TRANSGENDER COMPETITION IN COMBAT SPORTS: POSITION STATEMENT OF THE ASSOCIATION OF RINGSIDE PHYSICIANS

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The Association of Ringside Physicians (ARP) is committed to the concept of fair competition. It advocates for two equally skilled and matched athletes to keep bouts fair, competitive, entertaining, and, most importantly, safe for all combatants. Numerous studies have proven that transgender women may have a competitive athletic advantage against otherwise matched cisgender women. Likewise, transgender men may have a competitive disadvantage against cisgender men. These differences-both anatomic and physiologic-persist despite normalization of sex hormone levels and create disparities in competitive abilities that are not compatible with the spirit of fair competition. More importantly, allowing transgender athletes to compete against cisgender athletes in combat sports, which already involve significant risk of serious injury, unnecessarily raises the risk of injury due to these differences. Hence, the ARP does not currently support transgender athlete competition against cisgender athletes in combat sports.

Development of this Position Statement

The ARP is an international, non-profit organization dedicated to the health and safety of athletes in combat sports. This position statement expresses a collaborative effort among the authors, subject matter experts, ARP Board of Directors, and Emeritus Board. An extensive literature search including, but not restricted to MEDLINE, Cochrane Review, and non-indexed, peer-reviewed scientific articles published in online medical journals was performed regarding transgender athletes and sports participation. Though studies evaluating transgender athletes in combat sports are lacking, common-sense principles, extrapolation from related research, and decades of combat sports medical experience form the foundation for these rational recommendations.

The entire document is under editorial review for publication in a peer-reviewed medical journal and is therefore not available for review currently due to copyright restrictions. However, the Position Statement is based on the following key concepts as elucidated in the document:

- Sex refers to a person's physical characteristics, including chromosomes, reproductive organs (ovaries vs testes), hormones, and external genitalia. This results in two sexes at birth: male and female.
- Gender refers to one's sense of self as a man, woman, or others. Ciswomen are those whose sex and gender align; the same is true for cismen. A transgender man or woman is a person who identifies with a gender different from their biological sex.
- Males have, on average, larger hearts, lungs, bones, and muscles than females; higher concentration of blood hemoglobin; and higher muscle-to-fat ratio. These are due to different genetics and to years of exposure to testosterone, especially during puberty.
- The anatomic and physiologic advantages in males translate to an 8-12% competitive advantage in performance in most sports due to higher strength, power, endurance and recovery. The advantages of puberty and testosterone are exemplified best by the male gender dominance of sporting world records.
- While testosterone suppression is known to decrease muscle mass and strength and oxygen-carrying capacity, the reduction does not make up for the significant baseline differences between males and females even after three years of treatment. In addition, other advantageous physiology such as bone density and morphology, lung volume, and heart size are unlikely to be affected.

- Studies prove the presence of a continued sports performance advantage of transgender men over cisgender men despite testosterone suppression therapy. Testosterone level alone is inadequate to assure fairness in competition.
- Combat sports (those involving striking and grappling) are dangerous and have a high risk of injury, which is compounded when opponents are not carefully matched by age, sex, weight, and level of experience and skill.
- Transgender women retain significant anatomic differences and proven physiologic advantages over otherwise matched cisgender women, resulting in mismatched opponents. This increases the risk of serious injury in the cisgender women.
- Transgender men retain significant anatomic differences and proven physiologic disadvantages compared to otherwise matched cisgender men, resulting in mismatched opponents. This increases the risk of serious injury in the transgender men.
- Matching transgender men with cisgender men, or matching transgender women with cisgender women, is a mismatch based on genetic, anatomic, and physiologic differences and must be avoided.