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Cite this as: *BMJ* 2022;378:o1843

<http://dx.doi.org/10.1136/bmj.o1843>

Published: 29 July 2022

Aquatic Federation's new eligibility policy—an unacceptable erosion of bodily autonomy for women and girls

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On 20 June 2022, the international federation for aquatic sports (FINA) implemented a new “Policy on eligibility for the men’s and women’s competition categories.”¹

This policy exists “to establish eligibility criteria to regulate the participation of transgender and 46 XY DSD (differences of sex development) athletes in the men’s and women’s categories in aquatic sports,” FINA says.¹ To fulfil this, however, the policy requires that all athletes undergo a test to “certify their chromosomal sex.”¹ Additionally, FINA reserves the right to undertake further medical assessment for the purposes of category eligibility where the federation deems it necessary.

As such, FINA now mandates chromosome “sex” testing for all athletes to determine eligibility for the women’s and men’s competition categories.

According to their policy, XX genotype determines eligibility for the women’s category, and XY genotype determines eligibility for the men’s. However, this approach has long been recognised as unreliable and unworkable as anyone (including cisgendered women) with a sex variation (the preferred term for what was previously known as “intersex” women or women with “differences of sex development”) would “fail” the test.^{2–4}

For this reason, and because chromosome testing is expensive, discriminatory, and unpopular with women athletes, the International Olympic Committee phased out chromosome testing in the early 2000s.^{2,3} Since its unreliability persists today, FINA has had to include provision for further eligibility measures: medical examination comprising serum or plasma testosterone testing with associated limits, an assessment of androgen sensitivity, and an assessment of pubertal development.¹

Yet, as Cara Tannenbaum and I wrote in *The BMJ* in 2019,⁵ such approaches “emphasise two unresolved sex hormone controversies: normal serum testosterone levels and physiological androgen sensitivity.”

Testosterone levels and androgen sensitivity

For women who “fail” a chromosome test, FINA has set a new upper limit of 2.5 nmol/L of blood.¹ This threshold is problematic because women can and do have much higher natural testosterone levels.^{5,6} Additionally, endogenous testosterone is not the arbiter of sports performance that widespread cultural myths might have us believe,⁶ and blood concentrations give no indication of androgen sensitivity.^{5,6} So FINA had to include an assessment of androgen sensitivity in its new regulation. However, since no valid, reproducible test for androgen sensitivity exists, FINA’s assessment

generally includes physical examination of external secondary sex characteristics (such as clitoral size) and radiological imaging of internal sex organs.⁵ This approach has been criticised as “inappropriate, subject to false interpretation, and an invasion of personal privacy.”⁵

Tanner stage 2 assessment

FINA also now mandates an assessment of whether an athlete wishing to participate in the women’s category, and who does not have XX chromosomes, has undergone any part of “male puberty.”¹ This is determined using the Tanner scale—a visual assessment of external primary and secondary sex characteristics such as clitoral size, testicular volume, or pubic hair growth^{7,8}—or proof that pubertal development was stopped (with puberty blockers, for example) by age 12.

Yet, the Tanner scale is also subjective and an invasion of personal privacy when used to determine participation in sports. It also relies on a problematic and very narrow view of how a “normal” body “should” look, so that anyone who deviates from this norm comes under suspicion, with both gendered and racialised outcomes.^{8,9} In this way, “male puberty” and in particular the Tanner scale, have become the new proxies for supposed advantage in sport.

It is important to understand that the regulation of some girls and women in sport ultimately affects all girls and women in sport. What may seem a relatively simple chromosome test erodes medical privacy, and potentially sends girls and women down a path of extremely subjective and invasive sex testing that erodes bodily autonomy.^{4,5} This pathway has been linked to the potential for iatrogenic harm, harassment and abuse, and human rights violations when power imbalances are as extreme as they are in sport.^{4,5}

The World Medical Association has condemned this kind of eligibility classification and called on physicians to take no part in implementing such regulations.¹⁰ Human Rights Watch has documented human rights violations in such classification of eligibility.⁴ And even the International Olympic Committee has now recognised the historic harm such policies have had on both cis and trans women.¹¹

Eroding the medical and personal privacy and bodily autonomy of anyone who wants to participate in sport, but young people in particular, by subjecting them to this kind of medical assessment and regulation should be a red line for us all.

Looking ahead

FINA has suggested a new “open” category for any athlete who does not neatly fit into the women’s or men’s categories as defined by their new policy.¹ However, this approach amounts to segregation, would contribute to harmful othering of an already minoritised group, and is likely unimplementable legally or constitutionally in many countries.

Far more instructive is the International Olympic Committee’s 2021 “Framework on fairness, inclusion and non-discrimination on the basis of gender identity and sex variations” which directs international federations to approach inclusion in ways that are respectful of rights, evidence based, and uphold the dignity of all athletes through the implementation of 10 principles (see below).¹¹

If FINA is to take seriously the health, wellbeing, and safeguarding of all its athletes, then it would do well to look to the IOC Framework and its guiding principles as a way forward that ultimately allows it to work in service of those to whom it has a duty of care.

- IOC Framework on Fairness, Inclusion, and Non-Discrimination on the Basis of Gender Identity and Sex Variations Principles¹¹
- Inclusion
- Prevention of harm
- Non-discrimination
- Fairness
- No presumption of advantage
- Evidence-based approach
- Primacy of health and bodily autonomy
- Stakeholder-centred approach
- Right to privacy
- Periodic reviews

Competing interests: I have read and understood *The BMJ* policy on declaration of interests and declare the following interests: none.

Commissioned, not peer reviewed.

Note: This article is an edited version of the longform piece published by SB as a note on Twitter on 22 June 2022: <https://twitter.com/i/notes/1539265748828409856>

- 1 Fédération Internationale De Natation. Policy on eligibility for the men’s and women’s competition categories. 2022. <https://resources.fina.org/fina/document/2022/06/19/525de003-51f4-47d3-8d5a-716dac5f77c7/FINA-INCLUSION-POLICY-AND-APPENDICES-FINAL-.pdf>
- 2 Genel M, Ljungqvist A. Essay: Gender verification of female athletes. *Lancet* 2005;366(Suppl 1):. doi: 10.1016/S0140-6736(05)67843-9 pmid: 16360748
- 3 Yale News. Decision to abolish gender testing at Sydney Olympics supported by Yale physician. 2000. <https://news.yale.edu/2000/09/29/decision-abolish-gender-testing-sydney-olympics-supported-yale-physician>
- 4 Human Rights Watch. “They’re chasing us away from sport.” Human rights violations in sex testing of elite women athletes. 2020. <https://www.hrw.org/report/2020/12/04/theyre-chasing-us-away-sport/human-rights-violations-sex-testing-elite-women>.
- 5 Tannenbaum C, Bekker S. Sex, gender, and sports. *BMJ* 2019;364:. doi: 10.1136/bmj.l1120 pmid: 30894351
- 6 Jordan-Young RM, Karkazis K. *Testosterone: an unauthorized biography*. Harvard University Press, 2019doi: 10.4159/9780674242647.
- 7 Tanner JM, Whitehouse RH, Takaishi M. Standards from birth to maturity for height, weight, height velocity, and weight velocity: British children, 1965. I. *Arch Dis Child* 1966;41:71. doi: 10.1136/adc.41.219.454 pmid: 5957718
- 8 Roberts C. Tanner’s puberty scale: exploring the historical entanglements of children, scientific photography and sex. *Sexualities* 2016;19:46doi: 10.1177/1363460715593477.
- 9 Euling SY, Selevan SG, Pescovitz OH, Skakkebaek NE. Role of environmental factors in the timing of puberty. *Pediatrics* 2008;121(Suppl 3):71. doi: 10.1542/peds.2007-1813C pmid: 18245510

10 World Medical Association. WMA urges physicians not to implement IAAF rules on classifying women athletes. 2019. <https://www.wma.net/news-post/wma-urges-physicians-not-to-implement-iaaf-rules-on-classifying-women-athletes/>

11 International Olympic Committee. Framework on fairness, inclusion, and non-discrimination on the basis of gender identity and sex variations. 2021. <https://stillmed.olympics.com/media/Documents/News/2021/11/IOC-Framework-Fairness-Inclusion-Non-discrimination-2021.pdf>