

Cuckolded fathers rare in human populations

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Despite the urban myth reinforced by many a daytime talk show, researchers writing in *Trends in Ecology & Evolution* on April 5 say the emerging evidence consistently indicates that very few fathers have unknowingly raised children who were not biologically their own. The collective evidence for low rates of extra-pair paternity (EPP) challenges the notion that it pays, evolutionarily speaking, to sleep around, the researchers say.

"Media and popular scientific literature often claim that many alleged fathers are being cuckolded into raising children that biologically are not their own," said Maarten Larmuseau of KU Leuven in Belgium.

"Surprisingly, the estimated rates within [human populations](#) are quite low—around 1 or 2 percent."

Those rates apparently haven't changed much either, despite the fact that people in the past didn't have access to modern contraceptives.

When Larmuseau and his colleagues first got started exploring questions of EPP, they were surprised to discover how little hard evidence there was. Despite that, the scientific literature frequently suggested that about 10 percent of all children would have a biological father different from the alleged one.

But reliable data on contemporary populations that have become available over the last decade, mainly as supplementary results of medical studies, don't support the notion that one in 10 people don't know who their "real" fathers are. By combining genetics and in-depth

genealogies, he added, it's now even possible to look back at the EPP rates in the historical past. Those data suggest that the rates of EPP haven't changed much over time.

In 2013, Larmuseau and his colleagues published a report showing low EPP rates within people living in Belgium. However, it wasn't clear whether those rates were specific to people in that particular part of the world.

"For us, it came as a surprise that several recent studies also estimated historical rates of cuckoldry in other human populations, and came up with equally low estimates in South Africa, Italy, Spain, and Mali," he says.

The findings suggest that any potential advantage of cheating in order to have children that are perhaps better endowed is offset for the majority of women by the potential costs, the [researchers](#) say. Those costs likely include spousal aggression, divorce, or reduced paternal investment by the social partner or his relatives.

"The observed low cuckoldry rates in contemporary and past human populations challenge clearly the well-known idea that women routinely 'shop around' for good genes by engaging in extra-pair copulations to obtain genetic benefits for their children," Larmuseau said.

The researchers say that there is likely to be variation in the EPP rate among different groups of people based on various social factors. They plan to conduct future studies to estimate historical EPP rates in human populations with an eye toward factors that shape this limited variation.

More information: *Trends in Ecology & Evolution*, Larmuseau et al.:
"Cuckolded fathers rare in human populations"
[dx.doi.org/10.1016/j.tree.2016.03.004](https://doi.org/10.1016/j.tree.2016.03.004)

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