

# Does Male Circumcision Adversely Affect Sexual Sensation, Function, or Satisfaction? Critical Comment on Morris and Krieger (2013)

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## Abstract

Morris and Krieger (2013) have argued that male circumcision does not impact adversely on sexual sensation, satisfaction, and/or function. In the present paper, it is argued that such a view is untenable. By selectively citing Morris' own non-peer-reviewed letters and opinion pieces purporting to show flaws in studies reporting evidence of negative effects of circumcision, and by failing adequately to account for replies to these letters by the authors of the original research (and others), Morris and Krieger give an incomplete and misleading account of the available literature. Consequently, Morris and Krieger reach an implausible conclusion that is inconsistent with what is known about the anatomy and functions of the penile foreskin, and the likely effects of its surgical removal.

## Keywords

Circumcision, Sexual Dysfunction

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## 1. Introduction

Morris and Krieger's recent claim [1] that male circumcision has no adverse sexual effects misleads the reader. By downplaying empirical studies that have reported adverse sexual effects (often by selectively citing Morris' own non-peer-reviewed e-letters, and failing to mention or take into account others' critiques of those pieces), Morris and Krieger reach a conclusion that defies common sense. The foreskin itself is highly innervated erogenous tissue, which following amputation can no longer provide any sensory input to the brain [2]-[5]. Dur-

ing intercourse, for example, the foreskin not only minimises chafing (common in circumcised men) [6] [7], but also provides erotogenic sensations as it glides back and forth over the glans, stimulating the latter structure and vice versa [8]. Clearly, any sexual activity involving the physical manipulation of the foreskin is necessarily lost to circumcision [9]. To claim then, as Morris and Krieger have, that “*male circumcision has no adverse effect on sexual function, sensitivity, sexual sensation, or satisfaction,*” is to adopt rather limited definitions of those terms [9].

As Bossio *et al.* (2014) have recently stated, the paper by Morris and Krieger is “*not a meta-analysis, thus, no statistical analyses of the data have been performed; instead, the article presents the authors’ interpretation of trends*” (p. 2854) [10]<sup>1</sup>. In giving such a subjective interpretation, however, Morris and Krieger misrepresent the information that is included in their own review. As Bossio *et al.* (2014, p. 2854) go on to state, “*The conclusion they draw—that circumcision has no impact on sexual functioning, sensitivity, or sexual satisfaction—does not necessarily line up with the information presented in their review, which is mixed*”.

Morris and Krieger place undue reliance on methodologically flawed RCT studies in resource-poor African countries that have assessed sexual outcomes following adult, rather than infant circumcision, with measurements taken a maximum of 24 months after the surgery [11]. As Morris and Krieger report, at the 12-month time point, 99.7% of intact men (and 99.0% of circumcised men) reported being “satisfied or very satisfied” with their sexual experience, changing to 99.9% and 98.4% at 24 months. But they fail to point out that these extremely high scores for sexual satisfaction are dramatically out of line with baseline estimates of sexual satisfaction in many other places in the world [12], and that the “*rates of sexual dysfunction [reported in these studies] were 6 to 30 times lower than [those] reported in other countries,*” as noted by Van Howe (p. 20) [13]. Thus, it is either the case that Sub-Saharan Africans “*are having the best sexual experiences on the planet*” or the surveys used to assess sexual outcome variables in these studies were insensitive and flawed.

Consistent with the latter interpretation, Frisch has stated that, “*Having obtained the questionnaires from the authors ... I am not surprised that these studies provided little evidence of a link between circumcision and various sexual difficulties. Several questions were too vague to capture possible differences between circumcised and not-yet circumcised participants (e.g. lack of a clear distinction between intercourse and masturbation-related sexual problems and no distinction between premature ejaculation and trouble or inability to reach orgasm). Thus, non-differential misclassification of sexual outcomes in these African trials probably favoured the null hypothesis of no difference, whether an association was truly present or not.*” (p. 313) [14]

Morris and Krieger also misclassify a poor-quality study by Masters and Johnson from the 1960s as a high-quality study, even though its methods were not adequately reported and its findings had been previously discredited [15], further skewing their “systematic review”.<sup>2</sup> In an empirical study ( $N = 163$ ) of penile fine-touch pressure thresholds in circumcised versus genitally intact men, Sorrells *et al.* previously had reported that, “*The fine-touch sensitivity of 19 locations on the penis was measured using Semmes-Weinstein monofilament touch-test... When compared with the most sensitive area of the circumcised penis, several locations on the uncircumcised penis ... that are missing from the circumcised penis were significantly more sensitive.*” (pp. 865-868) [15]. Morris and Krieger rate this study as “low quality” (that is, SIGN level 2-), without explaining how it meets their stated criteria of having a “*high risk of confounding, bias, or chance and a significant risk that the relationship is not causal*”. The previous attempt by Morris to criticize this study in a letter to the editor co-authored with Waskett [16] betrayed a flawed understanding of the statistics involved—and was rebutted by Young [17]—but Morris and Krieger make no mention of this exchange.

Similarly, Morris and Krieger rate as “low quality” a study by Podnar, which compared elicitation of the penilo-cavernosus reflex among circumcised and genitally intact men [18]. Again, they do not provide adequate

<sup>1</sup>This has not stopped Morris from claiming that he published a “meta-analysis” when he only cites the calculations performed by Tian *et al.* (2013) [45]. In response to a letter to the editor Morris notes, “*A recent methodologically impeccable systematic review and meta-analysis has established that MC has no adverse effect on male sexual function, sensitivity, or satisfaction*” and cites his own review with Krieger, not the meta-analysis by Tian *et al.* (see Morris *et al.*, 2014) [46]. Needless to say, referring to one’s own methodologically flawed review (as demonstrated herein) as “methodologically impeccable” is also misleading.

<sup>2</sup>In fact, the “study” by Masters and Johnson was not actually published as a study and never underwent peer-review. The results were mentioned in passing in one of their books without adequate clarification of the methodology used in making the comparisons. To rate such a source as “high quality”, then, suggests that it is not so much the actual rigor of study design that weighed most heavily in Morris and Krieger’s categorization decisions, but more the reported results of the study. Specifically, studies with results that appear consistent with Morris and Krieger’s conclusion that circumcision does not have adverse effects on sexuality are rated as being of relative “high quality”, while studies with results that are inconsistent with this conclusion are rated by Morris and Krieger as being of relative “low quality”, at least partially independent of the actual quality of the methodologies in question.

justification for their decision to rate the study as “low quality”. While the penilo-cavernosus reflex was elicited in 92% of genitally intact men, it could only be elicited in 27% of circumcised men, providing strong evidence of a significant diminution ( $p < 0.001$ ) in sexual function in circumcised as compared with intact men. Podnar further reported (p. 582) that, “*It is known that [the] foreskin, but not glans penis, contains a high density of penile fine-touch mechanoreceptors. Clinically the penilo-cavernosus reflex provides information on function of the sacral nerve... in the majority of circumcised men this reflex cannot be elicited clinically.*” It seems arguable that the quality assigned to a study by Morris and Krieger reflects a study’s results more than the methodology used (see second footnote).

Michetti *et al.* (2006) reported increased alexithymia (a personality trait disorder associated with difficulty in emotional identification and expression) among men with ED problems [19]. In addition, in an empirical survey of alexithymia among circumcised versus genitally intact males ( $N = 300$ ), Bollinger and Van Howe (p. 184) reported that circumcised men were, “4.53 times more likely to use an erectile dysfunction drug” than genitally intact men [20]. In their attempt to dismiss the relevance of this study, Morris and Krieger note that ED drugs can be used recreationally—which may well be true—but this would not explain the observed *difference* in the use of such drugs between the circumcised and intact men in this study.

In an online survey ( $N = 1369$ ), Bronselaer *et al.* (p. 820) [21] found that, “*For the glans penis, circumcised men reported decreased sexual pleasure and lower orgasm intensity. They also stated more effort was required to achieve orgasm, and a higher percentage of them experienced unusual sensations (burning, prickling, itching, or tingling and numbness of the glans penis). For the penile shaft a higher percentage of circumcised men described discomfort and pain, numbness and unusual sensations... Our study confirms the importance of the foreskin for penile sensitivity, overall sexual satisfaction, and penile functioning.*” While Morris and Krieger attempt to downplay the relevance of this large sample study by citing their own opinion-based letter to the editor critiquing it [22], they do not so much as acknowledge the reply by Bronselaer [23], which pointed out the multiple flaws in their critique.

More recent studies published subsequent to the Morris and Krieger opinion piece, do not support their interpretation of the literature. For example, Dias *et al.* (p. 122) [24] reported that following adult circumcision, “*there was an increase in frequency of erectile dysfunction (9.7% versus 25.8%,  $p = 0.002$ ) and delayed orgasm (11.3% versus 48.4%,  $p < 0.001$ )*”. While acknowledging that there are a number of factors involved in the etiology of erectile dysfunction (ED), it is unlikely to be a coincidence that in circumcising cultures such as the USA, 52% of middle-aged men suffer from varying degrees of erectile dysfunction, whereas in non-circumcising cultures such as Germany, the prevalence is only 19% (see Wespes *et al.*, p. 4) [25]. They also reported (p. 32) that the highest prevalence of premature ejaculation (PE) is found in the USA (31%) where circumcision is common, whereas in France (a non-circumcising culture), the lifetime prevalence is only 15%, suggesting that circumcision itself may be a causal determinant of premature ejaculation.

Indeed, Bollinger and Van Howe [20] also found that circumcised men are 2.56 times more likely than genitally intact men, to suffer from premature ejaculation (cf. Tang & Khoo) [26]. At least 10 studies have been published comparing PE prevalence in genitally intact versus circumcised men [24] [27]-[35]. A meta-analysis based on all 10 studies found a trend that circumcised men were more likely to suffer from premature ejaculation ( $OR = 1.15$ ; 0.93 to 1.41) [36]. As Boyle [37] commented, “*Is it not more likely that it is precisely the lack of neurological control over the timing of ejaculation resulting from the severed neuronal circuitry after circumcision that is a major causal factor in PE?*”

It is informative to note that Morris fails to disclose his close affiliation with the *Circumcision Academy of Australia* (see <http://www.circumcisionaustralia.org/>), whose inaugural President—C. Terry Russell—appears to derive a personal income from performing circumcisions (see <http://www.circumcision.net.au>), but does not report this as conflict of interest in his articles co-authored with Morris. Morris has also published materials with the pro-circumcision advocacy group, *The Gilgal Society*, further undermining his claim to have “no conflict of interest”. In reality, Morris is a highly-active circumcision lobbyist—see <http://web.archive.org/web/20110518091029/http://www.circinfo.net/pdfs/GFW-EN.pdf>

The surgical removal of anatomically normal, healthy erogenous tissue from infant males is unlikely to have no adverse consequences; in the case of girls, such procedures are illegal. Any form of non-therapeutic, non-consensual cutting into the female genitalia, regardless of what kind or how much tissue is or is not removed, regardless of how expertly the surgery is performed, and regardless of whether one could find any health benefits for doing it (such research is of course not legal to carry out), is defined by law as an impermissible violation

of the girl's right to bodily integrity. Neonatal male circumcision remains a sexually harmful procedure [6] [7] [38]-[43], and Morris and Krieger's "systematic review" does little to alter that reality [44].

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