A combination of chromosome and hormone testing is the best way for the Olympics to determine who can compete in the women's events.

Athleticism in animals had long been a factor in survival; species that were more fit were able to better overcome the hardships of nature. As technology evolved, athleticism in humans is no longer a matter of survival but one of competition. For fair competition, the difference between men and women in athletic ability led to two categories. In evidence, across all Olympic events men perform on average 10% better than women (Tucker, R., & Collins, M., 2009). To ensure this categorization process is upheld, individuals must be tested to determine their placement. In this essay, I will be discussing whether a combination of chromosome and hormone testing is the best way for the Olympics to determine qualification for women's events. I will outline both sides of the argument, and present my opinion.

In the 1968 Olympics chromosome testing was first introduced and it's goal was to check for the presence of a "Barr body" which is only found in XX chromosomes. By this definition, it meant that humans who had XX chromosomes were considered female, and the rest were not. This process was brought up to contention due to presence of genotypic and phonetic abnormalities. People who had a disorder in sex development (DSD) could have chromosomes which were neither XX or XY (the typical male and female) or have XY chromosomes and be phenotypically female. Examples are: Klinefelter's syndrome (XXY), an infertile male identified as female by the Barr body test; Turner's syndrome (X), phenotypically female identified as male by the Barr body, Mosaicism, cells could either have XX or XXY, AIS (XY), phenotypically female due to androgen insensitivity but identified as male by the chromosome test (Tucker, R., & Collins, M., 2009).

In order to mitigate the issue of chromosome testing, the current Olympic committee allows all individuals who identify as female (phenotypically) and are under the guidelines of hormonal regulations to participate in women's events. These hormonal guidelines mainly

consist of the restriction of testosterone levels to under 10 nmol/l. This level of testosterone is much above the typical female levels of 0.12 to 1.79 nmol/l (Wells, C.J., 2016, p. 12). But this new combination of chromosome and hormonal testing is still criticized.

The CASM argues that individuals who were raised as female from childhood and are psychologically and socially female regardless of their chromosomal, gonadal and hormonal sex should be able to compete as women. This argument avoids the issue of defining the identity of people for them and attempts to mitigate criticism brought by gender politics (Tucker, R., & Collins, M., 2009). In addition to this, it is concurred that testosterone levels have not yet been proven to confer performance advantage in athletics. Even if it did it can be argued that a natural hormonal advantage is similar to other physical advantages which exists between people (eg. height) (Schultz, j., 2016). Lastly, critics argue that the policy seeks to enforce a two-sex system based on testosterone levels in a reality where a spectrum exists (Wells, C.J., 2016, p. 188).

It is evident that gender itself is not clearly defined and exists in a spectrum. It can also be said that there is no such a thing as sex, but rather only representations of the body established by gendered discourses of binary difference. Regardless, an argument for sex testing is that a presence of sexual difference is the basis of all gender existence whether it is cis-, trans- queer, straight, etc. The interest of testers is this difference specific to athletic ability. Policy supporters agree with critics that a spectrum exists but argue that measuring testosterone levels avoids categorizing identity and focuses on eligibility in regards to fair competition. In correspondence, Berman et al. (2018) analyzed performance data of athletics and reported the gap between achieved performance of women with the highest versus lowest testosterone levels was 1.6%.

In my opinion, the new policy of testing and regulating testosterone levels among individuals with DSDs to determine their eligibility in participating in women's events is

justified. This new policy avoids making attributions of sex/gender identity for athletics; which is their personal right to know. Rather it focuses on the fairness of competition, which was the initial basis of the creation of two categories. The question of sexual and gender identity can be extremely complicated and highly controversial. Both sides can agree (as do I) that there is no ground (gender or sex) that offers a definite moral answer to the question of female identity. With further research in scientific fields such as neuroscience, an answer to this may be found. In regards to athletic competition, it is logical to regulate factors which allow for fair competition.

References

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