



The reality of sex

Emma Hilton¹ · Pam Thompson² · Colin Wright³ · David Curtis^{4,5}

Received: 30 November 2020 / Accepted: 3 December 2020 / Published online: 15 January 2021
© Royal Academy of Medicine in Ireland 2021

We write as medical and biological professionals who are increasingly concerned with how commercial and corporate interests of publishers are being allowed to unduly influence intellectual discourse, especially in relation to biological sex. We represent a variety of backgrounds, with interests ranging from malelethal genetic disorders in humans to sex behaviours in invertebrates. Human sex is an observable, immutable, and important biological classification; it is a fundamental characteristic of our species, foundational to many biology disciplines, and a major differentiator in medical/health outcomes.

Public discourse around sex increasingly seeks to deny basic facts of human biology. One recent example has been the treatment of Suzanne Moore at The Guardian following her attempts to discuss sex-related issues (<https://unherd.com/2020/11/why-i-had-to-leave-the-guardian/>). This denialism is no longer confined to humanities departments and social media hashtags but has made inroads into mainstream culture, in part due to a highly sympathetic media environment. Of particular concern to us is the sight of respected scientific publications, such as *Nature*, now beginning to echo these popular trends. In a recent article discussing a research study of differential disease burden in male and female patients with cystic fibrosis, the following

disclaimer was inserted: “*Nature* recognizes that sex and gender are not the same, and are neither fixed nor binary” [1]. The Chief Supplements Editor of *Nature* has confirmed that it is the journal’s policy to add such disclaimers (Herb Brody, personal communication).

We regard the claim that sex is neither fixed nor binary to be entirely without scientific merit—there are two sexes, male and female, and in humans, sex is immutable (disorders of sexual development are very rare and, in any event, do not result in any additional sexes). Such politically motivated policies and statements have no place in scientific journals. It is essential that impartiality be maintained in order to preserve public trust in science as a process dedicated to producing shared knowledge.

We call upon authors and editors to resist non-scientific pressures to suppress honest and accurate discussion of these matters, particularly in the field of medicine where diagnosis, prognosis and treatment can depend on a patient’s sex.

Funding The authors received no external funding for this work.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflicts of interest.

Ethical approval No human subjects participated and ethical approval is not required.

Reference

1. Healey N (2020) The gender gap in cystic fibrosis. *Nature*. 583:S10–S11

Publisher’s note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

✉ David Curtis
d.curtis@ucl.ac.uk

¹ Faculty of Biology, Medicine and Health, University of Manchester, Manchester, UK

² Wigan, UK

³ Granite Bay, USA

⁴ UCL Genetics Institute, University College London, London, UK

⁵ Centre for Psychiatry, Queen Mary University of London, London, UK