Circumcision

Who should you believe?

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When it comes to the truth on any topic, would you trust an academic expert? Or would you put your faith in an article by a freelance writer? ... or the opinion of a lay person?

My academic expertise

In the Summer issue (27:4) of *the* Skeptic I published a damning critique of a factually deficient, error-riddled article by David Vernon on the topic of male circumcision. I set out the evidence-based facts with references, and exposed the fictitious nature of Vernon's statements. Such an exercise was carried out by necessity as part of my job as an academic in an area in which I have extensive knowledge, experience, reputation and a track record of scientific publications. These include a recent invited, refereed review in a leading biomedical journal and, years ago, a book, on circumcision.

I maintain an up-to-date internet review on this topic (www.circinfo.net), a wesbite that has grown enormously over the past 15 years, currently citing 660 publications of the extensive research, which on balance points to the considerable benefits of circumcision. It represents the most extensive review on circumcision in the world. As well, I give invited seminars on circumcision to medical audiences, and was invited to chair the circumcision session at the 4th International AIDS Society Conference in 2007.

I have provided invited input to medical bodies, including the World Health Organization and UNAIDS pertaining to the writing of documentation to assist the roll-out of male circumcision for prevention of HIV/AIDS that is now endorsed by these bodies.

A freelance writer

But instead of accepting my criticism and going to the literature to confirm his errors, David Vernon has instead chosen to mount a personal defence of his untenable position. Importantly, he does not address the extensive scientific material I presented. Have I blinded him with science? If he had learnt anything from doing a MSc at Griffith University it should have been to pay due diligence by becoming familiar with the credible scientific literature on a topic before putting fingers to keyboard. He asked if I don't like Griffith University. To reply, all I can say is that I have experienced both brilliant and academically weak research students (and staff) at that university.

Vernon is not employed as a scientist, yet he claims that his diverse qualifications in other fields have taught him to think. I continue to see no evidence of this, however, in his recent rebuttal. What he wrote shows no depth of investigation. He

falsely claims to sum up my argument as, "If a man chooses to be promiscuous, practise unsafe sex, and fail to be hygienic in his behaviour, then circumcision conveys some protection to him and his partner.' This is indeed 'poppycock' (which is from the Dutch *pappekak* for soft faeces, or *poppekak*, meaning to show excessive religious zeal, but which literally means "as fine as powdered doll shit").

As I made clear, protection against some sexually transmitted infections (STIs) is only a part of the story. But on this score, Vernon needs to look at the statistics and appreciate that condoms are not used universally, especially by the most promiscuous age-groups, and do not provide complete protection against all STIs, including HIV. Should infected secretions of the partner come in contact with the vulnerable inner foreskin during foreplay then HIV infection can

The protection against conditions unrelated to STIs is vast. For example, circumcision protects against urinary tract infections in infancy, childhood and the adult years. These afflict approximately one in six uncircumcised males over the lifetime.

As well, penile inflammation and dermatological problems are higher in the uncircumcised and are common, as are physical problems such as phimosis that predisposes to penile cancer later in life and makes having sexual intercourse difficult and painful. Hygiene is hard to achieve in uncircumcised men, even with frequent washing.

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For the female partners, risk of cervical cancer, infertility, pelvic inflammatory disease and genital herpes are greatly elevated. Thus, his naively simple-minded statement above establishes Vernon's continued ignorance on the topic and thus lack of credibility.

I am circumcised

Vernon appears not to have read my internet review. Why do I know this? If he had, he surely would have seen that this site contains a click-on section entitled 'About the author'. Reading this would have answered his criticism that I do 'not make [my] personal physical status public'. In fact, on this page of my website, and in any other forum, I state that I am circumcised, just as most Australianborn men my age are. My status has not influenced my position. If the evidence changed in the future, so would my stance.

My entry to the circumcision field came via my research as a molecular biologist to develop a better cervical cancer screening test, namely one based on detection of HPV types that are responsible for virtually all cervical (and penile) cancers. It was largely the chasm between the scientific evidence and the unscientific propaganda of the anti-circ movement that led me to promote the scientific facts and expose the anti-circ fiction. I expect any scientist would do the same.

Neither Vernon, nor his son, is circumcised. Could his status, and failure to acquaint himself with the scientific evidence before choosing not to get his son circumcised, have influenced his ability to present a rational, evidence-based account of this topic?

A diverse mind-set

Vernon's logic is lacking when he links my statements on each of the diverse personalities and motivating factors that can be found amongst the anti-circumcision movement to himself. Nowhere did I say that Vernon, or any other person in the anti-circumcision movement, is all of the following: felon, foreskin fetish-

ist, paedophile, psychiatric patient, 'politically correct' 'do-gooder', or homosexual who practices 'docking'.

Nor am I homophobic. I have nothing against homosexuality. I consider, however, that irrespective of one's sexual affiliation, it is important that everybody receives correct information on the risks of infection and disease acquired sexually. Circumcision is one component of this overall message. But its benefits, as I have stated, extend well beyond the sexual arena.

'Circumstitions'

Vernon refers to a website that he purports contains a critique of my internet review. If one goes to this anti-circumcision site with the semi-amusing title 'circumstitions', however, one will see that the part that attacks my website involves criticisms of the text as it existed in 1998! — ie, is a decade out-of-date, just as are most of the arguments of anti-circumcision proponents.

One will find that the comments made are the personal opinions, fallacies and emotive propaganda of the anti-circumcision movement that I criticise. Theirs are the real 'circumstitions'! In fact, I read this site years ago and, where necessary, adjusted my text to counter their dubious claims. If indeed Vernon is not an anti-circumcision activist, as he claims, then he nevertheless gives every appearance of being one, based his response which is deontological, rather than one that is meta-ethical, ie, evidence-based. His reply in fact ignores the evidence I presented.

Ouotes from Tasmania

Vernon ends with two ill-informed quotes from Tasmania. Last year I wrote to each of the individuals who Vernon quotes to point out why their statements were utter nonsense and have spoken to Paul Mason in person at a conference in Sydney this year. I believe he has now rethought his position. So should Vernon if he wishes to earn the respect of his readers.

Lay fallacies

Following Vernon's diatribe there appeared a piece of nonsense written by David Brookman from Salamander Bay. I will now correct what he says.

'Circumcision prevents HIV infection' – now case closed!

Brookman quotes from a Cochrane review in 2003 that stated that the authors were awaiting the results of three randomised controlled trials (RCTs) — the 'gold standard' in epidemiology — before drawing a conclusion as to whether circumcision did in fact prevent HIV infection. Unlike most people, he appears unaware that the findings of these RCTs were all published by Feb 2007. This news led to considerable publicity world-wide, and it is now universally accepted that circumcision prevents HIV infection — case closed!

In fact, the RCT data were virtually identical to the data emanating from twenty years of observational studies. An official pronouncement by WHO and UNAIDS has led to the promotion by these and other bodies and governments of circumcision as an effective HIV reduction strategy in countries with a high-incidence of HIV/AIDS. The new 'ABC' is 'antivirals, barriers and circumcision', which adds to the original 'ABC' (abstinence, behaviour and condoms) for HIV prevention.

Other RCTs

Other RCTs support the observational data for other conditions prevented by circumcision. One of the HIV RCTs also found acquisition of genital ulcer disease to be twice as great in uncircumcised men. There is also now RCT evidence that genital herpes is 30% higher in uncircumcised men, and, strikingly, is two-fold higher in their female sexual partners, consistent with observational studies in Pittsburg.

As well, recent RCT data supports previous research showing that circumcision does not adversely affect sexual satisfaction or function in young men. With each new

research study that appears, the claims by the anti-circ movement look increasingly shaky!

New Zealand data

Brookman refers to a recent longitudinal study in Dunedin that saw no difference between each category of penis in several common STIs, namley gonorrhoea, chancroid, nonspecific urethritis (NSU), genital herpes and genital warts. The latter are caused by low-risk types of human papillomavirus (HPV).

These findings differ from a similar longitudinal study in Christchurch that found that uncircumcised men were twice as likely to report ever having had these particular STIs. The incidence of syphilis, chancroid and genital herpes were too low in these small New Zealand studies to draw a definitive conclusion

More meta-analyses

A meta-analysis has demonstrated higher incidence of each of syphilis, chancroid and genital herpes in uncircumcised men. Another credible meta-analysis found four-fold higher incidence of human papillomavirus (HPV) in uncircumcised men, and comparison of HPV incidence across different locations on the penis noted that HPV incidence was substantially higher in uncircumcised men.

Risk to female partners

That uncircumcised men do have either a greater rate of infection or a higher load of infectious organisms is suggested by the up to six-fold higher incidence of cervical cancer in the female partners of uncircumcised men. Virtually all cervical cancers are caused by high-risk HPVs. Unlike low-risk HPVs that cause visible warts, these cancercausing varieties form flat warts that are not visible on the penis.

In addition, women whose male partner is uncircumcised are six times as likely to get Chlamydia, a bacterium that can cause infertility, pelvic inflammatory disease and ectopic pregnancy. And, as mentioned above, genital herpes is twice as high in women with an uncircumcised partner.

Van Howe

As for the meta-analyses by Van Howe that Brookman refers to, it needs to be recognised that these have all been severely criticised as erroneous. Van Howe is a wellknown anti-circ activist and is notorious for his incorrect application of statistical methods as a kind of 'game' in order to arrive at a conclusion that accords with his anti-circ belief. For example, after a meta-analysis of HIV data he concluded that circumcision increases the risk of HIV! This not only contradicted the source data he used for his meta-analysis, but a subsequent reputable meta-analysis and the three RCTs. The flaws in Van Howe's HIV analysis drew sharp criticism from HIV experts.

Another meta-analysis by Van Howe that Brookman refers to, namely of circumcision and HPV, has similarly come under severe criticism.

Brookman also refers to a recent meta-analysis by Van Howe on genital ulcerative disease and sexually transmitted urethritis. Although his analyses concluded that syphilis was four times higher in uncircumcised men, consistent with the literature, his findings for other STIs such as chancroid, gonorrhoea, non-specific urethritis and genital herpes are not in accord with the literature.

If one checks the published source data Van Howe draws on for his meta-analysis, one finds that this differs, often markedly, from what he presents in his paper! His entire meta-analysis is therefore invalid. Does his work reflect a lack of scholarship, carelessness, or a deliberate attempt to deceive, which would amount to academic fraud? Regardless, Van Howe's publications cannot be trusted. His other publications routinely come under fire for their scientific errors. The Center for Disease Control invited Van Howe to present his arguments at a meeting

held in 2007 concerning the RCT data on HIV/AIDS. Members of the audience of reputable scientists, which included authors of the various RCTs, quickly made up their mind about Van Howe and his message.

The benefits are many and varied

Brookman suggests that the only health benefit of circumcision is prevention of chronic balanitis. As can be seen in the few examples above, and the more extensive account elsewhere, the benefits of circumcision are vast, covering as they do a large number of medical, health and sexual conditions, not just chronic balanitis.

Abundance of references

But when Brookman criticises me for using long lists of references, he is really clutching at straws. The list I provided in my critique was in fact short compared with the 660 that one can find on my website. And, let me assure the reader, these are accurate and verifiable. Just go to PubMed or a medical library.

Biological support

In his final paragraph, Brookman reveals further evidence that he has not read my article properly, when he states that he does not know how circumcision would "reduce the penetration of any infective organism".

I explained the biological evidence in my critique. To recap, the inner lining of the foreskin is a thin mucous membrane lacking a protective keratin barrier, and experiments with live HIV have shown this virus rapidly infects by this route. The inner foreskin contains an abundance of immune system cells that send projections towards the surface, and contain receptors that HIV attaches to.

On top of this, the foreskin can tear easily, so allowing direct infection into the blood stream of infectious microorganisms. An uncircumcised penis presents a larger surface area for infection, and the preputial sac represents a space

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that can hold infected secretions acquired during sexual intercourse, as well as the man's own complement of bacteria, yeast, dirt, shed skin cells and sweat, the latter being constituents of smegma, a foul-smelling white film that increases in abundance after puberty in uncircumcised males (see reviews).

Masturbation

Lastly Brookman claims there are no studies of differences in masturbatory activity between the circumcised and uncircumcised, when in fact there are plenty. These show that, if anything, circumcised men masturbate more. They also have a more varied sexual repertoire, fewer sexual problems, especially from middle-age onwards, and a penis favoured by women for sexual activity.

Conclusion

Thus, in conclusion, the dissertations by Vernon, Brookman, and others who have provided uninformed opinion — in contradiction to the clear scientific evidence concerning the many, lifelong health benefits of this simple, safe procedure — should be treated with the utmost scepticism.

Note: A full list of references is available from *the Skeptic* or from the author's web site.

Medical evidence

Asst Prof Guy Cox Electron Microscope Unit, The University of Sydney NSW

It is always bad form to play the man instead of the ball, but methinks David Vernon doth protest too much. At any rate (*Skeptic* Autumn 2008, page 52) he takes this tactic on board and make it his own.

Professor Brian Morris (Circumcision facts trump anti-circ fiction, *Skeptic* Summer 2007, page 52) spends one paragraph of a five page article querying Vernon's qualifications, the rest of the article being densely argued science.

Vernon, on the other hand, in his two and a half pages, reduces science to one sentence: "If a man chooses to be promiscuous, practise unsafe sex, and fail to be hygienic in his behaviour, then circumcision conveys some protection to him and his partner." That is the sum total of factual content in those two and a half pages, the remainder being a rant against the poor old professor. This little sentence is true as far as it goes but it tells only a tiny part of the story.

Even so, considering that in spite of the best efforts of medical science AIDS is still a death sentence, wouldn't it be worth giving your sons some protection from the accident of a condom splitting? I could scarcely imagine anything worse than seeing one of my two sons dying a protracted death from HIV infection, and against that a little piece of skin seems rather trivial. What's more, neither Vernon nor I will get any grand-children if our sons don't practise unprotected sex some time!

Now let's look at the full picture. Urinary tract infections are common in babies and children, and can be life-threatening. Uncircumcised boys are between 10 and 20 times more likely to suffer from these infections than circumcised boys. That is an enormous difference. The man who first discovered this, Dr Thomas Wiswell, started his research rather opposed to circumcision, but when he saw the figures he rapidly came to appreciate how valuable it was in preventing illness and death in infancy

Figures don't always get the message across, but personal experiences have an impact. When my older son was young he got appendicitis, and had to be hospitalised for an emergency appendectomy. In the same ward was a boy a year or so younger than him, uncircumcised, who was recovering from a UTI

which had spread to his bones. He was making a full recovery but he'd been in that hospital for several months (and by this stage was bouncing off the walls). It is a sobering thought that a simple, quick and cheap operation when he was a baby could have spared him all that.

Is that all? By no means. Balanitis (infection of the glans of the penis) is something which only uncircumcised men and boys get — it's not lifethreatening but it is very uncomfortable. Since it's a minor infection good statistics are scarce, but in a survey I did a few years ago (admittedly as a piece of journalism rather than science) 14% of uncircumcised men said that they had suffered from it. That's a lot. Were it not the penis that's involved, such a simple cure for such a common problem would be performed automatically.

Then there's the question of retracting the foreskin. If this isn't possible neither is proper hygiene (a problem Vernon ignores) but probably more important to most boys is the fact that a sex life is ruled out. How common is this? Very common. A British study of over a thousand soldiers found that 14% of the uncircumcised men suffered from phimosis (a non-retractable foreskin). Other studies among Caucasians have found similar figures — in Asian countries the figure is higher. What's more, if a phimosis sufferer does manage to retract his foreskin, his problems may not be over. A tight foreskin which gets stuck in the retracted position (paraphimosis) can cut off blood circulation leading to serious consequences. Of course a man or boy who suffers from phimosis can get circumcised — and will probably have to — but the operation is much simpler (and cheaper) on an

It has been known for a long time that cancer of the penis is very rare among circumcised men, and more recently the long-standing suspicion that cervical cancer in women was also associated with uncircumcised partners has been confirmed. It is now realised that both are caused by certain strains of papilloma (wart)

virus (other strains just cause warts). So it does seem likely that unprotected sex is a factor, but since the infection can be symptomless that doesn't exactly mean that it's only a problem for the irresponsible. And these, like AIDS, are very unpleasant diseases.

Does this mean that I'm going to join Brian Morris is calling for male circumcision to be mandatory? Well, no. I do understand that parents bring cultural and philosophical beliefs into play here, and I'm not going to take a position on that. But it is important that parents understand the medical issues, and there is no doubt that from a strictly medical basis circumcision is hugely beneficial. From that point on parents must make their own decision.

Postscript

It seems to be *de rigueur* in this debate to declare one's own circumcision status. I'm not at all sure that this is relevant, but for what it's worth I was circumcised as an adult, as a consequence of an infection (not acquired through sex, safe or unsafe). I can therefore state without fear of contradiction that being circumcised is far more comfortable in everyday life than having a foreskin. And (since you asked) sex is better without a foreskin too.

Sniping at snipping

Roderick Shire Adelaide SA

am sick of this. I do not care how many science degrees David Vernon has. He is still talking (writing) poppycock.

Female circumcision, as practised in many Muslim countries, including Egypt. Yes. I will be at the barricades with him.

Head binding and stretching the neck with brass rings, as performed by some African tribes and foot binding, fortunately no longer practised in China. Absolutely, I will join him in the campaign against such practices.

I realise that we are supposed to respect Aboriginal customs and even treat their creation myths with the same respect as our own, including, presumably evolution, but the practice of banging a wooden peg through the penis brings at least tears to my eyes and a sharp intake of breath, if not actually outright condemnation.

But male circumcision. Give me a break. I do not feel humiliated, disfigured or psychologically damaged. I do not hide my head in shame or walk down the street carrying a sign with the word "Unclean" on it. Nor do I wish to sue my parents for allowing such an unnatural, barbaric and life damaging act to be carried out on my (infant) person. Or at least without my permission. I am sure there are whole generations of young people who wish to sue their parents, encouraged by Governments, for all sorts of things which they, the children, did not want to happen to them, like vaccination and schooling and wearing seat belts in the back of

Homosexual men may prefer to have sex with uncircumcised partners. Fine. I am not gay, so it is of purely academic interest, but apart from that I am quite happy to have been circumcised and really I have better things to do than read lunatic attacks on the custom in *the Skeptic*. Even disguised as attacks on religion. I can find plenty of ways of making religion look ludicrous without this one.

Editor's Note

This correspondence is now closed.

... Greenhouse from p 54

skeptic, geology Professor Ian Plimer of Adelaide University; Research Professor Robert M Carter of James Cook University; and atmospheric scientist, Emeritus Professor Robert Roper of the Georgia Institute of Technology (originally from Adelaide).

The signatories of this and other similar petitions critical of the IPCC's paternalistic attitude are behaving as skeptics in the best sense of the term. The world's media, by and large, are sanctifying the IPCC's apocalyptic prophecies with evangelistic zeal. They speak pejoratively of "global warming skeptics" and "climate-change deniers" as if dissent is a mortal sin. Take comfort, sinners. The Little Ice Age might well be reborn!

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