Application No. 10934/21

IN THE EUROPEAN COURT OF HUMAN RIGHTS

BETWEEN

Semenya,

Applicant

– and –

Switzerland,

Respondent

SUBMISSIONS ON BEHALF OF THE WORLD MEDICAL ASSOCIATION AND THE GLOBAL HEALTH JUSTICE PARTNERSHIP

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INTRODUCTION

1. These written submissions are made by the World Medical Association and the Global Health Justice Partnership pursuant to article 36 § 2 of the Convention for the Protection of Human Rights and Fundamental Freedoms (the "European Convention on Human Rights" or "ECHR") following leave granted to intervene as a third party before the Chamber under rule 44 § 3 of the Rules of the Court, and extended for proceedings before the Grand Chamber through fresh observations. We update our previous submission to reaffirm how World Athletics' Eligibility Regulations for the Female Classification across versions in 2018, 2019 and 2021 created dynamics threatening the patient-physician relationship and violating medical ethics, and address how they are exacerbated by the new version (in effect as of March 2023).

2. The World Medical Association (WMA) is a global federation of National Medical Associations representing millions of physicians worldwide. It aims to ensure the independence of physicians and the highest possible standards of ethical behavior and care by physicians toward all people. The WMA provides ethical guidance covering a wide range of subjects, including health-related human rights, in order to promote and defend the basic rights of patients and physicians. The Global Health Justice Partnership (GHJP), an initiative of Yale University's Law School and School of Public Health, was established to promote interdisciplinary, innovative, and effective responses to key risks to health-related rights globally. The GHJP works in partnership with relevant scholars and practitioners around the world to move research and analysis into action to promote the rights and health of all persons. The GHJP has developed an extensive program of research and policy analysis on gender, health, and rights.

3. The WMA has unequivocally objected to the Eligibility Regulations for the Female Classification (Athletes with Differences of Sex Development) ("Regulations") approved by World Athletics (previously the IAAF) and has called on physicians to refrain from participating in their implementation. These submissions are in furtherance of the WMA's consistent position on the Regulations and seek to demonstrate that: (i) the Regulations cannot be implemented without the active participation of physicians; (ii) the Regulations engender the violation of fundamental ethical principles and obligations generally accepted in the medical community and enshrined in various Declarations of the WMA; and (iii) these principles and obligations relate to the rights guaranteed under the European Convention on Human Rights and can aid the Court in their interpretation.

THE ROLE OF PHYSICIANS IN THE IMPLEMENTATION OF THE REGULATIONS

4. The Regulations exclude participation in athletics events in the women's classification based on eligibility criteria that must be identified by physicians, including blood testosterone level, androgen sensitivity, and the presence of any listed "differences of sex development" (DSDs).[1] The Regulations require certain athletes to reduce and maintain their blood testosterone below a certain level through pharmacological or surgical interventions that must be prescribed and administered or performed by physicians.

5. At all stages of implementation, the Regulations implicate and rely on physicians, including athletes' personal physicians, physicians affiliated with or appointed by World

[1] The DSDs covered by the Regulations since 2019 are: 5α-reductase type 2 deficiency; partial androgen insensitivity syndrome; 17β-hydroxysteroid dehydrogenase type 3 deficiency; ovotesticular DSD; or any other genetic disorder involving disordered gonadal steroidogenesis. *Compare* Eligibility Regulations for the Female Classification (Athletes with Differences of Sex Development) 2018, r 2.2(a)(i); 2019, r 2.2(a)(i); 2021, r 2.2.1(a); 2023, r 3.1.1. For event exclusions, *compare* Regulations 2018, r 2.2(b); 2019, r 2.2(b); 2021, r 2.2.2; 2023, r 2.1.

Athletics or national athletics federations, and other specialists. A combination of these medical professionals may be involved in each of the three distinct stages of assessment under the Regulations: identification, testing, and intervention.

6. Athletes are **identified** for investigation by the World Athletics Medical Manager, usually a physician, based on information received from sources including the athlete and the team doctors of the athlete's affiliated national federation. Information may include the results of routine pre-participation health examinations and from the analysis of blood or urine samples collected for anti-doping purposes.[2]

7. Identification is followed by a multi-step **testing** process carried out by a range of physicians. It involves: (1) initial clinical examination, data compilation, and preliminary endocrine assessment by qualified physicians; (2) assessment by an expert panel of medical professionals convened by World Athletics; and (3) possible further assessment at a designated specialist reference center. The physicians involved may include the athlete's own physician, gynecologists, endocrinologists and pediatricians, among others.

8. If the expert panel determines that an athlete does not meet the eligibility criteria, the athlete must submit, in order to compete and continue their career, to ongoing monitoring of testosterone suppression which, as the 2023 Regulations more explicitly name, has always entailed notice requirements, surveillance, and inferred 'consent' to sample analysis for compliance.[3] This involves **interventions** to reduce and maintain the athlete's natural blood testosterone level below the specified level for an extended period to establish eligibility, and at all times to maintain eligibility, through pharmacological or surgical interventions. While the Regulations state that "surgical anatomical changes are not required in any circumstances," this suggestion rests on the assumption that other interventions will be able to maintain the required levels.[4]

9. In sum, the Regulations depend on, and have continued to call on despite objections, the active participation of physicians – across specialties – at every stage of implementation. It is therefore of critical concern that such implementation is in flagrant breach of the most fundamental ethical principles and obligations of the medical profession.

VIOLATION OF THE PRINCIPLES OF MEDICAL ETHICS

10. Crucially, throughout the process stipulated by the Regulations, athletes do not voluntarily come to physicians as individuals seeking medical care, but are compelled to do so for the sole purpose of athletics' eligibility rules compliance.[5] Therefore, the patient-physician relationship is tainted from the outset by external coercion creating an indefensible situation in which physicians are faced with "patients" who have neither freely sought nor require care. Nonetheless, physicians have ethical obligations to the athlete-patients now before them, ethics that the Regulations ask them to violate.

11. The WMA recognizes the following medical ethics principles as core values of the medical profession: respect for autonomy, beneficence, non-maleficence, and justice, as

[2] Regulations 2018, r 3.2, 3.3; 2019, r 3.2, 3.3; 2021, r 3.2, 3.3; 2023, r 4.5, 4.6.
[3] Regulations 2018, r 3.9, 3.12, 3.18, Appendix 3 point 8(c); 2019, r 3.9, 3.12, 3.19, Appendix 3 point 8(c); 2021, r 2021, r 3.9, 3.12, 3.19, Appendix 2 point 8(c). *Compare* 2023, r 2.1.2, 4.10, 5.2, 5.3, Appendix 2 point 8(c).
[4] Regulations 2018, r 2.4; 2019, r 2.4; 2021, r 2.4; 2023, r 3.3.2. The Court of Arbitration for Sport noted that expert witnesses called by the parties were unable to agree on whether oral contraceptives stably reduced testosterone levels, the limited evidence and lack of guidelines for such treatment on elite athletes, and that if oral contraceptives could not maintain a lowered level of testosterone, an athlete would be required to turn to GnRH agonists or gonadectomy: *Semenya and ASA v. IAAF*, CAS 2018/O/5794 [487], [592], [593].
[5] Regulations 2018, r 3.5; 2019, r 3.5; 2021, r 3.5; 2023, r 4.6.

well as confidentiality, non-discrimination, consciousness, and the defense of human rights.[6] These principles underpin the codes of many regional medical associations, including the American Medical Association, the Africa Medical Association, and the Conseil Européen des Ordres des Médecins. Further, the WMA's Declaration of Geneva – the modern Hippocratic oath – dictates that physicians will not, in any circumstances, use their medical knowledge to violate human rights and civil liberties.[7] Any medical assessment or intervention that does not privilege the patient's health and well-being, or that is conducted without the patient's free and informed consent, is in opposition to the fundamental medical ethics principles reflected in the WMA's statements.

a. Respect for autonomy

12. The WMA has made strong commitments to the ethical principles promoting both patient and professional autonomy. First, the WMA's Declaration of Seoul on Professional Autonomy and Clinical Independence stipulates that physicians must have the freedom to exercise their professional judgment in the care and treatment of their patients without undue or inappropriate influence by outside parties.[8] The Regulations, however, ask physicians not only to identify, examine, and diagnose at the behest of an entity other than the patient (as may arise in workers' compensation systems or employment fitness protocols, e.g., and which may also raise ethical concerns),[9] but also to *intervene* upon athletes using non-beneficial practices aimed at compliance with sports regulations, rather than making therapeutic and clinically appropriate recommendations. Efforts to bring athletes into compliance with the Regulations reveal external influences on professional autonomy, jeopardizing the patient-physician relationship.

13. The WMA's Declaration of Geneva requires physicians to respect the autonomy and dignity of their patients, focusing on confidentiality and consent.[10] These principles have been translated into discrete rights in the WMA Declaration of Lisbon on the Rights of Patients: (i) the right to choose freely one's physician and health service institution; (ii) the right to self-determination, to make free decisions regarding oneself, and to give and withhold consent to any diagnostic or therapeutic procedure; and (iii) the right to confidentiality of one's health status, medical condition, diagnosis, prognosis, treatment, and all other information, even after death, except with explicit patient consent or as provided by law. Procedures without patient consent may occur only exceptionally, as specifically permitted by a valid law and in line with medical ethics. Yet, the Regulations ask physicians to ignore their obligations to patients, engendering practices that deny the ability of athlete-patients to make informed decisions and exercise moral choice.

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[6] Declaration of Geneva [1948] <https://www.wma.net/policies-post/wma-declaration-of-geneva/>. International Code of Medical Ethics [1949] <https://www.wma.net/policies-post/wma-international-code-of-medical-ethics/>. Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Subjects [1964] <https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/>. Declaration of Lisbon on the Rights of the Patient [1981] <https://www.wma.net/policies-post/wma-declaration-of-lisbon-on-the-rights-of-the-patient/>. Declaration of Cordoba on Patient-Physician Relationship [2020] <https://www.wma.net/policies-post/wma-declaration-of-cordoba-on-patient-physician-relationship/>.

[7] Declaration of Geneva, n 6.

[8] Declaration of Seoul on Professional Autonomy and Clinical Independence [2018] <https://www.wma.net/policies-post/wma-declaration-of-seoul-on-professional-autonomy-and-clinical-independence/>.

[9] International Dual-Loyalty Working Group, Dual Loyalty & Human Rights in Health Professional Practice: Proposed Guidelines & Institutional Mechanisms [2003] 48 <https://phr.org/our-work/resources/dual-loyalty-and-human-rights-in-health-professional-practice/>.

[10] Declaration of Geneva, n 6.

14. For example, while the Regulations state that "no athlete will be forced" to submit to medical assessment or interventions, the consequence of such refusal is exclusion: originally from an arbitrary list of events included under Regulations from 2018 to 2023, and now from all events.[11] Facing a set of forced choices does not allow athletes to make a truly voluntary decision about whether to undergo assessment or intervention. From the perspective of medical ethics, the conditions required for the informed consent of the patient are not met, especially in light of elements of coercion. Particularly coercive conditions arise where athletes, their families, national federations and the team of agents, promoters, and sponsors supporting them, depend on their sporting career for their livelihood and economic stability. This has been shown to be the case insofar as the Regulations disproportionately affect athletes from under-resourced nations.[12] This concern is more pronounced under the 2023 Regulations: while athletes previously could (and in some instances did) switch to unlisted events, they are now excluded from all events, increasing the degree of coercion to submit to the assessments and intervention.

15. In prescribing and carrying out the medical interventions required to meet the eligibility criteria in the Regulations, physicians are faced with a stark dilemma: either they act against the core values of their profession or oppose the Regulations' imperatives and risk losing their work. This is also true of physicians employed by national federations who are in turn bound by World Athletics' rules and regulations (i.e., a "multiple principal problem," also sometimes framed as "dual loyalty" in medical contexts).[13]

16. The Regulations therefore put physicians at risk of violating key medical ethics principles derived from autonomy. For example, ethical principles protecting informed consent require that a patient or their authorized representatives be provided with complete information about their medical condition, treatment options available, associated benefits and risks in the immediate and long-term, and anticipated costs, in language they understand.[14] Yet, in facilitating compliance with the Regulations, physicians are required to focus on specific non-health-related goals such as lowering testosterone to a certain level, rather than presenting all options, including no interventions at all. Such a narrow lens creates risks that athletes will not receive or fully consider all information on the tests and procedures to be conducted, or the implications of test results.[15]

17. Further, the Regulations put physicians at risk of conduct that violates confidentiality obligations toward their patients. This risk may arise either directly (through providing medical information such as test results to athletics authorities, including World Athletics, or national federations);[16] or indirectly, (by implicating physicians in chains of information sharing in which athletics authorities, who have shown themselves not to be reliable in terms of confidentiality, act in ways that result in an athlete being disqualified or changing events, making it obvious that an athlete is suspected of having a DSD).[17]

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[11] Regulations 2018, r 2.5, 2.6; 2019, r 2.5, 2.6; 2021, r 2.5, 2.6; 2023, r 3.3, 3.4. The 2023 version states simply that consent may be revoked, demonstrating continued lack of appreciation for how 'choice' is fundamentally constrained, given that revocation of consent removes eligibility: Regulations 2023, r 2.2.

[12] *See* Human Rights Watch, 'They're Chasing Us Away From Sport – Human Rights Violations in Sex Testing of Elite Women Athletes' [2020] 58, 93-97 <https://www.hrw.org/report/2020/12/04/theyre-chasing-us-away-sport/human-rights-violations-sex-testing-elite-women>.

[13] ibid 54-56.

[14] Basil Varkey, 'Principles of Clinical Ethics and Their Application to Practice' [2020] Vol. 30(1) Med Princ Pract 17, 29.

[15] Human Rights Watch, n 12 at 63-67.

[16] Human Rights Watch, n 12 at 59, 61-63.

[17] Human Rights Watch, n 12 at 46, 59, 65.

18. The coercive nature of the entire process is reinforced by the involvement of physicians associated with national federations. While the Regulations formally govern only World Athletics' approach and action regarding eligibility testing, they call for national federations' cooperation in their application and enforcement.[18] This adds a layer of opacity and a cascade of abusive interventions, as the Regulations' trickle-down effects are seen in efforts by national federations, through team doctors and affiliated physicians, who proactively monitor and test athletes for signs of differences in sex development. The Regulations specifically identify team doctors of national federations as "reliable sources" of information.[19] Athletes subjected to monitoring, invasive check-ups and testing have recounted instances where varied interventions and tests were conducted in quick succession and they were not provided sufficient information or detail on the process or results. Athletes have also spoken of being pressured by physicians affiliated with national federations to undergo invasive physical examinations of chest and genitals leading to medically unnecessary interventions so they could continue to compete.[20]

b. Beneficence and Non-maleficence

19. The principle of beneficence obliges physicians to act in a way that benefits the patient, including to promote their overall welfare by balancing the benefits of any intervention against risks and costs. Relatedly, the principle of non-maleficence obliges physicians to avoid causing harm to the patient, including unnecessary pain, suffering, or offense.[21]

20. The principles of beneficence and non-maleficence are at the heart of the patient-physician relationship. The WMA's Declaration of Cordoba on Patient-Physician Relationship highlights that the privileged bond between patient and physician is "the fundamental core of medical practice" and is based on trust arising from the physician's commitment to alleviate suffering and improve a person's health and well-being.

21. The Regulations ask physicians to prescribe and administer or perform medical interventions for the purpose of compliance at all times with sports eligibility rules, regardless of whether this is in the best interests of the patient and will benefit their health and well-being. Physicians are called on by the Regulations to prescribe or perform a treatment that will quickly reduce and consistently maintain blood testosterone level below the specified threshold, a challenge given testosterone's dynamic fluctuations. With eligibility to participate in all events now at risk, there is even more pressure to intervene, yet there is no guidance. No agreed approach has been developed precisely because the objective of the Regulations is not one that any patient would freely request or any doctor would otherwise recommend. A medical intervention is, in general, only appropriate where there is a medical need, and with attention to minimal invasiveness and side effects; medically unnecessary interventions are generally not in the best interests of patients and can lead to long-term and even unanticipated health consequences.[22] All procedures to reduce blood testosterone for the purpose of compliance with the Regulations, as opposed to health-related reasons, are inherently medically unnecessary, a fact that physicians connected with World Athletics have

[18] Regulations 2018, r 1.3; 2019, r 1.3; 2021, r 1.3; 2023, r 2.4.
[19] Regulations 2018, r 3.3; 2019, r 3.3; 2021, r 3.3; 2023, r 4.5
[20] Human Rights Watch, n 12 at 59, 63-67.
[21] Principles of Biomedical Ethics, n 6.
[22] Medical interventions do not always take place only in case of a medical need, e.g., where testing is ordered by a judicial body or for purely aesthetic reasons. However, in such cases, interventions are either required by valid law or occur with free and informed patient consent, unlike the interventions required under the Regulations, which are (a) not binding law enacted by a State and (b) under which athletes must either agree to reduce their blood testosterone levels in order to continue participating in events covered by the Regulations or risk exclusion.

acknowledged.[23] They cannot, therefore, be said to be in the individual's benefit or in accordance with the beneficence principle.

22. Moreover, the side effects of all such procedures constitute risks that cannot be balanced against any health benefit because, again, their purpose is compliance with sports eligibility rules. These include diuretic effects that cause excessive thirst and urination, electrolyte imbalance, liver toxicity, disruption of metabolism, inhibited steroid production, cortisol deficiency, headache, fatigue and nausea (for pharmacological interventions such as hormonal contraceptives or GnRH contraceptives),[24] as well as compromised bone strength, chronic weakness, depression, diabetes, and sterilization (in the case of surgical interventions such as gonadectomy).[25] Causing these harms to an individual, without a health- or well-being-related reason to justify them, offends the non-maleficence principle. The 2023 Regulations have reduced the testosterone limit from 5 to 2.5 nmol/L, which increases the risk that physicians will be called upon to administer GnRH agonist or surgical treatments to prevent fluctuations in testosterone levels, but which are associated with very serious and long-lasting side effects.

23. Importantly, the principles of beneficence and non-maleficence require recognition that what constitutes a benefit for one patient may be harmful to another.[26] Thus, while some women choose to take oral contraceptives for birth control or regularizing their menstrual cycle, the objectives of such interventions relate to their own fertility and other health goals and are markedly different from reducing blood testosterone levels to meet sports eligibility standards. Likewise, while individuals with differences in sex development may sometimes choose to undergo interventions like surgery to address specific medical needs such as the prevention of a germ cell tumor, this is not the case with athletes investigated under the Regulations. These athletes have not indicated any health concern; indeed, having a blood testosterone level above 5 or 2.5 nmol/L (or any other limit) is not in itself considered a medical condition requiring an intervention to lower it.[27]

24. The Regulations ask physicians to act contrary to their ethical obligations by disregarding the range of risks associated with reducing blood testosterone level and by prescribing and administering interventions to maintain that level over athletes' entire careers without any medical need or health benefit. For this reason, the WMA has called on physicians to oppose the Regulations and refrain from implementing them on the ground that "[i]t is in general considered unethical for physicians to prescribe treatment for excessive endogenous testosterone if the condition is not recognized as pathological."[28]

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[23] Sports officials affiliated with World Athletics acknowledged the lack of a medical condition requiring surgical and pharmacological interventions on athletes in a retrospective clinical study they conducted on athletes on whom partial clitoral removal with bilateral gonadectomy were performed. *See* Patrick Fenichel et al, 'Molecular Diagnosis of 5α-Reductase Deficiency in 4 Elite Young Female Athletes Through Hormonal Screening for Hyperandrogenism' [2013] Vol 98(6) Journal of Clinical Endocrinological Metabolism E1055, E1057.

[24] Human Rights Watch, n 12 at 63-67, 82; Rebecca Jordan Young et al, 'Sex, Health and Athletes' [2014] Vol. 348 BMJ 348, 349.

[25] Letter from Special Rapporteur on the right to enjoyment of the highest attainable standard of physical and mental health et al to IAAF (18 September 2018) <https://www.ohchr.org/Documents/Issues/Health/Letter_IAAF_Sept2018.pdf>.

[26] Raanan Gillon, 'Medical ethics: four principles plus attention to scope' [1994] BMJ 184, 185.

[27] *See* American Association of Clinical Endocrinologists, 'Medical Guidelines for Clinical Practice for the Diagnosis and Treatment of Hyperandrogenic Disorders' [2001] Vol. 7(2) Endocrine Practice 120; Rebecca Jordan Young et al, n 24 at 349.

[28] 'WMA urges physicians not to implement IAAF Rules on classifying women athletes' (WMA, 25 April 2019) <https://www.wma.net/news-post/wma-urges-physicians-not-to-implement-iaaf-rules-on-classifying-women-athletes/>.

25. Furthermore, the Regulations ask physicians to violate patients' rights – codified in the WMA Declaration of Lisbon – to be cared for by a physician who is free to make clinical and ethical judgments and to always be treated in accordance with their best interests and generally approved medical principles. The WMA has constantly and firmly opposed intrusion in the practice of medicine: the patient-physician relationship "should never be subject to undue administrative, economic, or political interferences" or other influences that risk alienating physicians from patients and potentially harming them.[29] The ongoing, compelled, non-therapeutic, and potentially harmful actions taken under the Regulations undermine the essential "atmosphere of trust" in the patient-physician relationship. The WMA has therefore consistently opposed the Regulations and asked physicians to "refuse to perform any test or administer any treatment or medicine not in accordance with medical ethics, and which might be harmful to the athlete using it, especially artificially modifying constituents, biochemistry or endogenous testosterone."[30] Upholding patient rights and the principles of beneficence and non-maleficence are fundamental obligations of physicians and are seriously interfered with by the Regulations.

c. Justice and Non-discrimination

26. Justice as a principle of medical ethics is concerned with the "fair, equitable, and appropriate" treatment of persons, including distributively just and non-discriminatory treatment.[31] Discrimination involves a failure to provide healthcare, as required by principles of medical ethics, based on a person's individual or social characteristics such as sex, gender, race, religion, age, type of illness or economic status.[32] In the WMA's Declaration of Geneva, the physician's pledge recognizes this principle of justice by requiring physicians not to permit considerations such as age, disease, disability, ethnic origin, nationality, gender, sexual orientation or social standing to come in the way of their duty to their patients.[33] This duty of physicians relates to the right of patients to appropriate medical care without discrimination.[34]

27. To understand how the Regulations implicate physicians in discriminatory practices, it is useful to consider the characteristics in turn. *First***,** the Regulations only apply to women and involve the surveillance of all women, especially those whose gender presentation does not match dominant stereotypes of femininity. As noted by United Nations human rights experts, the Regulations' surveillance of all women, and the selection of a subset of women to investigate, reinforces negative stereotypes and stigma around race, sex, and gender identity and subjective expectations around which bodies are appropriate.[35]

28. *Second*, the Regulations are only concerned with the eligibility of women with a specific set of intersex variations or differences in sex development known as 46,XY DSD, characterized by the Regulations previously as blood testosterone level above 5 nmol/L and now 2.5 nmol/L, and "sufficient androgen insensitivity for those levels of testosterone to have a material androgenizing effect."[36] In practice, assessment is made through reference to the supposed material androgenizing effects on physiological traits like breast development, body hair, and clitoral size, determined through invasive and

[29] Declaration of Cordoba on Patient-Physician Relationship, n 6.
[30] WMA urges physicians not to implement IAAF Rules on classifying women athletes, n 28.
[31] Basil Varkey, n 14.
[32] Mohammadjavad Hosseinabadi-Farahani et al, 'Justice and unintentional discrimination in healthcare: A qualitative content analysis' [2021] Vol. 10 J Educ Health Promot 51, 51-52.
[33] Declaration of Geneva, n 6.
[34] Declaration of Lisbon, n 6.
[35] Letter from Special Rapporteur on the right to health, n 25.
[36] Regulations 2018, r 2.2(a); 2019, r 2.2(a); 2021, r 2.2.1(a); 2023, r 3.1.

offensive exams carried out by physicians.[37] Moreover, there is evidence that athletes already under suspicion are vulnerable to being surveilled and observed for differences in their genitalia, while submitting samples for anti-doping purposes.[38]

29. Identification and assessment efforts, including invasive questioning, track stereotypes around race, gender, sexuality, and conventional notions of femininity.[39] Evidence suggests that athletes from the Global South are scrutinized and intervened upon disproportionately – with the assistance of medical professionals – despite identifying as women for social and legal purposes since birth.[40] The WMA has said the Regulations "constitute a flagrant discrimination based on the genetic variation of female athletes."[41]

30. The Regulations' discriminatory remit is made even more notable by the scope of events covered and the divergent regimes created for physicians according to the sources of testosterone. *First*, from 2018 to 2023, the Regulations applied only to women competing in an arbitrarily chosen set of events, whereas the 2023 version goes further to cover the sport of athletics entirely,[42] despite contestation around the relationship between elevated testosterone level and athletic performance.[43] *Second*, the Regulations do not focus solely on elevated testosterone levels but on the source of the testosterone (through reference to the gonadal sex) and its "masculinizing" effects (via attention directed to secondary sexual characteristics).[44] The Regulations do not apply, for example, to women with polycystic ovary syndrome (PCOS) or congenital adrenal hyperplasia (CAH), even where these conditions cause natural testosterone levels above the specified level; they apply only to women with 46,XY DSD. In fact, for women with PCOS and CAH, the Regulations suggest interventions to address the risk of cardiovascular events and gynecological cancers rather than reducing blood testosterone.[45] In other words, physicians are asked to provide different advice and interventions to women if they are athletes, and based on the sources of their testosterone, rather than health-related reasons.

31. Thus, the Regulations put physicians at risk of participating in a cascade of justice violations: identifying and intervening in women athletes' bodies and lives under arbitrary and discriminatory gender regimes; treating two categories of women with

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[37] Fabian Rose, 'Caster Semenya and the Intersex Hypothesis' in Sandy Montanola and Aurélie Olivesi (eds), *Gender Testing in Sport* (Routledge 2017). The 2011 version of the Regulations named traits like "deep voice," breast shrinkage, excessive body hair, clinical data on loss of menstruation over a period of time, increased muscle mass (all traits relatively common among elite athletes and difficult to measure) and might also encompass lack of a uterus and larger than typical clitoris. This amalgam of possible considerations contains many features today condemned as unacceptably culturally dependent, especially given greater global recognition of racial and ethnic variation within and across genders. These criteria however, are retained in clinical assessment guidelines used to assess material androgenizing effects pursuant to the Regulation. *See* Katrina Karkazis et al, 'Out of Bounds? A Critique of the New Policies on Hyperandrogenism in Elite Female Athletes' [2012] Vol. 12(7) Am J Bioeth, 3.

[38] Human Rights Watch, n 12 at 83-84; Rebecca Jordan Young et al, n 30 at 349.

[39] Human Rights Watch, n 12 at 89-91. *See* Katrina Karkazis and Rebecca M. Jordan Young, 'The Powers of Testosterone: Obscuring Race and Regional Bias in the Regulation of Women Athletes [2018] Vol. 30(2) Feminist Formations 1.

[40] Letter from Special Rapporteur on the right to health, n 25. Human Rights Watch, n 12 at 27. OHCHR, 'Intersection of race and gender discrimination in sport' [2020] 8 <https://undocs.org/en/A/HRC/44/26>.

[41] WMA urges physicians not to implement IAAF Rules on classifying women athletes, n 28.

[42] Regulations 2018, r 2.2(b), 2.3; 2019, r 2.2(b), 2.3; 2021, r 2.2.2, 2.3; 2023, r 3.2.

[43] Sigmund Loland, 'Caster Semenya, athlete classification, and fair equality of opportunity in sport' [2020] J Med Ethics 1, 4; The Powers of Testosterone, n 39 at 25, 27.

[44] *See* Regulations 2018, r 2.2 (endnote 4), Appendix 3 point 16; 2019, r 2.2 (endnote 4), Appendix 3 point 16; 2021, r 2.2.1 (endnote 4), Appendix 3 point 16; 2023, Appendix 2 point 16; Silvia Camporesi and Paolo Maugeri, 'Caster Semenya: sport, categories and the creative role of ethics' [2010] J Medical Ethics 378, 379.

[45] Regulations 2018, Appendix 3 point 12 (endnote 13); 2019, Appendix 3 point 12 (endnote 13); 2021, Appendix 2, point 12 (endnote 8); 2023, Appendix 2, point 12 (endnote 6). PCOS is exempted since 2018, CAH since 2019.

elevated blood testosterone differently, not according to health needs but for policy compliance; and acting under dubious scientific authority in ways identified as serving a gendered and racially discriminatory goal of bringing women's naturally occurring testosterone levels, and their primary and secondary sexual characteristics, within the bounds of what sports regulators consider acceptable for a woman.[46]

PRINCIPLES OF MEDICAL ETHICS AND HUMAN RIGHTS

32. The right to the highest attainable standard of physical and mental health is enshrined in the International Covenant on Economic, Social and Cultural Rights. It is an inclusive right, extending beyond healthcare to the underlying determinants of health, and States must abstain from enforcing discriminatory practices relating to women's health status and needs.[47] The principles of medical ethics described in these submissions support the promotion and protection of human rights in medical practice, and the WMA "is committed to promoting health-related human rights for all people worldwide."[48] The WMA has recognized that "[a] woman's right to the enjoyment of the highest standard of health must be guaranteed throughout her lifetime, equal to that of men" and "[w]omen are affected by many of the same health conditions as men, but women experience them differently due to both genetics and the social construction of gender."[49]

33. These principles of medical ethics correspond to ECHR rights under article 3 (right against inhuman and degrading treatment), article 8 (right to private and family life) and article 14 (right to equality and non-discrimination) and can aid this Court in interpreting these provisions in the health context.

34. This Court has previously located health rights under article 8[50] and recognized that States have a positive obligation under articles 2 (right to life) and 8 to institute measures to protect the physical integrity of patients "…based on the need to protect patients as far as possible from possibly serious consequences of medical interventions."[51]

35. Notably, this Court has demonstrated concern about forcible medical interventions undertaken without patient consent or any therapeutic need. In *VC v Slovakia*, the Court highlighted that sterilization of a Romani woman, conducted under stereotyped and paternalistic conditions, demonstrated an absence of full, free, and informed consent, or any therapeutic objective, generating serious consequences for her physical and mental health, and violating rights under articles 3 and 8.[52] These forcible interventions affecting the reproductive health status of women were found incompatible with foundational rights principles of respect for freedom and dignity, especially when alternative methods were available and the intervention did not address any imminent life-threatening condition.[53] The case engaged with concerns similar to the constrained 'choice' of athletes coerced into undergoing medical interventions lacking any therapeutic objective.

36. Further, coercive medical interventions under the Regulations, directed at a specific set

[46] Letter from Special Rapporteur on the right to health, n 25.
[47] CESCR, 'General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12)' (11 August 2000, E/C.12/2000/4).
[48] WMA, Human Rights – Physicians as Human Rights Advocates <https://www.wma.net/what-we-do/human-rights/> accessed Dec. 19, 2023.
[49] WMA, Women and Health – A Woman's Right to the Highest Standard of Health <https://www.wma.net/what-we-do/human-rights/women-and-health/> accessed Dec. 19, 2023.
[50] *Nada v Switzerland* App no 10593/08 (ECHR, 12 September 2012) [151].
[51] *Erdinc Kurt v Turkey* App no. 50772/11 (ECHR, 6 June 2017) [53].
[52] *VC v Slovakia* App no 18968/07 (ECHR, 8 November 2011) [118].
[53] ibid [113].

of women athletes based on subjective standards for physical features and characteristics, entail a violation of the right against discrimination based on sex under article 14. The Regulations lack reasonable and objective justifications, particularly given the contested scientific basis of claims of athletic advantage caused by elevated testosterone levels.

37. Moreover, recognizing the overwhelming risks to rights provoked by interventions on persons with DSD, the Parliamentary Assembly of the Council of Europe, and other rights groups,[54] have cautioned against surgical or pharmacological interventions on children with intersex variations and DSD precisely because they are conducted without informed consent, violate physical integrity, respond to no immediate danger to health and hold no genuine therapeutic purpose nor evidence of long-term effectiveness or benefit.[55] These considerations apply equally to athletes investigated under the Regulations.

CONCLUSION AND IMPLICATIONS

38. The conditions for eligibility imposed by the Regulations threaten the patient-physician relationship as they ask physicians to violate their ethical obligations to athletes who come before them not for health-seeking but rather regulatory compliance reasons. It unfairly leaves athletes with the coerced 'choice' to either submit to physical assessments, consult with physicians, and undergo unnecessary medical interventions with the potential for serious side effects, or give up their livelihood.

39. Physicians are central to the Regulations: their implementation would be impossible without physicians' involvement. Physicians' conflicts of interest, arising in practice from their dual loyalties to the athletes and athletics federations under the Regulations, constrain them to offer unsuitable and harmful medical advice to athletes, as opposed to appropriate medical care that puts the patient's health first.[56] Rather than offering holistic health care that is tailored and responsive to athletes' specific concerns, the Regulations disregard these conflicts of interest and ask physicians to take steps which risk their ethical obligations. All other options that better respond to athletes' needs are foreclosed.

40. The WMA's Declaration on the Principles of Health Care for Sports Medicine, first adopted in 1981, provides that "in order to carry out his or her ethical obligations, the sports medicine physician's authority must be fully recognized and upheld, particularly when it concerns the health and safety of the athlete. Concern for the athlete's health and safety must override the interests of any third party."[57] Referring to the World Athletics' rules, the Declaration also specifies that "the mere existence of a condition caused by a difference in sex development, in a person who has not expressed a desire to change that condition, does not constitute a medical indication for treatment. Medical treatment solely to alter athletic performance is unethical".

41. We hope this brief assists the Court in appreciating how the Regulations place physicians in an unacceptable position, generating not just ethical violations but violations of the rights of persons facing medical choices that ethical standards were created to protect.

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[54] 'Unnecessary Surgery on Intersex Children Must Stop' (Physicians for Human Rights, 20 October 2017) <https://phr.org/news/unnecessary-surgery-on-intersex-children-must-stop/>; Human Rights Watch, 'I Want to Be Like Nature Made Me – Medically Unnecessary Surgeries on Intersex Children in the US' [2017] <https://www.hrw.org/sites/default/files/report_pdf/lgbtintersex0717_web_0.pdf>.

[55] Promoting the human rights of and eliminating discrimination against intersex people [2017] RES 2191.

[56] Nancy M. P. King and Richard Robeson, 'Athletes are Guinea Pigs' [2013] Vol. 13(10) Am J Bioeth 13.

[57] Declaration on Principles of Health Care for Sports Medicine [2021] <https://www.wma.net/policies-post/wma-declaration-on-principles-of-health-care-for-sports-medicine/>.