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LETTER TO THE EDITOR

Prostate Cancer

Reply to Letter by Dr. Christoph Kupferschmid: Commentary on “Countries with high circumcision prevalence have lower prostate cancer mortality”

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Dear Editor,

We thank Dr. Kupferschmid for his interest in our study, which examined male circumcision (MC) and prostate cancer mortality.^{1,2} Considerable strong evidence has been accumulated since 1951.³ Most of his references^{4–10} do not address MC and the risk of death from prostate cancer. That is a different question than MC and the risk of developing prostate cancer, which none of his references validly assess. One reference addressed bacterial colonization,⁶ not prostate cancer. Another⁷ concerned sexually transmitted infections and prostate cancer. The US article he claims calculated number of circumcisions required to circumvent one prostate cancer death¹¹ had no death statistics. Since 14% of American men get prostate cancer and the Wright study found circumcision reduced risk by 13% in Caucasian and 36% in African American men, 54 Caucasian and 19 African American men would need to be circumcised prior to sexual debut to prevent one prostate cancer diagnosis.

Epidemiological studies in and of themselves can no more prove MC reduces prostate cancer mortality than they can prove cigarette smoking increases lung cancer mortality. They do, however, provide evidence scientists and officials might use to direct scientific investigation and government policy. We specifically stated that our findings do not prove a causal relationship.¹

Dr. Kupferschmid asserts our study used data from “different heterogeneous sources and different years.” Each information source provisioned estimates for a particular year for prostate cancer mortality rates,¹² MC rates,¹³ gross national incomes per capita and male life expectancies at birth,¹⁴ and proportions of Muslims¹⁵ and Jews in countries.¹⁶

Dr. Kupferschmid infers we evaluated differences among continents without taking into account potential biases. Vital, in our view, was taking into account differences among large geographic regions that might have biased the analysis of countries’ mortality rates. Evidence of differences in cancer incidence and other relevant matters among continents is readily available.^{17–20} Using the WHO region as a covariate mitigated potential study bias arising from factors unrelated to MC. In our study, the “Americas” is not only limited to the USA, where MC is common, but also includes Central and South America, where MC is low.

Our study¹ took into account male life expectancy at birth and gross national income per capita. These covariates in part adjust for factors such as access to clean water and medical care. Higher-income countries have increased levels of prostate cancer, possibly due to sedentary lifestyle, obesity, and high red meat consumption, as we discussed.¹ Differences in proportions of Muslims and Jews, while of direct importance as respects MC, also reflect differences in dietary habits, as we discussed.¹ Social factors, a concern of Dr. Kupferschmid, were taken into account.

With these factors taken into account, our analysis revealed an association between increased MC rates and decreased prostate cancer mortality rates that could not be explained by chance.¹ The three categories used for MC prevalence, 0%–19%, 20%–80%, and 80%–100%, were designated by the WHO.¹³ The threshold for significant protection against prostate cancer mortality could be well below 80% and requires further research.

Since more men die with prostate cancer than die of it, death from prostate cancer is a harder endpoint. By revealing an association of MC with prostate cancer mortality, our study adds to the existing data.

COMPETING INTERESTS

All authors declare no competing interests.

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