-integrity movement

In 1996, Mann [50] noted that public health and human rights were undergoing major transformations, producing more dynamic and challenging linkages between them, through their association. Many years earlier, children's advocates had created non-governmental and professional organizations to protect the rights of children to their genital integrity (Appendix 1). These organizations assert the principle that, where minors are concerned, 'the unnecessary removal of a functioning body organ in the name of tradition, custom or any other non-disease related cause should never be acceptable to the health profession', such interventions being 'violations of human rights and a breach of the fundamental code of medical ethics' [2], and that educated professionals have an ethical duty to protect the health and rights of those with little or no social power to protect themselves [51, 52]. Details of one such organiz-

ation, NOHARMM, can be found at the website detailed in Appendix 1.

Conclusion: planning for change

NOHARMM's poll is the first to systematically document adverse outcomes of childhood circumcision on men's health and well-being. Its findings reveal wide-ranging physical, sexual and psychological consequences. Respondents probably represent a vanguard among circumcised males and their testimonies further challenge the appropriateness of non-therapeutic childhood circumcisions. They also raise new research questions;

- how does neonatal brain/CNS integrity compare before and after circumcision?;
- are some brain and behavioural deficits related to traumatic neonatal circumcision?;
- does brain activity during sexual arousal differ between circumcised and intact males?;
- how does infant circumcision and/or restoration affect adult sexual response and self-esteem?;
- do the duration/modality/quality of foreplay and intercourse differ between circumcised and intact men?;
- do levels of sexual compulsivity differ between circumcised and intact males?;
- how does male circumcision affect female sexuality?;
- which cognitive and/or non-cognitive motivations must be addressed to break the intergenerational cycle of male genital abuse?

The survey further suggests that serving children's best interests involves recognizing genital cutting customs as a human rights issue and that, 'Individuals who wield the least power need increased social and legal protection' [53]. Health professionals have successfully opposed other customary body mutilations. Protecting physical integrity is imperative and is achievable without impugning any race or religion. It is now essential that:

- national/international medical associations and human rights organizations adopt/implement gender-neutral policies protecting the inherent rights of all children to physical integrity and self-determination;
- international support be provided to children's advocates educating their respective societies about genital integrity and the rights of children;
- medical communities refrain from participating in or facilitating customs that violate these fundamental human rights, and that this principle be taught in ethics and human rights programmes of medical schools;
- medical schools and continuing education programmes teach the unique anatomy, physiology, development and proper care of intact genitalia, as well as non-surgical prophylaxis and treatment alternatives to circumcision;

- medical schools in circumcising societies cease requiring/coercing students to perform infant circumcisions, and that hospitals discontinue soliciting parents for circumcision of their newborns;
- medical associations take responsible leadership in addressing parents' unreasonable medical and/or social fears concerning intact genitalia;
- peer support models be developed to assist physicians in resisting parental requests for non-therapeutic circumcision and to address physicians' resulting fears of losing respect or income;
- age-appropriate materials be incorporated into relevant primary, secondary and university school programmes teaching the functions and care of intact genitalia, as well as human rights principles of physical integrity and self-determination.

Lastly, this poll reveals a significant change in attitudes; it can no longer be confidently assumed that circumcising a healthy boy will be viewed by him later as beneficial. Increasingly, circumcised males are learning the functions of intact genitals, documenting the harm from circumcision and pursuing genital wholeness. They will undoubtedly increase their pressure on circumcising societies to affirm male genital integrity and to prevent involuntary non-therapeutic circumcision.

References

- 1 World Population Statistics. In: *Vital Abstracts of the United States* 1994 [http://www.medaccess.com/census95/95s/1350.htm]
- 2 Toubia N. FGM and the responsibility of reproductive health professionals. *Int J Gynecol Obstet* 1994; **46**: 127–35
- 3 Özdemir E. Significantly increased complication risks with mass circumcisions. *Br J Urol* 1997; **80**: 136–9
- 4 Crowley JP, Kesner KM. Ritual circumcision (Umkwetha) among the Xhosa of the Ciskei. *Br J Urol* 1990; **66**: 318–21
- 5 Wallerstein E. Circumcision: The Uniquely American Medical Enigma. In: *Symposium on Advances in Pediatric Urology*. *Urol Clin North Am* 1985; **12**: 123–32
- 6 National Center for Health Statistics. US Dept. of Health and Human Services 1979–96
- 7 Milos MF, Macris D. Circumcision: male-effects upon human sexuality. In: Bullough VL and Bullough B, eds *Human Sexuality: an Encyclopedia*. New York/London: Garland Press 1994: 119–21
- 8 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
- 9 Lillienfeld A, Graham S. Validity in determining circumcision status by questionnaire as related to epidemiological studies of cancer of the cervix. *J Natl Cancer Inst* 1958; **21**: 713
- 10 Schlossberger NM, Turner RA, Irwin CE Jr. Early adolescent knowledge and attitudes about circumcision: methods and implications for research. *J Adolescent Health* 1991; **12**: 293–7
- 11 Megafu U. Female ritual circumcision in Africa. *East African Med J* 1983; **40**: 793–800
- 12 Report of the AAP Task Force on Circumcision. *Pediatrics* 1989; **84**: 388–91
- 13 Williams N, Kapila L. Complications of circumcision. *Br J Surg* 1993; **80**: 1231–6
- 14 Snyder JL. The problem of circumcision in America. *The Truth Seeker* 1989; **July/Aug**: 39–42
- 15 Hammond T. Long-term consequences of neonatal circumcision: a preliminary poll of circumcised males. In Denniston GC, Milos MF, eds, *Sexual Mutilations: A Human Tragedy*. Proceedings of the Fourth International Symposium on Sexual Mutilations, Lausanne 1996. New York: Plenum Press, 1997: 125–9
- 16 Werker P, Terng A, Kon M. The prepuce free flap: dissection feasibility study and clinical application of a super-thin new flap. *Plastic & Reconstructive Surgery* 1998; **102**: 1075–82
- 17 Masters WH, Johnson VE. *Human Sexual Response*. Boston: Little, Brown & Co, 1966: 189–91
- 18 Money J, Davidson J. Adult penile circumcision, erotosexual and cosmetic sequelae. *J Sex Res* 1983; **19**: 289–92
- 19 Koso-Thomas O. *The Circumcision of Women: A Strategy for Eradication*. London: Zed Books, 1987: 11
- 20 Laumann EO, Masi CM, Zuckerman EW. Circumcision in the United States. Prevalence, prophylactic effects and sexual practice. *J Am Med Assoc* 1997; **277**: 1052–57
- 21 Halata Z, Munger BL. The neuroanatomical basis for the protopathic sensibility of the human glans penis. *Brain Res* 1986; **371**: 205–30
- 22 Halata Z, Spaethe A. Sensory innervation of the human penis. In Ivell, Holstein, eds, *The Fate of the Male Germ Cell*. New York: Plenum, 1997: 265–6
- 23 Calderone MS. Fetal erection and its message to us. Sex Information and Education Council of the U.S. (SIECUS) Report May-July, 1983: 9–10
- 24 Prescott JW. Genital pain vs. genital pleasure: why one and not the other? *Truth Seeker* 1989; **1**: 14–21
- 25 Maguire P. Coping with loss. Surgery and loss of body parts. *Br Med J* 1998; **316**: 1086–8
- 26 Stein MT, Marx M, Taggart SL, Bass RA. Routine Neonatal Circumcision. The Gap Between Contemporary Policy and Practice. *J Family Prac* 1982; **15**: 47–53
- 27 Warren JP, Bigelow J. The case against circumcision. *Br J Sexual Med* 1994; **21**: 6–8
- 28 Bigelow J. *The Joy of Uncircumcising! Exploring Circumcision: History, Myths, Psychology, Restoration, Sexual Pleasure and Human Rights*, 2nd edn. Aptos: Hourglass, 1995: 131–87
- 29 Goldman R. *Questioning circumcision: A Jewish perspective*. Boston: Vanguard, 1998: 1
- 30 Aldeeb Abu-Sahlieh SA. To mutilate in the name of Jehovah or Allah: legitimization of male and female circumcision. Amsterdam: Middle East Research Associates, 1994: 9
- 31 Badger J. Circumcision. What you think. *Aust Forum* 1989; **20**: 10–29
- 32 Boynton P. Survey correspondence. *Journeyman* 1993; May 20.

- 33 Men's Forum. Circumcision uncut. *Men's Confidential* 1996; March: 10
- 34 Miller A. Breaking down the wall of silence. New York: Meridian, 1993: 74
- 35 Miller A. Banished knowledge: facing childhood injuries. New York: Doubleday, 1990: 135-41
- 36 Lightfoot-Klein H. *Prisoners of Ritual. An Odyssey Into Female Genital Circumcision in Africa*. New York: Harrington Park Press, 1989: 193
- 37 Goldman R. *Circumcision: The Hidden Trauma*. Boston: Vanguard, 1997: 70
- 38 Wynter S. Genital mutilation or symbolic birth? Female circumcision, lost origins, and the aculturalism of feminist/western thought. In *Bridging Society, Culture and Law: the Issue of Female Circumcision. Case Western Reserve Law Review*, Winter 1997; 47: 547
- 39 Wiedemann E. Wahlen in Zeiten der Cholera. *Der Spiegel* 1997; 22 December: 124
- 40 Taylor P. Circumcision rituals cause illness, death. *Seattle Times* February 5 1995
- 41 Mothibeli T. Shock claims for schools on circumcision. Johannesburg: *Weekend Star* August 1994
- 42 Immerman RS, Mackey WC. A proposed relationship between circumcision and neural reorganization. *J Genet Psychol* 1998; 159: 367-78
- 43 Philon d'Alexandrie. *De specialibus legibus, I-II*. Paris: Cerf 1975
- 44 Maimonides M. In Friedländer M. (Trans). *Guide to the Perplexed*. New York: Hebrew Publishing Co 1881: 267
- 45 Al-Mannawi MAR. Fayd al-qadir sharh al-jami' al saghir. Beirut: Dar al-ma'rifah 1995
- 46 Comfort A. *The Anxiety Makers: Some Curious Preoccupations of the Medical Profession*. Camden: Thomas Nelson 1967
- 47 Wallerstein E. *Circumcision: an American Health Fallacy*. New York: Springer 1980; 13,14,38
- 48 DeMeo J. The geography of male and female genital mutilations. In Denniston GC, Milos MF, eds, *Sexual Mutilations: A Human Tragedy*. New York: Plenum Press, 1997: 1-15
- 49 Paige KE. The ritual of circumcision. *Human Nature* 1978; May: 40-8
- 50 Mann J. Health and human rights. If not now, when? *Health Human Rights* 1997; 2: 113-20
- 51 Milos MF, Macris D. Circumcision. A medical or a human rights issue? *J Nurse Midwifery* 1992; 37: 87S-96S
- 52 Denniston GC. Circumcision and the Code of Ethics. *Humane Health Care International* 1996; 12: 78-80
- 53 Toubia N. From Health or Human Rights to Health and Human Rights: Where Do We Go From Here? *Health and Human Rights* 1995; 1: 138

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Appendix 1

Organizations and websites promoting genital integrity

- Attorneys for the Rights of the Child
2961 Ashby Ave., Berkeley, CA 94705 USA
E-mail: svoboda1@flash.net
URL: <http://www.noharrrm.org/ARC.htm>
- Circumcision Resource Center/Jewish Associates of CRC
P.O. Box 232, Boston, MA 02133 USA
E-mail: crc@ziplink.net
URL: <http://www.circumcision.org/>
- Doctors Opposing Circumcision
2442 N.W. Market St., Suite 42, Seattle, WA 98107 USA
E-mail: crc@circumcision.org
URL: <http://weber.u.washington.edu/~gcd/DOC/>
- Circumcision Information Resource Centre/Info-Circoncision [English/Français]
Succ. Les Atriums, C.P. 32065, Montréal, QC CANADA H2L 4Y5
E-mail: infocirc@total.net
URL: <http://www.infocirc.org/index-e.htm>
- International Symposia on Sexual Mutilations [biennial conferences on male/female genital mutilation]
P.O. Box 2512, San Anselmo, CA 94979 USA
E-mail: nocirc@concentric.net
URL: <http://www.nocirc.org/symposia/>
- Intersex Society of North America
P.O. Box 31791, San Francisco, CA 94131 USA
E-mail: info@isna.org
URL: <http://www.isna.org/>
- Israeli Association Against Genital Mutilation
P.O. Box 56178, Tel Aviv 61561 ISRAEL
E-mail: zoossmann@hotmail.com
- National Organization of Circumcision Information Resource Centers [information clearinghouse with domestic and international chapters]
P.O. Box 2512, San Anselmo, CA 94979 USA
E-mail: nocirc@concentric.net
URL: <http://www.nocirc.org>
- National Organization to Halt the Abuse & Routine Mutilation of Males [men's education and empowerment]
P.O. Box 460795, San Francisco, CA 94146, USA
E-mail: info@noharrrm.org
URL: <http://www.noharrrm.org>
- National Organization of Restoring Men [support groups for nonsurgical foreskin restoration]
3205 Northwood Dr., Suite 209, Concord, CA 94520 USA
E-mail: waynerobb@aol.com
URL: <http://www.norm.org>
- Nurses for the Rights of the Child
369 Montezuma, #354, Santa Fe, NM 87501 USA

E-mail: wholebaby@nets.com

URL: <http://www.cirp.org/nrc/>

Patients in ARMS [support network for victims of medical abuse] 7480 Gravois, Dittmer, MO 63023 USA

E-mail: carmilarms@aol.com

Research, Action and Information Network for Bodily Integrity of Women

915 Broadway, Suite 1109, New York, NY 10010-7108 USA

URL: <http://www.rainbo.org/>

Independent Websites:

Alternative Bris Resources

<http://www.circumcision.org/question.htm>

Circumcision Information Resource Pages

<http://www.cirp.org/>

Circumcision: The Virtual Journal

<http://weber.u.washington.edu/~gcd/>

CIRCUMCISION/

Foreskin Restoration Resource

<http://www.4skin.com.restore/>

Female Genital Mutilation Research Home Page

<http://www.hollyfeld.org/fgm/>

City of Light Cyber Mosque circumcision page

<http://www.moslem.org/khatne.htm>

Mothers Against Circumcision

<http://members.aol.com/maggimago0/index.html>

Voices Intact [for teenagers and parents]

<http://www.vintact.org>