

## The Transgender Athlete (Part 1)

Dr. Melissa MacDonald

Thank you, Dr. Stark. I saw the whole setup. I have been a licensed DC for almost two years now. I work in Human Performance Center as the Sports Fellow, and I am Primary for the Minnesota Vixen. This topic became important to me, prior to my fellowship, while I was working in the understaffed population clinic at Pillsbury house as a supervisor, and quite a few of our patients there are from the transgender population. In discussing with them where the shortcomings of health care is, and where we're missing the boat taking care of that, that's when this became a topic that was of interest.


Then when joining the Human Performance Center and working with the Minnesota Vixens-- seeing that there is a need even within the professional athlete, and how that is a problem. Rio was the first Olympics that had, in the books, four transgender athletes to participate. I'm going to start off with a video to really emphasize where we are right now. This event-- the powerlifting event occurred in Australia in March of this year.

New Zealand's first transgender woman to compete at the Australian international weightlifting competition pulled off a dominating performance at this year's event, but some of her competitors are saying she had an unfair advantage. The New Zealand Herald says, 39-year-old Laurel Hubbard set four unofficial national records at the event on March 19. The second place finisher lifted about 19 kilograms, or 41 pounds, less than her. Hubbard was born as a male and was a competitive weightlifter before transitioning to a female in her mid-30s. One competitor told New Zealand's 1 NEWS NOW, "we all deserve to be on an even playing field. It's difficult when you believe that you're not."

Others have also publicly questioned if it's fair for Hubbard to compete as a woman. Hubbard passed all necessary qualifications to compete in the event as a female, which includes a testosterone test. [INAUDIBLE]

So this is definitely occurring on the international stage of athletics and is becoming a more prevalent concern even in high schools, so this is something that I can definitely walk into your office-- and some of you are going to be dealing with. First and foremost, I wanted you to see the outline of how this presentation is going to flow this morning. We're going to go over some general terminology definitions. A lot of times, one of the first mistakes as a provider-- is we do not use the pronoun designated by the athlete. We use their real name versus their chosen name, or we use what they consider their dead name. And we just do some micro aggressions, so I really want to make sure that we understand the terminology of how to communicate appropriately with a transgendered individual.

And then just going through the history of gender norms in athletics, there is a history of how we separated sports by the sexes, and this led to the controversy of how does a transgender athlete



join and participate in sports? We will then go through the policy, so the laws dictated from the international to the collegiate level, all the way into the high school level and K-12. Then at the very end, we'll go through clinical consideration and sport-specific injuries to be aware of when working with this population.

Merriam Webster Dictionary-- just a definition is relating to be a person whose gender identity differs from the sex the person had when identified at birth. This is just an umbrella term for anyone who identifies-- or behavior falls beyond the outside of the stereotypical norm. It represents an individual whose gender identity does not match their birth gender. Keep that in mind. They're not synonymous terms.

So when working with them, you'll have biological sex, gender, and sexual orientation. So you could have a biological male, that identifies as a female, that is straight because they date males. Or recently in the news, there is an Oregon couple, where you have a CIS gender-- so born male, identifies as male-- that is gay, whose transgender male husband are now expecting a first biological child. So this is kind of the population and how to take that into consideration.

This is a really nice, kind of cheesy diagram. I found it amusing, but it really helps emphasized that point. So you have the gender unicorn. You have the gender identity, which is whether they see themselves as female, or male, or some other non-binary gender. They may want to stay androgynous and use the pronouns of they and them, versus using he or she, which as a provider can be uncomfortable if you're not used to using those terms-- that have had arguments with individuals discussing that they is not singular, yet I'm telling you not to use it as a singular. They can be both.

Gender expression, whether they're feminine or masculine, could you even have someone that is female, identifies as a woman, yet be masculine in how they [INAUDIBLE] gender? Sex assigned at birth in a female male, or intersex. A lot of times within the intersex population, which we will go over, they don't know that they're separate intersex until, one, they're either competing at a high enough level to require testing, or, two, they are trying to have children and are having issues with conceiving. And they go through testing, and they find out that they are actually intersex.

Physically attracted to just depends, and they're emotionally attracted to. So I found this as a nice, just simple diagram that can kind of explain that out. So, into the history. The purposes for sports. So the modern Olympic time started in 1896. Females weren't initially allowed to compete at that first Olympics. They didn't join until the 1900s.

And this was really centered around physical displays of strength, competition, and there's a risk of injury. So they didn't want women to compete, because that didn't fit with the social norms of the time or what a woman was-- stay at home, take care of the family, cook the dinners, that kind of things. Also at this time, women were really only educated to a high school level, because any education beyond that wasn't needed to be a homemaker.

So in that first Olympics, there were 22 female athletes that competed. It was very small. They did non-aggressive sports. There was a little bit of running-- a little bit of gymnastics. Really in 1924 was when there was a first significant women's program, and that is when we had Dora Ratjen and Stella Walsh come on scene. And those were two prevalent female athletes that didn't quite fit the gender stereotypes. The other issue within the next 1920, or 1936, area of the world games in the Olympics was it was a way for nations to compete while the war was going on, and so there was cheating on both sides in the male division and the female division.

All right, so we have Ratjen and Walsh. So Dora Ratjen, later in the 1950s, came out as Heinrich Ratjen, and there were two theories that were portrayed in the 1950-- well, 1950s, they adamantly said that he was forced, by the Nazi party, to compete as a woman. He placed fourth in the high jump, and he was one of the reasons utilized to institute gender testing in the 1950s and '60s. But more recent research has come out in that he was misgendered at birth, in that he had non-discriminant genitalia. So when he was born, they labeled him as a female. So at the time he competed, he didn't know that he was cheating. And it was a case of human error, so he was raised as a woman and then transitioned later in life.

Walsh, at the time of competition, was the best sprinter, best javelin thrower, and ultimately one of the most dominating female athletes at the time. The controversy came up actually when she died in the 1980s, and she was actually murdered. The autopsy was released-- and that she had ambiguous genitalia, which led to the belief that she cheated when she competed in the 1930s, because they said, oh, look, we had a male competing in the female division, and that is why she dominated. But in the 1930s, there wasn't any controversy considering that. And I found this great video of her actually competing.

[VIDEO PLAYBACK]

- This is John Lee presenting [INAUDIBLE] this week, we [INAUDIBLE] the world's greatest women athletes-- Ms. Walsh and Ms. [INAUDIBLE] Ms. [INAUDIBLE] holds the world record for putting [INAUDIBLE]. There she is doing her stuff, and again in slow motion she throws the stone about 30 feet. Remarkable for a girl of 21. Now watch Ms. [INAUDIBLE] go the distance.

She's broken the world's record three times this year and the best thrower 145 feet. No one is prouder and second [INAUDIBLE] for the Olympic games. Now [INAUDIBLE] Walsh, perhaps another woman athlete as well. There she is throwing a javelin, just one of many American secrets. She has won 9 of 11 events at the [INAUDIBLE] championships. She had [INAUDIBLE] there's [INAUDIBLE] but in this case doesn't stand a chance. [INAUDIBLE] this way [INAUDIBLE]

Now she is traveling at top speed but slowed down by the slow motion camera and is still being chased by that man. A real race against other first-grade women runners, but she beats them all easily. By the way, in case you're interested, she's [INAUDIBLE]

[END PLAYBACK]

I thought that was funny. But as you can see they did not see her as having a gender ambiguity at the time. She was put at a first rate world class female athlete. It didn't come about it until the 1980s when the controversy was [INAUDIBLE] and tried to strip her of all her medals.


The next one was the Devonshire Wonder. This is the same time that Stella Walsh and Dora Ratjen were competing, and this was an instance when they embraced of the same identity. [INAUDIBLE] from 1925 to 1934. competed as Mary, and then, after done competing, went through a series of operations and became Mark. It was really the first positive Press that ever occurred concerning a transgender athlete. He was never forced to return any titles-- and ruled, at the time, that he competed within the rules of the time, and was not trying to cheat the system or cheat the gender boundaries, which was what happened to Stella Walsh and Dora.

Now 1950s rolled around, and sex verification testing started to occur. It all started in the 1940s with the International Amateur Athletic Federation, the IAAF. And they required all female athletes that were going to compete internationally to bring certification of their eligibility to compete, and then this that was later adopted by the Olympic Committee. The issue with this testing is that it didn't dictate who would perform in it, so any country could have any doctor do it. And as long as they brought a birth certificate or a national ID that stated they were female, they weren't allowed to compete in the female division, which led to further verification testing.

So in the 1960s, the certification was deemed untrustworthy, and a new standard of scientific tests were put in place, which consisted of the visual exam. They would have a naked parade, where female athletes would have to parade in front of three doctors to determine whether they were female enough to compete, and they were judged both on primary sexual characteristics and secondary characteristics. There was an instance where an American shot putter heard a sprinter from another country discussing the fact that they were not allowed to compete in this event, because they didn't have large enough breasts to be considered female enough to compete.

Well, when you look at a traditional female athlete, they do not fit the stereotypical norms of an everyday female, so the sex verification testing really were just starting to put a cap on what the athletic level of a female athlete could compete at. Because if anybody was too strong, too fast, and did not fit the stereotypical norms, they were deemed masculine and kicked out. This really puts a stop to having any advancement in female athletes, and puts a cap on how well we can actually perform.

So after the 1960s, late 1960s, they actually started including a manual exam, which a lot of the athletes described as a grope. In the 1970s and '80s, the visual exam was eliminated, and they went straight to the Barr body test. It was done by a buccal swab, and actually tested for the XX and XY Barr bodies to determine whether the athlete was male or female. It was easy to use. It just requires [INAUDIBLE] a microscope. The issue is that there is more than just XX and an XY.



There are phenotypes. We have XXY, and you have XO. And this can have a greater effect on sports performance than just going off of that. Plus, when you look at athlete, the physiology and just [INAUDIBLE] phenotype is more important than their gender. If you look at Michael Phelps, the greatest male swimmer, and you look at how he's built, he was born with extraordinarily long arms, short torso, long legs-- makes him a better swimmer. Should he be eliminated for swimming, because he was born that way, and it's not fair to the other athletes?


Another one is-- there was a male cross-country skier from Switzerland that had a genetic modification that caused him to produce higher amounts of hemoglobin, so he processed oxygen better at higher altitudes. Should he have been excluded simply because he was born that way? And he had a genetic variant that allowed him to perform better in sports. When you get into elite athletes, there are genetic variations that cause them to [INAUDIBLE] the athletes over the everyday athlete.

The Barr body came into controversy in the mid-1980s with a Spanish hurdler, Maria Martinez-- [INAUDIBLE] sorry if I mispronounced it-- failed it. She came up as having an XY. It was then determined that she had androgen insensitivity syndrome. What that means is she does have internal testicles. She just is unable to process testosterone.

So all in the womb, we all start off as female, and then it's the testosterone that allows the male characteristics to develop. Her body does not allow for that testosterone to take effect, so she is a male by the characteristics of having testes and having XY, but only exhibits female characteristics. This should be considered an intersex athlete. When she failed, it was suggested to her that she should get an injury and quietly leave competition. She refused. She competed and won, and they stripped her of her medals. And then she went through an appeals process, and was able to successfully win, and have all her wins reinstated, and change the ruling on how an androgen insensitive athlete was able to compete.

So what are the effects? I've kind of been talking about it when we've been going-- a cognizant upper limit for women's sporting performance. Currently, they've gotten rid of blanket testing. What that means is in Paris, the 1990s, every female athlete that wanted to compete internationally had to have a test confirming their gender identity, and that they were female. In the 1990s, because of the controversy of the test being ineffective, having too many false positives, they eliminated that testing. But they have it, so that if there is any question, such as having a masculine body type, they can enforce testing. Within the male athlete, there is no physiological upper limit, and there is a-- female wants to compete against the men, they can just go compete. There is no difference.

The other thing that took into removing any blanket testing is with all the doping regulations and laws. They were already doing blood tests to ensure testosterone levels and other cheating methods that way, and they didn't feel that doing specific sex verification testing was pertinent. The issue with just relying on doping is there are inherent conditions that can cause increased



testosterone in female athletes such as polycystic ovarian syndrome, or if they have an androgen syndrome.

One factor was the change in culture. In 1992, the IAAF, which was the ones that initially instituted the sex testing, stopped all testing requirements. The Olympics was a little bit-- took a little more time to catch up, and actually the last time they required testing was at the Atlanta Olympics. And at that one in particular, they had eight athletes fail the Barr exam, and then were able, through appeals, to still compete in the Olympics. Although the sex of the athlete can come into question, they-- so any time the athlete's sex comes into question, they can be required to go physiological, genetic, hormonal, and psychological testing. And I have some examples of where this occurred recently in 2010.