

## Response to "Commentary on Chapter 'Male circumcision protects against urinary tract infections'"

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## Response to

Rawashdeh YF, Hvistendahl GM. Commentary on chapter "Male circumcision protects against urinary tract infections". Version: 2018-10-05. In: Bjerklund Johansen TE, Wagenlehner FME, Matsumoto T, Cho YH, Krieger JN, Shoskes D, Naber KG, editors. Urogenital Infections and Inflammations. Berlin: German Medical Science GMS Publishing House; 2017-. DOI: 10.5680/lhuii000022

We agree that the appropriate course is to compare risks and benefits.

We also agree that male circumcision offers clear benefits for patients with genitourinary tract (GU) abnormalities because the substantial reduction in the risk for GU infections greatly exceeds the minimal risk of surgical complications.

The question is, "Do the data support recommendation supporting circumcision of males with no obvious GU abnormalities?" Relevant data are included in the chapters on UTI, STI, HIV, penile inflammation and genital cancers. Below we summarize the large body of strong data presented in these chapters.

Anecdotal reports document serious complications after male circumcision, such as injury to the glans or Fournier's gangrene. When considered in the context of the millions of circumcisions performed annually, the rate of such serious complications is <0.001% for male circumcisions done by experienced medical providers. Male circumcision does not reduce male sexual function or satisfaction.

Male circumcision reduces UTI risk in male infants by 90%. Such infections represent the most common cause of sepsis in this population. Circumcision also results in a substantial decrease in UTI risk for older males. Over a lifetime approximately 30% of uncircumcised males experience a UTI. UTIs are easily treated in older males. However, UTI in infants causes severe pain, distress and fever, diagnosis is more challenging and treatment often requires hospital admission intravenous antibiotics. Some males experience complications such as sepsis and chronic bacterial prostatitis that are not treated easily in our current era of increasing antimicrobial resistance.

Three randomized clinical trials and strong epidemiological data support the conclusion that male circumcision decreases HIV infection risk by 60–70%. Strong data also demonstrate that circumcised males and their sexual partners are at substantially lower risk for several common STIs. Uncircumcised males are at markedly increased risk for genital inflammatory conditions and genital cancers, especially cancer of the penis. The female partners of "high risk" uncircumcised males are at greater risk of cervical cancer.

Detailed analyses have shown that in the US early infant male circumcision is highly cost effective for UTI and STI reduction.





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Risk: Benefit analyses based on detailed review of the extensive data have found that benefits exceed risks by over 100 to 1. Such scholarly reviews of the evidence have led the World Health Organization, the US Centers for Disease Control and Prevention, the American Academy of Pediatrics, the American Urological Association and numerous medical experts to recommend male circumcision as a key public health measure.

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