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Joint position statement of the International Federation of Sports Medicine (FIMS) and European Federation of Sports Medicine Associations (EFSMA) on the IOC framework on fairness, inclusion and non-discrimination based on gender identity and sex variations

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ABSTRACT

The IOC recently published its framework on fairness, inclusion and non-discrimination based on gender identity and sex variations. This framework is drafted mainly from a human rights perspective, with less consideration for medical/scientific issues. The framework places the onus for gender eligibility and classification entirely on the International Federations (IFs), even though most will not have the capacity to implement the framework. The position of no presumption of advantage is contrary to the 2015 IOC consensus. Implementation of the 2021 framework will be a major challenge for IFs that have already recognised the inclusion of trans and women athletes with differences of sexual development (DSD) using a scientific/medical solution. The potential consequences for sports that need to prioritise fairness or safety could be one of two extremes (1) exclusion of all transgender or DSD athletes on the grounds of advantage or (2) self-identification that essentially equates to no eligibility rules. Exclusion of all transgender or DSD athletes is contrary to the Olympic charter and unlawful in many countries. While having no gender eligibility rules, sport loses its meaning and near-universal support.

Key messages

What is already known

- Athletes are currently excluded from the female category in sport based on transgender or differences of sexual development status.
- The IOC published its new framework on fairness, inclusion and non-discrimination based on gender identity and sex variations in November 2021.
- The publication of this framework has generated debate and discussion in sport and exercise medicine.

Athletes should not be under pressure to undergo medical procedures or treatment to meet eligibility criteria. However, if an athlete is fully informed and consents, then it is their free choice to undergo carefully considered or necessary interventions for gender classification for sport to compete fairly and safely in their chosen gender. Free choice is a fundamental human right, but so is the right to fair and safe competition.

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Key messages

What are the new findings

- It aims to facilitate a necessary critical discussion leading to a potential revision of the IOC framework.
- It strongly supports the right of each athlete to make their own choice based on their own needs and situation.
- It seeks to ensure that all athletes remain entitled to fair competition consistent with the WADA code that protects an athlete's fundamental right to participate in sport where fellow athletes have not been modified to their advantage by doping or other means.
- It suggests that it is essential that multisport international organisations such as the IOC take the responsibility to set standards and expectations based on competitive fairness and the best available science that all International Federations (IFs) can follow.
- It encourages all stakeholders in sport including the IOC, the IFs, the sponsors of sport, the WADA and research organisations including medical/biomedical research councils to dedicate the necessary funding to conduct essential research to support more evidence-based scientific solutions that are consistent with a rounded view of human rights and fairness.

The IOC published its new framework on fairness, inclusion and non-discrimination based on gender identity and sex variations[1] on 16 November 2021. This framework drafted mainly from a particular human rights perspective with little consideration of medical/scientific issues supersedes the 2015 IOC consensus on sex reassignment and hyperandrogenism that was concluded following a rigorous in-person IOC consensus meeting that focused on scientific and medical aspects of sex, gender and performance.[2] The 2015 consensus was drafted with the overriding sporting objective 'the guarantee of fair competition' and the realisation that 'restrictions on participation are appropriate to the extent that they are necessary and proportionate to the achievement of that objective'.[2] The 2021 IOC framework's position of 'no presumption of [performance] advantage' that states 'until evidence determines otherwise, athletes should not be deemed to have an unfair or disproportionate competitive advantage due to their sex variations, physical appearance or transgender status' is in stark contrast with the outcome of the 2015 IOC consensus, the scientific evidence,[3 4] and the subsequent assessment of numerous sports medicine associations/commissions.[5–11] For instance, the Sports Medicine Commission of World Rowing, also known as the World Rowing Federation (previously Fédération Internationale des Sociétés d'Aviron (FISA)), concluded that 'the FISA Sports Medicine Commission, in acknowledgement of the scientific and medical literature, see an important role of testosterone for performance, training, and regeneration in rowing and therefore supports the listing of testosterone in the World Anti-doping Agency (WADA) prohibited list (International Standard)'.[12]

Given the above, this joint position statement aims to present an evidence-based critique that is consistent with a more rounded view of human rights and promote discussion of this new framework, especially among those responsible for the care of athletes. This joint position statement of the International Federation of Sports Medicine (FIMS) and European Federation of Sports Medicine Associations (EFSMA) has been prepared by expert members of the respective Executive Committees and relevant Commissions, members and affiliates of the FIMS Collaborating Centres of Sports Medicine and other invited medical experts from the international sports and exercise medicine community, including Chief Medical Officers of numerous International Federations (IFs). A number of the authors of this joint position statement were also members of the 2015 IOC consensus on sex reassignment and hyperandrogenism.[2]

NOT SCIENTIFIC OR MEDICALLY-BASED

The new IOC framework mainly focuses on a particular human rights perspective, and the scientific, biological or medical aspects are not considered. This is highlighted specifically in point 5 of the framework, which states that there should be 'no presumption of advantage[1]' due to an athletes sex variations or transgender status. While not being named specifically in the framework but clarified in the presentation of the framework by the IOC,[1] it is clear that this point refers to the androgenic hormone testosterone and that there should be no presumption of advantage due to high concentrations of testosterone in the male range of 9.2–31.8 nmol/L[13] for long periods. Testosterone is well established in the literature to promote the male secondary sex characteristics[14] and is the primary driver for the increase in muscle mass,[3] enhanced physique and performance for athletes.[15] High concentrations of testosterone drive an increase in fat-free mass, which is responsible for much of the sex differences in sports performance between cisgender men and cisgender women.[16] The performance-defining qualities of testosterone are also reflected in the fact that the WADA lists testosterone as an S1 anabolic agent and 'prohibits its use at all times'.[17] Therefore, there is little doubt that high testosterone concentrations, either endogenous or exogenous, confer a baseline advantage for athletes in certain sports. Hence, it is clear to uphold the integrity and fairness of sport that these baseline advantages of testosterone must be recognised and mitigated, as has been called for previously.[5 18 19]

Second, point 7.1 of the new framework mischaracterises the medical treatment of transgender athletes as a 'medically unnecessary procedure or treatment'.[1] Gender-affirming hormone treatment has been shown to have both positive physical and psychological effects, such as improved quality of life[20] and mood[21] of the transitioning individual, with the administration of exogenous virilising hormones considered a mainstay treatment for many transgender patients[22] and importantly, medically necessary for these patients.[23] The protocol for the treatment of trans women is to seek testosterone suppression and feminising exogenous oestradiol supplementation to the norms of cisgender women (testosterone 0.5–2.4 nmol/L;

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oestradiol 15–350 pg/mL[24]), while trans men seek the virilisation of exogenous testosterone into the norms of cisgender men (testosterone 9.2–31.8 nmol/L[24]). This protocol for the treatment of trans women is consistent with the scientific consensus that trans women's testosterone should be suppressed to below 5 nmol/L to be eligible to compete in the female category of sport[5] and therefore, conflicts with the statement that this treatment is 'medically unnecessary'.[1] The implementation of such eligibility criteria for trans women and the integration of trans men into the male category due to their now high concentrations of testosterone upholds the integrity of sport and upholds the protected category of women's sport. This implementation would also combat the concern about self-identification in the female category of sport due to the medically necessary treatment of transgender patients. Integrating cisgender women athletes with differences of sexual development (DSD) into the female category of sport is further complicated by differing levels of hyperandrogenism. Hence, the authors are sympathetic to the predicament that these cisgender women athletes with DSD face. However, as high testosterone concentrations can provide a baseline advantage for competitors in certain sports, high testosterone concentrations must be mitigated in the female category of these sports to maintain fairness and integrity.

Third, the Framework document states in item 7.2 that 'criteria to determine eligibility for a gender category should not include gynaecological examinations or similar forms of invasive examination, aimed at determining sex, sex variations or gender'. Although the need for such examinations to be carried out by an experienced practitioner must always be carefully considered, not being able to consider information that can be gleaned from a physical examination conflicts with current recommendations of endocrine and gynaecological scientific societies.[25] Indeed, a thorough evaluation should be considered if menarche has not occurred by 15 years of age or 3 years post thelarche. Moreover, some IFs set their rules for the eligibility of athletes with a DSD based on specific diagnoses and their level of androgen sensitivity (a clinical assessment so far). Not allowing so-called 'invasive tests' would sometimes result in the IF not being able to enforce its rules and the athlete not being able to comply with them.

IMPLEMENTATION

Implementation of this framework will create a dilemma for IFs that have already recognised the unique challenges raised by the inclusion of trans and women athletes with DSD. Recently proposed interventions for gender classification were based on the 2015 IOC Consensus and the respective IFs own comprehensive analyses with many stakeholders, including ethical, social, cultural and legal experts. For example, in 2020, World Rowing implemented a bylaw to rule 13 for men's and women's events as follows:

> Eligibility by Gender 1) A rower is eligible to compete in a men's event or as a man in a mixed event if the gender of the rower is Male in the rower's passport or national identity card. 2) A rower is eligible to compete in a women's event, or as a woman in a mixed event, if: a) The gender of the rower is Female in the rower's passport or national identity card; and b) where applicable, the rower meets the requirements of paragraph 3 below 3) Where, either: a) the rower's gender has changed; or b) the rower has otherwise been required by the Executive Committee to establish eligibility to compete as a woman; the rower first satisfies the FISA Gender Advisory Panel that the rowers' serum testosterone concentration has been less than 5 nmol/L continuously for a period of at least the previous 12 months and secondly meets any other requirements reasonably set by the Executive Committee.[26]

Similar solutions to those implemented by World Athletics[6 7] have been adopted by other IFs such as Union Cycliste Internationale[27] and World Rowing[26] and now in conflict with the IOC framework (table 1). Such conflicting guidelines, rules and recommendations will only confuse the IFs and athletes and provide legal ambiguity for lawyers to exploit when pursuing a gender-related case at the Court of Arbitration for Sport.

In another departure from the 2015 IOC consensus, the 2021 IOC framework places the responsibility for gender classification entirely on the IFs, even though most IFs will not have the capacity, resources or necessary expertise to adopt the framework. For instance, the 2021 framework requires 'Any restrictions arising from eligibility criteria should be based on robust and peer-reviewed research that demonstrates a consistent, unfair, disproportionate competitive advantage in performance or unpreventable risk to the physical safety of other athletes'.[1] The burden of proof is now on the IFs to provide 'evidence-based' eligibility criteria within the very narrow constraints imposed by the framework that requires 'athletes should be allowed to compete in the category that best aligns with their self-determined gender identity' and 'athletes should never be pressured by an International Federation, sports organisation, or any other part (either by way of the eligibility criteria or otherwise) to undergo medically unnecessary procedures or treatment to meet eligibility criteria'.[1]

CONSEQUENCES

The potential consequences of these imposed constraints could be one of two unwanted extremes (1) exclusion of transgender or DSD athletes on the grounds of performance advantage or (2) self-identification that all but equates to no eligibility rules. By adopting the recent IOC framework without the possibility of necessary interventions for gender classification (the authors preferred use of the term rather than the unhelpful and emotionally charged concept of 'unnecessary medical intervention'),

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Table 1 Selection of International Federations policies on integrating trans women and female athletes with differences of sexual development (DSD) into the female category of sport

International Federation (eligibility criteria)	Rule
World Athletics (trans women)[7]	The athlete must demonstrate that the concentration of testosterone in serum has been less than 5 nmol/L continuously for at least 12 months, and keep serum testosterone concentration below 5 nmol/L to maintain her eligibility.
World Athletics (female athletes with DSD)[6]	The athlete, if deemed relevant, must reduce her blood testosterone level to below five (5) nmol/L for a continuous period of at least 6 months to be eligible for restricted events, and henceforth must maintain her blood testosterone level below five (5) nmol/L continuously.
USA Hockey (trans women)[29]	A trans woman desiring to play girls competitive hockey must confirm by a medical professional that the athlete has undergone at least 1 year of testosterone suppression therapy. The athlete must additionally provide a personal statement, confirming the athlete's gender identity, and written confirmation of gender identity from a healthcare provider.
World Rugby (trans women)[8]	Transgender women may not currently play women's rugby.
Scottish Women's Football Association (trans women)[11]	May compete in female or mixed-sex domestic competition by providing evidence that her hormone therapy has brought her blood measured testosterone levels within the range of her affirmed gender.
International Tennis Federation (trans women)[10]	The Athlete must provide a written and signed declaration, that her gender identity is female; and must demonstrate that the concentration of testosterone in her serum has been less than 5 nmol/L1 continuously for at least 12 months and that she is ready, willing, and able to continue to keep it below that level for so long as she continues to compete in the female category of competition.
USA Gymnastics (trans women)[9]	USAG believes that transgender and non-binary gymnasts should not be restricted from taking part in gymnastics competitions based on their gender identity. Athletes wishing to compete at the international track level must comply with the IOC guidelines for transgender athletes.
Union Cycliste Internationale (trans women)[27]	A signed declaration that her gender identity is female, demonstrate that the concentration of testosterone in her serum has been less than 5 nmol/L2 continuously for at least 12 months and she must keep her serum testosterone concentration below 5 nmol/L to maintain eligibility.
World Rowing (trans women)[26]	A rower is eligible to compete in a women's event, or as a woman in a mixed event, if: a. The gender of the rower is Female in the rower's passport or national identity card and b. where applicable, the rower meets the requirements of paragraph three below. 3. Where, either: a. the rower's gender has changed; or b. the rower has otherwise been required by the Executive Committee to establish eligibility to compete as a woman; the rower first satisfies the World Rowing Gender Advisory Panel that the rowers' serum testosterone concentration has been less than 5 nmol/L continuously for a period of at least the previous 12 months and second meets any other requirements reasonably set by the Executive Committee.
World Rowing (female athletes with DSD)[26]	The Executive Committee will appoint and maintain from time to time a panel of experts in the specialist areas of Gender Identification, Sex-reassignment, Hyperandrogenism, Transgender and Differences of Sexual Development (DSD) to be known as the Gender Advisory Panel. The purpose of that panel is to evaluate cases seeking a determination of gender eligibility and to provide expert advice to the Executive Director, the Executive Committee, or the Council (as the case may require) on those specialist areas.

exclusion of all transgender or DSD athletes on the grounds of performance is likely in sports where safety and fairness are prioritised (eg, Athletics, Rugby, Boxing, Judo); at least during the time it will take for confirmatory research to be conducted. A recent viewpoint provided a potential roadmap for integrating trans women into the elite female category of sport.[19] Some sports may be impacted by higher testosterone concentrations, while others may not. Safety is not an issue for sports that do not include contact with an opponent but have a physical challenge (eg, archery) and could be considered a testosterone impacted sport. Therefore, eligibility regulations would then be drawn up by the sports IF based on fair competition. Conversely, some sports do not include contact with the opponent or a physical challenge (ie, shooting) which could be considered a non-testosterone impacted sport. Therefore, the IF would then prioritise inclusion by maintaining baseline eligibility regulations necessary to uphold sporting integrity and prevent the premise of self-ID in the female category. However, we believe that these decision-making principles could be

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used for all IFs when considering the integration of trans women into the elite female competition.

The development of the 2021 IOC framework would in many countries be unlawful and against the Olympic charter that states:

> "The enjoyment of the rights and freedoms set forth in this Olympic Charter shall be secured without discrimination of any kind, such as race, colour, sex, sexual orientation, language, religion, political or other opinion, national or social origin, property, birth or other status".[28]

In the other extreme case of an equally undesirable consequence of having no gender eligibility rules, that is, self-identification that amounts to a free choice to compete in any gender classification, sport would lose its integrity and near-universal support. As we have seen during the COVID-19 crisis, sport is much poorer without supporters. Without rules that are perceived as fair, sport will not engage the younger generation and likely negatively impact future participation rates in the female category. As stated in the 2021 framework, athletes should never be pressured by an IF, sports organisation, or any other party to undergo any medical procedures or treatment to meet eligibility criteria. However, if an athlete is fully informed and consents, then it is their free choice to undergo 'necessary interventions for gender classification' to compete in the gender classification of their choice and return to the main theme of the new IOC framework, free choice is a fundamental human right.

CONCLUSIONS

The new IOC framework leaves all responsibilities to the IFs, whereas the authors believe the IOC should provide direction to the IFs. The IOC framework only deals with this important issue from a particular human rights perspective, yet this must be seen in a more rounded human rights perspective and is also a medical and scientific matter. The authors would like to see further discussion and consultation with all stakeholders leading to a balanced framework that protects the rights of all athletes and gives IFs the tools they need to ensure inclusion and fairness.

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