Correction: *Cardiopulmonary capacity and muscle strength in transgender women on long-term gender-affirming hormone therapy: a cross-sectional study*

Alvares LAM, Santos MR, Souza FR, *et al*. Cardiopulmonary capacity and muscle strength in transgender women on long-term gender-affirming hormone therapy: a cross-sectional study. *Br J Sports Med* 2022;56:1292–8. doi:10.1136/bjsports-2019–101557

Errors within the content of the article are highlighted below:

Abstract Methods:
First sentence: "A cross-sectional study was carried out with 15 TW (34.2±5.2 years old), 15 cisgender men (CM) and 14 cisgender women (CW)."
Correct: "A cross-sectional study was carried out with 15 non-athlete TW (34.2±5.2 years old), 14 cisgender men (CM) and 13 cisgender women (CW)."

Abstract Results:
First sentence: "VO2peak (L/min) was 2606±416.9"
Correct: VO2peak (ml/min) was 2606±416.9

Abstract Results:
Second sentence is missing: "The VO2peak/fat-free mass (ml/kg/min) was 47.3±5.1 in TW, 53.3±8.3 in CW, and 52.4±5.8 in CM (TW vs CW p>0.05; TW vs CM p>0.05; CW vs CM p>0.05)."

Abstract Results:
Final sentence: "The mean strength (kg) was 35.3±5.4 in TW, 29.7±3.6 in CW and 48.4±6.7 in CM (TW vs CW, p<0.05; TW vs CM, p<0.0001)."
Correct: "The mean strength (kg) was 35.3±5.4 in TW, 29.7±3.6 in CW and 48.4±6.7 in CM (TW vs CW, p<0.05; TW vs CM, p<0.0001); however, adjusted for fat-free mass there was no difference between TW (0.6±0.1) and CW (0.7±0.9; p>0.05)."

Abstract Conclusion:
First sentence: "CPC in non- athlete TW showed an intermediate pattern between that in CW and CM."
Correct: "Absolute CPC in non-athlete TW showed an intermediate pattern between that in CW and CM; however, relative CPC adjusted for fat-free mass showed no difference between TW and CW or CM."

Abstract Conclusion:
Last sentence: "The mean strength and VO2 peak in non-athlete TW while performing physical exertion were higher than those in non-athlete CW and lower than those in CM."
Correct: "Similarly, the mean strength in non-athlete TW was higher than those in non-athlete CW but not when adjusted for fat-free mass."

What This Study Adds
Current: "These are the first scientific data on the cardiopulmonary capacity of transgender women. The mean VO2 peak of non-athlete transgender women while performing physical exertion was higher than that of non-athlete cisgender women (p<0.05) and lower than that of cisgender men (p<0.0001)."
Correct: "These are the first scientific data on the cardiopulmonary capacity of transgender women undergoing long-term gender-affirming hormone therapy. The absolute mean VO2 peak of non-athlete transgender women while performing physical exertion was higher than that of non-athlete cisgender women and lower than that of cisgender men, but there were no differences in relative VO2 peak when adjusted for fat-free mass."

How This Study Might Affect Research, Practice, or Policy
First bullet: "These findings could inform policy and help in decisions about the participation of transgender women in sporting activities."
Correct: "This study was in non-athletes and findings may not apply to policy decisions about the participation of transgender women in sporting activities."

Table 2. Comparative analysis of metabolic aspects, cardiopulmonary capacity and strength among the transgender woman, cisgender woman and cisgender man groups

	Transgender women (n=15)	Cisgender women (n=13)	Cisgender men (n=14)	Comparison	P
Metabolic aspects					
VO2 at rest (ml/min)	328.7 (SD±75.1)	240.1 (SD±31.4)	395.8 (range 229–956)	TW x CW	**
				TW x CM	NS
				CW x CM	**
VO2 AT (ml/min)	1686 (range 1144–1786)	1309 (SD±256.6)	1864 (SD±4417)	TW x CW	NS
				TW x CM	NS
				CW x CM	**
VO2 RCP (ml/min)	2313 (SD±431.0)	1914 (SD±351.2)	2916 (SD±562.9)	TW x CW	*
				TW x CM	**
				CW x CM	****
VO2 Peak (ml/min)	2606 (SD±416.9)	2167 (SD±408.8)	3358 (SD±436.3)	TW x CW	*
				TW x CM	****
				CW x CM	****
VO2 Peak/Wgt. (ml/kg/min)	33.5 (SD±4.7)	35.7 (SD±4.7)	42.0 (range 32.3–49.2)	TW x CW	NS
				TW x CM	**
				CW x CM	**
VO2 Peak/FFM (ml/kg/min)	47.3 (SD±5.1)	53.3 (SD±8.3)	52.4 (SD±5.8)	TW x CW	NS
				TW x CM	NS
				CW x CM	NS
Cardiopulmonary aspects					
Peak O2 pulse (ml/Beat)	14.2 (SD±2.1)	11.8 (SD±2.0)	18.5 (range 12.2–22.4)	TW x CW	*
				TW x CM	****
				CW x CM	****
Maximum HR (bpm)	185.7 (SD±11.6)	177.2 (SD±6.1)	181.1 (range 164–189)	TW x CW	*
				TW x CM	NS
				CW x CM	NS
% Maximum HR predicted per age	103.1 (SD±7.3)	96.5 (SD±3.2)	99.2 (SD±3.4)	TW x CW	**
				TW x CM	NS
				CW x CM	NS
VE (BTPS) (L/min)	102.3 (SD±16.2)	87.4 (SD±10.2)	128.8 (SD±18.7)	TW x CW	NS
				TW x CM	**
				CW x CM	****
Strength					
				TW x CW	*
Mean strength (kg)	35.3 (SD±5.4)	29.7 (SD±3.6)	48.4 (SD±6.7)	TW x CM	****
				CW x CM	****
				TW x CW	NS
Mean strength/FFM	0.6 (SD±0.1)	0.7 (SD±0.9)	0.7 (SD±0.1)	TW x CM	*
				CW x CM	NS

Discussion:

Cardiometabolic aspects

Second sentence: the word "unprecedented" was removed.

Second paragraph: "Studies in sports physiology demonstrate an average difference of 25%–35% VO2peak between CM and CW,[4] data that were corroborated by our results. For the first time in literature, we present the VO2peak value of TW, which was intermediate between the values of the CW and CM groups."

Correct: "Studies in sports physiology demonstrate an average difference of 25%–35% VO2peak between CM and CW,[4] data that were corroborated by our results. For the first time in literature, we present the absolute VO2peak value of TW, which was intermediate between the values of the CW and CM groups. Notably, relative VO2 peak differences between TW and CW were not present when adjusted for FFM or body weight."

Conclusion:

First paragraph: "In this small cohort of non-athlete TW, who were previously exposed to male pubertal development and underwent long-term oestrogen therapy, we identified higher grip

strength and VO2 peak levels than in non-athlete CW, but these same parameters were lower compared with non-athlete CM."

Correct: "In this small cohort of non-athlete TW, who were previously exposed to male pubertal development and underwent long-term oestrogen therapy, we identified higher absolute grip strength and VO2 peak levels than in non-athlete CW, but these same parameters were lower compared with non-athlete CM. However, when adjusting for FFM, there were no differences in relative VO2 peak or strength between TW and CW."

Figures (2 and 3): Settings: VO2 measurement units.

Figure 2:

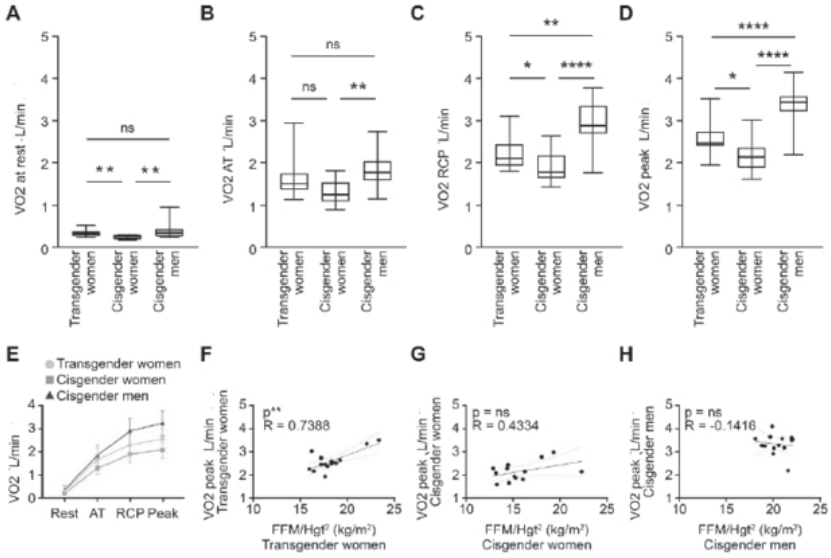
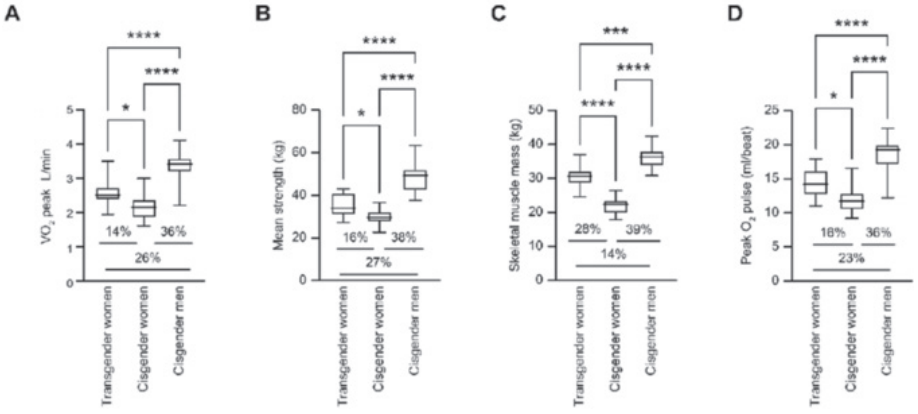


Figure 3:



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