

On penises and vaginas: Why maleness always wins the headlines

What do Y chromosomes and duck penises have in common? It should be pretty obvious: a lot. But, as two recent commentaries point out, studies about the Y and penises also tell us about their counterparts: the X chromosome and vaginas. Those feminine features, however, don't seem to make the headlines.

[In April 24's Nature](#) (pay wall), two papers reported the discoveries of 12 genes on the Y chromosome, that are important, not in determining the sex of an organism, but in regulating genes, proteins and tissues throughout the body.

The media largely commented that this research further evidenced the sex differences between males and females. Other's wrote that it beefed up the case for the Y, which had been losing genes pretty rapidly. ["Researchers See New Importance in Y Chromosome," read the New York Times' headline.](#)

[As Harvard gender expert Sarah Richardson wrote at Slate](#), the 12 newly discovered genes don't make men and women different, in fact they regulate processes that make the sexes more similar. It's a dose problem. Females have two X chromosomes, so two copies of the genes that live on the X. Males have and X and a Y chromosome. The 12 newly discovered Y genes are counterparts to genes on X, and both sets crucially regulate gene expression throughout the body, Richardson writes:

The 12 genes do not specialize in sex differences. The studies demonstrate that they are part of a family of genes that play an all-purpose regulatory role in the human genome. Scientists don't yet know precisely what the genes do, but the studies show that they are important, because fetal viability is impaired without two doses of them...When it comes to sex, scientific reviewers, journals, funders, and reporters simply find similarities less interesting than differences.

It's also unfortunate because figuring out the Y-chromosome dosage problem is a really big deal scientifically. The X chromosome has 2,000 genes; the Y only 200. And, as we know, having only copy of some genes is highly detrimental.

Another analysis looked at the differences in the number of papers published about male and female genitalia. Perhaps duck penises come to mind, [as they do for Ed Yong at National Geographic](#):

In 2009, duck penises took the Internet by storm. Thanks to a newly published study and an eye-opening video, people learned that while most birds lack penises at all, male ducks have huge, corkscrew-shaped ones. During sex, they extrude these into females at high speed. Since then, duck penises have become a short-hand for the “ain’t nature wacky” genre of science writing, and an unexpected focal point for debates about the value of basic science.

And during that time, one important part of the original study was lost. People forgot that the story of duck penises is really the story of duck vaginas.

Malin Ah-King, Andrew Barron and Marie Herberstein analyzed 364 studies on animal genitalia and found the majority 49 percent focused on the penis, 8 percent on female genitals and 44 percent on both. The authors tried to figure out why. Yong reports:

They believe that male genitals still get more attention because of longstanding gender stereotypes that have seeped into evolutionary biology. For a long time, researchers believed that males played a dominant role in sex, while females were more passive—Darwin himself referred to them as “coy”.

These stereotypes are pervasive. In the most cited studies on sexual conflict, authors use active words like ‘intimidation’ and ‘coercion’ to describe males, but passive words like ‘resistance’ and ‘avoidance’ to describe females. More tellingly, males have ‘adaptations’ and females have ‘counter-adaptations’. Males act; females react.

It’s also possible that studying female genitals is just more difficult. The anatomy must be examined with imaging devices or through complicated dissection, and the organs themselves are more dynamic in their physiological responses, especially during sex.

Regardless, it’s important to note that when the scientific community and media at large talk about sex and sexual evolution, we do so with a bias that disproportionately highlights the differences and penises. This obviously isn’t just a biology problem, or a scientific problem. But, if we can begin to examine it in these spheres, it might trickle up alongside the science into culture.

Sources:

- [Researchers See New Importance in Y Chromosome](#), Nicholas Wade, New York Times
- [Y All the Hype?](#), Sarah Richardson, Slate
- [Where’s All The Animal Vagina Research?](#), Ed Yong, National Geographic

Additional Resources:

- [The X-Files: Looks like men aren’t on their way to extinction after all](#), Genetic Literacy Project
- [Political correctness alert: Science literacy collapses when male/female genetics are debated](#),

Genetic Literacy Project