

**“Sex Assigned at Birth”: The medical establishment betrays science,
logic and common sense**

by Alan Sokal and Richard Dawkins

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The American Medical Association says that the word “sex” — as in male or female — is problematic and outdated; we should all now use the “more precise” phrase “sex assigned at birth”. The American Psychological Association concurs: terms like “birth sex” and “natal sex” are “disparaging” and misleadingly “imply that sex is an immutable characteristic”. The American Academy of Pediatrics is on board too: “sex”, the AAP declares, is “an assignment that is made at birth”. The American Psychiatric Association, which had “male/female” in the 1994 fourth edition of its Diagnostic and Statistical Manual of Mental Disorders, and “natal male/female” in the 2013 fifth edition, changed this to “individual assigned male/female at birth” in its 2022 text revision. And now even the Centers for Disease Control and Prevention urge us to say “assigned male/female at birth” or “designated male/female at birth” instead of “biologically male/female” or “genetically male/female”.

Advocates defend this lexical revision, both on purported scientific grounds and because the traditional terminology of male and female is said to undermine “inclusivity” and “equity”. But these justifications do not hold water. And the medical associations’ newspeak twists simple scientific facts beyond recognition.

Nearly all animals, as well as many plants, reproduce sexually. In all sexually reproducing species this occurs by combining a large gamete, called an ovum (or egg), with a small gamete, called a sperm. Though some (“hermaphrodite”) plants and animals produce both ova and sperm, there are no hermaphrodite mammalian species. In mammals, each individual produces only one kind of gamete. Those individuals that produce (relatively few) ova are called female; those that produce (large numbers of) sperm are called male. Whether a mammal embryo develops into

a male or a female is determined by a pair of sex chromosomes: XX for females, XY for males.

In short, sex in all animals is defined by gamete size; sex in all mammals is determined by sex chromosomes; and there are two and only two sexes: male and female.

All this is, of course, hardly news: it has been known for over a century, and it is basic stuff from any half-decent high-school course in biology.

For sure, quirks of mutation or prenatal development may leave some individuals unable to produce viable gametes at all. But an infertile individual with a Y chromosome is still male, just as a one-legged person remains a full member of our bipedal species.

Much is speciously made of the fact that a very few humans are born with chromosomal patterns other than XX and XY. The most common, Klinefelter syndrome (XXY), occurs in about 0.1% of live births; these individuals are anatomically male, though often infertile. Some extremely rare conditions, such as de la Chapelle syndrome (0.003%) and Swyer syndrome (0.0005%), arguably fall outside the standard male/female classification. Even so, the sexual divide is an exceedingly clear binary, as binary as any distinction you can find in biology.

So where does this leave the medical associations' claims about "sex assigned at birth"?

A baby's name is assigned at birth; no one doubts that. But a baby's sex is not "assigned"; it is determined at conception and is then *observed* at birth, first by examination of the external genital organs, and then, in cases of doubt, by chromosomal analysis. Of course, any observation can be erroneous, and in rare cases the sex reported on the birth certificate is inaccurate and needs to be subsequently corrected. But the fallibility of observation does not change the fact that what is being observed — a person's sex — is an objective biological reality, just like their blood group or fingerprint pattern, not something that is "assigned". The medical

associations' pronouncements are social constructionism gone amok.

Sex is a fundamental feature of the human species; it is a key variable in psychology, sociology and public policy. Worldwide, men commit the vast majority of homicides; women are far more likely than men to be single parents. While these distinctions are statistical, not absolute, they really matter. Our public discourse becomes impoverished and distorted if we are unable to speak and write straightforwardly about sex. And nowhere is this loss clearer than in medicine.

For decades, feminists have protested against the neglect of sex as a variable in medical diagnosis and treatment, and the tacit assumption that women's bodies react similarly to men's bodies. Two years ago, the prestigious medical journal *The Lancet* finally acknowledged this criticism, but the editors could not bring themselves to use the word "women". Instead the journal's cover pompously proclaimed: "Historically, the anatomy and physiology of bodies with vaginas have been neglected." But now even this double-edged concession may be lost, as the denial of biological sex threatens to undermine the training of future doctors.

The medical establishment's new-found reluctance to speak honestly about biological reality most likely stems from a laudable desire to defend the human rights of transgender people. But while the goal is praiseworthy, the chosen method is misguided. Protecting transgender people from discrimination and harassment does not require pretending that sex is merely "assigned".

It is never justified to distort the facts in the service of a social or political cause, no matter how just. If the cause is truly just, then it can be defended in full acceptance of the facts about the real world; if that cannot be done, then the cause is not just.

And when an organization that proclaims itself scientific distorts the scientific facts in the service of a social cause, it undermines not only its own credibility but that of science generally. How can the public be expected to trust the medical establishment's declarations on other controversial issues, such as vaccines — issues on which the

medical consensus is indeed right — when it has so visibly and blatantly misstated the facts about something so simple as sex?

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