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The Inclusion of Transgender Athletes in Sports

There has been much debate over the inclusion of transgender individuals in sports, especially at the college level due to an individual's lack of knowledge and awareness on the matter at hand. With proper self-education, one may realize the importance of involvement of transgender athletes in sports along with the truth behind their use of hormone therapies and its effect that it has on the body. When looking at statistics in the United States, 0.7% of individuals ages 13 to 17 identify as transgender (150,000) and .6% of adults (1.4 million) identify as transgender.¹ Of those numbers, only 32 transgender athletes have competed openly in college level sports.¹ Since the transgender athlete population is increasing, there is importance in the understanding of terms, treatments, and policies that these individuals must undergo.¹

Terms

The term cisgender describes an individual whose gender identity matches the gender that they were assigned at birth while the term transgender describes an individual whose current gender identity is different from the gender that they were assigned at birth.² For an individual whose sex assigned at birth was male, but who now identifies as a female would be considered a transgender woman, while an individual assigned a female at birth and now identifies as a man would be considered a transgender male.² When a transgender individual begins to live according to their gender identity, this time period may be referred to as gender transitioning.² This transitioning period varies among individuals and can look different for each person. Some may decide to change their clothing, name, and pronouns, or even undergo hormone therapy and other medical procedures to change their physical characteristics to better reflect their identified

gender.² A person's decision to partake in a full medical procedure in addition to changing social characteristics does not change the severity of an individual's transitioning period.² Every individual's transitioning period is different, and one is not more valid than another.²

Medical Treatments

There are many types of treatments offered, all presenting a different outcome. When examining gender affirming therapy, there are two kinds: Feminizing hormone therapy and Masculinizing hormone therapy.³ Feminizing hormone therapy is used to alter one's hormone levels to match their gender identity.³ This begins by taking Aldactone, a male sex hormone blocker, in doses of 100 to 200 milligrams a day to suppress the body's testosterone production.³ After being on Aldactone for 4-8 weeks, you then take doses of estrogen to decrease the production of testosterone in your body and induce feminization.³ Feminizing hormone therapy will begin to change one's body within weeks to months, and the changes include breast development, redistribution of body fat, decreased muscle mass, and decreased facial hair and body hair growth.³

Masculinizing hormone therapy begins once an individual takes the male hormone testosterone.⁴ During this time menstrual cycles and the production of estrogen will be decreased.⁴ Initially, an individual will begin with a low dose and then slowly increase the dosage over time.⁴ This can be done either by a gel applied to the skin, through an injection, or in a pill form.⁴ Masculinizing hormone therapy begins to change the body within weeks and the changes include voice deepening, facial and body hair growth, and increased muscle mass and strength.⁴

For individuals that wish to transition more into their self-identified gender, options such as facial surgery, top surgery or bottom surgery are available.⁵ Facial reconstruction surgery

works to change an individual's cheek bones, chin, jaw, and nose.⁵ Transgender females use this surgery to increase their facial feminization, while transgender males will utilize this surgery to create a more masculine appearance.⁵ Transgender males will go through chest or "top" surgery to remove their breast tissue, while transgender females will go through top surgery to enhance their breast size.⁵ The last type of surgery is bottom surgery, where an individual can reconstruct their genitalia to conform to their self-identified gender.⁵ Transgender men can remove their ovaries and uterus and a penis and scrotum can be constructed while a transgender female can remove their penis and scrotum and construct a vagina and labia.⁵ Since these medical procedures can be costly, and many health insurances do not cover transition-related procedures, not every individual will take part in these types of transitioning.⁵

Challenges Transgender Individuals Face

Although Transgender individuals are increasingly accepted in daily life, they still face severe discrimination and inequality.⁶ When looking at legal rights, although there is a recent United States Supreme Court Decision not allowing for gender discrimination in the world place, there is no law that discusses and supports an individual and their gender identity.⁶ This means that transgender individuals may still face discrimination when applying for a job, eating at a restaurant, or even finding housing.⁶ There are even individual states that refuse transgender individuals from entering public bathrooms corresponding with their gender identity.⁶ The legal system does not protect transgender individuals from discrimination that they may face in everyday life based on their gender identity.⁶

Transgender individuals also face a lack of healthcare coverage. Based on their gender identity, 29% of transgender adults have been denied health care by a doctor.⁶ This shows that the healthcare system fails to meet the needs of the transgender community.⁶ With the increased

ingestion of hormones, there is an increased risk of disease and infection in individuals who decided to implement hormone therapy as part of their transitioning period.⁶ It is important that doctors and medical professionals are able to understand how to properly care for these individuals.⁶ Despite guidelines and data that supports current transgender treatments, transgender patients report that providers lack knowledge for treatments as well as the comfort to treat these individuals.⁶ With the number of transgender individuals increasing, it is important that further education is received as well as taught by institutions to ensure that these individuals are receiving the proper medical attention.⁶

Policies

In 2004, the International Olympic Committee released a policy for inclusion of transgender athletes in the Olympic games.⁷ Referred to as the Stockholm Consensus, this policy allowed for transgender females who had transitioned before puberty to compete under the female category and transgender males who had transitioned before puberty to compete under the male category.⁷ Individuals who had transitioned after puberty were left with a more strict criteria.⁷ The criteria is comprised of both bottom surgery, a legal document recognizing a change of gender, and hormone therapy.⁷ Bottom surgery is comprised of genitalia surgery and gonadectomy, which is the surgical removal of the testes in males or the ovaries in females.⁷ This was recommended to be performed at least two years before competition.⁷ Since then, the International Olympic Committee has updated its policy to a less restrictive one. The new policy, written in 2015, no longer requires gender affirmation surgery or a legal document recognizing the change of gender.⁷ The policy determines the idea that discusses the idea that transgender males may compete in the male category, but transgender females who have declared their identity as females and who have testosterone levels tested as less than 10 nmols per liter for 12

months leading up to a competition in the female category.⁷ If a transgender female athlete does not meet the criteria, then they would not be able to compete in the female category for the following 12 months.⁷

The National Collegiate Athletic Association

The National Collegiate Athletic Association (NCAA) has recently updated the policies on the involvement of transgender individuals in sports, referencing the 2010 version while also adding new requirements.⁸ The new policy states that transgender student athletes must document their testosterone levels at the beginning of their season, then complete another documentation every six months.⁸ During these documentations, the individual's testosterone levels must fall below 10 nmol/L to continue to participate.⁸ Testosterone testing is also required four weeks before an individual's participation in a sports championship.⁸ Overall transgender participation and required testosterone levels will vary depending on the sport.⁸ Regarding the participation of transgender athletes who are undergoing hormonal treatments, the NCAA states that a transgender male who has received a medical exemption from receiving testosterone may continue to compete on a men's team but may no longer compete on a women's team.⁸ For a transgender female who is in the process of taking testosterone blockers, participation on a men's team may still take place, but participation on a women's team may not occur until completing one full year of testosterone suppression treatment.⁸ When looking at transgender student athlete that is not taking hormone treatments, participation as allowed in sex-separated sports and activities as well as sports in accordance with an individual's birth gender.⁸

Title Nine

Title IX's history of non-discrimination based on sex has reshaped opportunities for women, especially in the sports aspect.⁹ Before the 1970's school athletic events focused mostly

on men, leaving women to face exclusion.⁹ Making up only 7% of high school athletes, women exclusion was even more apparent in the college level.⁹ Once title IX became a law, it is a requirement that schools provide teams specifically for females.⁹ It is only under limited circumstances that a male may compete on a female team, or a female may compete on a male team.⁹ Since the creation of this law, there has always been a hesitation regarding the impact that it may lead.⁹ The hesitation lied in the idea that sex segregation over time would lead to a propel of discrimination, further assuming that women would fail if placed in a competition with men.⁹

The importance of title IX validates the need for discrimination in athletics on the basis of sex, but recently this bill has been used as an excuse to create a bias regarding transgender athletes and their participation in sports.¹⁰ Over one hundred and forty bills across the country target transgender children, mostly focusing on the participation of transgender athletes in sports.¹⁰ These bills aim to exclude athletes due to their gender identity, which violates title IX law prohibiting discrimination due to sex.¹⁰ The individuals behind the creation of these bills aim to protect women's sports by excluding the participation of transgender women.¹⁰ Title IX justifies this exclusion since transgender women are biologically male, therefore taking away opportunities from those that title IX was intended to protect.¹⁰

Title IX was established to offer opportunities for women and girls, however title IX can enforce masculine views in sports by operating under the idea that women are a weaker gender, therefor requiring sex-segregated teams as opposed to co-ed teams.¹⁰ The segregation of sports allows for a message stating that men are better athletes, and women are unable to hold their own against males.¹⁰ This idea reinforces masculinization and the idea that biological sex defines an individual's athleticism.¹⁰ The bills that aim to protect women's sports have true intentions to prohibit transgender women from sports.¹⁰ Suggesting that transgender women who are assigned

male at birth are not real women, and instead a treat to real women, is a discrimination against transgender individuals.¹⁰

Misconceptions

Common misconceptions that are brought to the table when discussing transgender females and their participation in sports stem from the idea of feminizing hormones and its effectiveness on a transgender female.¹¹ When looking at feminizing hormone therapy, the medicines that are involved are estrogen, androgen blockers, and sometimes progesterin.¹¹ Estrogen is the primary hormone when discussing female physical traits.¹¹ The presence of this hormone also works to suppress testosterone.¹¹ Androgen blockers work to block testosterone production in the body.¹¹ This will help to minimize male characteristics and allow for the body to begin creating more feminizing effects.¹¹ By taking androgen blockers with estrogen, the body will require less estrogen intake and instead get the same results.¹¹ After 1-3 months of a typical dose of these two medicines, an individual's muscle mass decreases and the body fat increase, especially in the breast and hip area.¹¹ The length of hormone therapy that the NCAA has deemed fit for a transitioning individual on hormone therapy is one year.¹² This was chosen due to the determination that one year on this therapy was a sufficient time for minimization of any advantages that a trans woman had on cisgender females.¹²

It is important to understand that the Olympics have had trans-inclusive policies in place since 2004, but no single transgender athlete has yet to qualify for the position. This shows that transgender individuals have been able to compete in the Olympics but due to the lack of advantages that the body holds, no individual has been able to achieve this.¹³ Multiple states also have laws passed allowing transgender youth to participate in sports teams based on their gender identity since 2013, where there have also been no issues regarding the fact until recently in the

collegiate level.¹³ This notion of transgender women having an advantage during the participation in sports against cisgender women goes along with the idea that testosterone in the body that a transgender woman has increase their ability to win through muscle mass.¹³ Whether a transgender female, or a cisgender female, the body still carries testosterone.¹³ When looking at studies of testosterone in athletes, “levels of athletes do not show any clear consistent relationship between testosterone and athletic performance.”¹³

When looking at hormone therapies, a transgender women’s testosterone level is decreased, and must be at a certain level for over one year in order to participate in college athletics.¹² This level was determined to be set at 10 nmol/L (288.18 ng/dL). When looking at a cisgender male, their levels of testosterone vary from 300-1,000 ng/dL.¹² When comparing the level of testosterone of a transgender woman to a cisgender male, the decrease that a trans woman must go through is obvious. This shows that there is an obvious decrease in testosterone, and that testosterone is no longer an advantage.¹² Although these testosterone levels are not completely aligned with cisgender women, the decrease is significant enough to dramatically effect a trans individuals muscle mass.¹²

In a study looking at how long-term testosterone hormone therapy effects lean body mass, muscular area, muscular strength and hemoglobin, trans women experienced significant decreases in all four parameters.¹² It was shown that after 4 months of hormone therapy, transgender women have hemoglobin levels equivalent to cisgender women.¹⁴ Hemoglobin is a protein located in your red blood cells that carry oxygen to the working muscle.¹⁴ This is important regarding an individual’s sports performance because a higher volume of red blood cells is equal to a higher athletic performance since the muscles are able to receive oxygen at a faster rate.¹⁴ When looking at the muscle mass and body fat changes, after 12 months, studies

have shown that a transgender woman's lean body mass was decreased by 3.0% to 5.4% which shows a decrease in the amount of muscle that the individual has, also affecting force production.¹² Muscular strength was also a factor that was observed through hand grip strength, where the strength in the participants decreased significantly after hormone therapy.¹²

Another common misconception is the idea that biological males show to be more athletic than biological females.¹² A person's genetic makeup and reproductive anatomy are not true indicators of athletic performance.¹² This shows that there is no reason why a transgender woman's physiological characteristics should be related to their athletic performance, let alone be treated differently than a non-transgender woman and their physiological characteristics.¹²

Lia Thomas

Competing in the women's 500-yard freestyle after completion of two years of hormone therapy, and completely following all gender-related policies needed to participate as a transgender woman under NCAA swimming policies, Lia Thomas became the first openly transgender swimmer to win an NCAA Division I championship title.¹⁵ Thomas grew up and began swimming at the age of 5 and in 2017 attended the University of Pennsylvania.¹⁵ Thomas began swimming on the men's team during her freshman year, and by the 2018-2019 season held the record for the top university's men's times in the 500, 1000 and 1650 free.¹⁵ In May 2019, Thomas began transitioning therapy and was able to compete on the women's team in the 2021 season.¹⁵ Thomas lost muscle mass after completing hormone therapy, and her recorded times for the 500-freestyle increased by over 15 seconds from the times received as a male during the beginning of competing on the women's team.¹⁵ As time went on, Thomas decreased her time in the 100 free and 500 free and found herself ranked number one in the 500-yard freestyle.¹⁵ Beating Olympics silver medalist, Emma Weyant, by 1.75 seconds in the national

championships, Thomas found herself to be the winner of the NCAA Division I national championship.¹⁵

There is a public debate on whether Lia Thomas should be able to continue competing on the Women's swim team in the future as she plans to swim at the 2024 summer Olympic trials.¹⁵ Many believe that this creates an unfair environment and takes opportunities away from other swimmers.¹⁵ Women on Thomas' swim team sent anonymous letters to the university asking the NCAA to refrain from taking legal actions which could prevent Thomas from competing in the NCAA championships.¹⁵ Another group of swimmers on Thomas' team state also let out a statement supporting their teammate and her achievements.¹⁵ It is important to see that those who are on her team and are in a position to compete against her are the ones who are showing the support for her throughout her journey.¹⁵ Thomas' teammates believe that Thomas should be able to participate in a safe and welcoming athletic environment.¹⁵ When comparing this view to the idea that the public and media has on the situation, there is a different attitude.¹⁵ New outlets such as Fox news and predominantly conservative media advertise that "women's sports are for women, not men pretending to be women." Protesters even attended the national championship, where there were chants of "Save Women's Sports."¹⁵

It is important to realize that those not in the competition and not swimming are the individuals who present Lia Thomas as a problem. A fellow teammate stated that like anyone else in this sport, Thomas has trained to be where she is and has followed all the rules and guidelines placed upon her, making her deserve every achievement that she accomplishes and deserves to be celebrated for her success instead of being labeled as a cheater due to her identity.¹⁵ Those who are spectators are ones who chose to determine whether or not a Thomas poses as a threat to the other individuals.

The Media

The public attitude towards transgender individuals and their rights are complex. Much of the public's attitude towards transgender rights are based on an individual's demographic and political factors, such as sexual orientation, age, education, and race.¹⁶ Younger, white, liberal individuals with LGBTQ identifications and Democratic views tend to air on the side of pro-gender opinions.¹⁶ Personally knowing individuals of the transgender community also plays a role on an individual's acceptance.¹⁶ When looking at gender, a woman tends to have more of a favorable attitude towards transgender individuals when being compared to a man, and this thought stems from the idea that there has been a long-lasting gender gap, as seen in politics, which influences a large number of individuals.¹⁶ Another form of judgement that an individual carries regarding people of the transgender community stems from the ideology placed by parents and institutional forces such as the school system while growing up.¹⁶

Studies find that those who have interpersonal contact with a member of the transgender community are more likely to reduce their prejudice towards the group.¹⁶ This shows that more exposure to this community will reduce transphobia and the discomfort that people face regarding transgender individuals.¹⁶ Viewing LGBTQ characters on television through shows and movies leads to a greater support for this community due to the fact that an individual's exposure to this community is increasing.¹⁶

Conclusion

The inclusion of transgender athletes in sports is important to ensure that every individual is being respected and supported throughout their journey, especially if their journey may be different than our own. The uniqueness of an individual does not deem them unworthy of achieving what others are able to achieve. As a community in athletics, we must be inclusive and

understand that everyone deserves to be recognized for their dedication to their sports and decisions that they make through their life. With an open mindset, we can ensure that every individual is comfortable with being who they truly are.

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