

*Shani Wilson, PA-C  
Elijah Salzer, DMSc, PA-C, NYSAFE, C-EFM  
Diane Bruessow, PA-C*

# Transgender Medicine: Top 10

AAPA Conference | Houston, TX | May 21, 2024 3:30p

1

## Attestation

By viewing, attending or participating in this session attests that you are here to learn how to support access to gender-affirming care.

By viewing, attending, or participating in this session, you agree not to audio or video record, photograph, or transmit in any way any portion of this session content, not limited to information about the speakers, attendees, or content discussed.

2

## Disclosures

Diane Bruessow  
US Professional Association for Transgender Health (USPATH), board of directors

Elijah Salzer  
LGBT PA Caucus, board of directors

Shani Wilson  
LGBT PA Caucus, board of directors

3

There is a growing body of evidence supporting transgender and nonbinary (TNB) health across the lifespan that is relevant to clinical practice.

This session will help attendees navigate barriers to quality care, including unreliable information perpetuated in the media and political discourse that directly influences PA practice.

The speakers will introduce current publications from the medical literature that respond to questions commonly asked by our patients, address prior knowledge gaps in TNB health, and highlight new developments published after the most recent guidelines.

The literature will be explored through the lens of evidence-based medicine (EBM), bioethics, and/or intersectionality.

4

## Learning Objectives

At the conclusion of this session, participants should be able to:

- Apply current knowledge to the care of transgender and nonbinary patients across their lifespan
- Describe how the literature informs treatment goals for the care of transgender and nonbinary patients
- Identify the transgender and nonbinary patients that would benefit most from the current medical knowledge

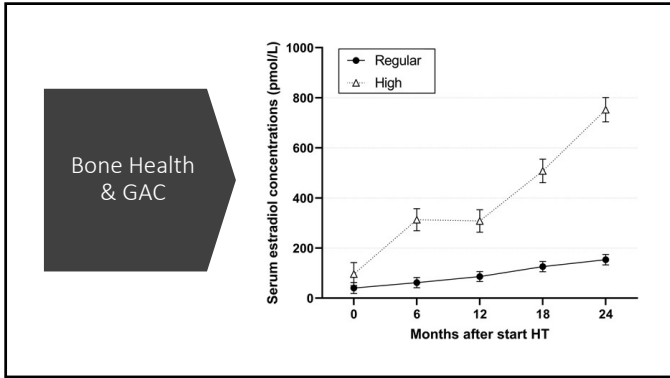
5

Kidney  
Function &  
GAC

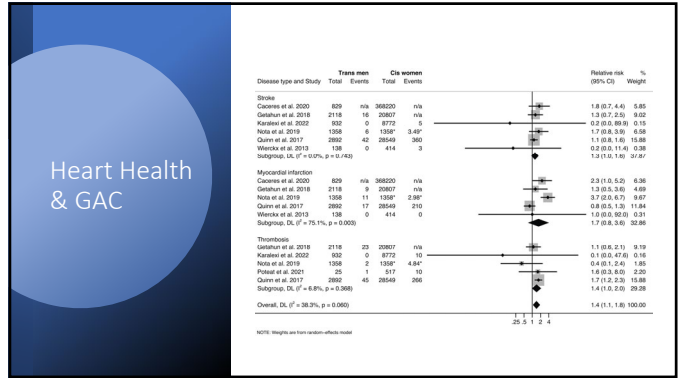
### What is the effect of gender-affirming hormone therapy on kidney function?

Zaky, Khalida, Sarah Curtis, Thomas Ferguson, et al. The Effect of Gender-Affirming Hormone Therapy on Measures of Kidney Function. *CJASN* 16: 1125-1134 (2023). Visual Abstract by Danya Rajan, MD, PhD.

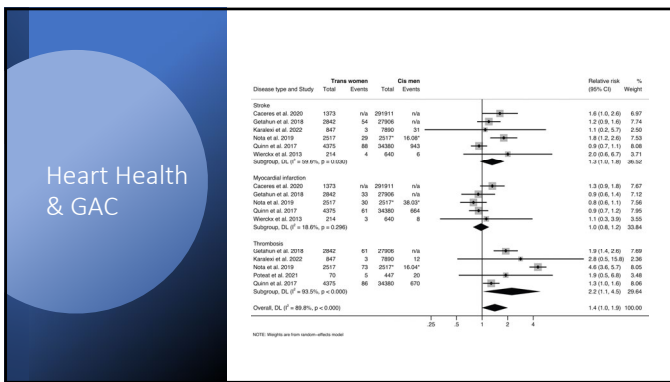
6



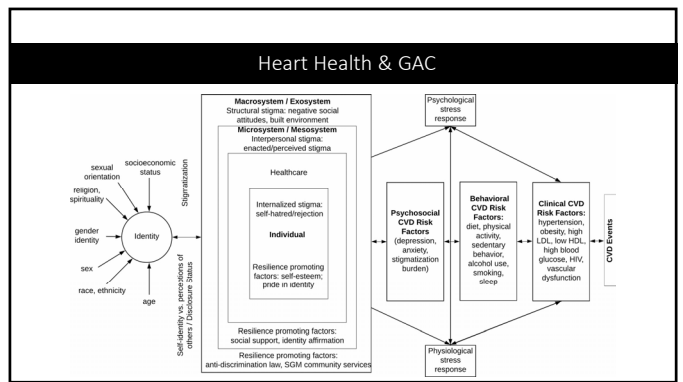
7



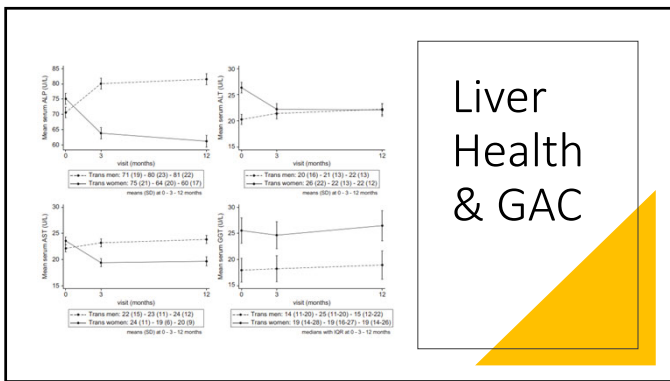
8



9



10

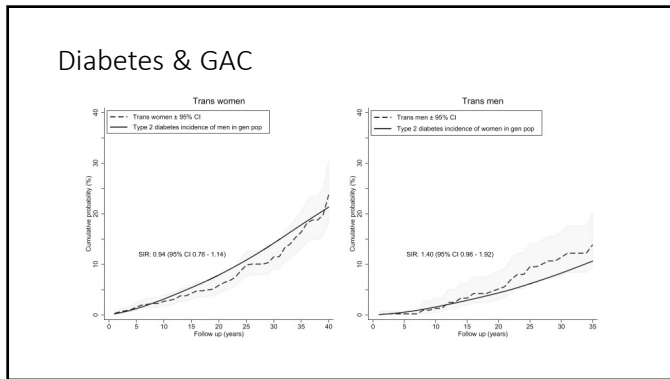


11

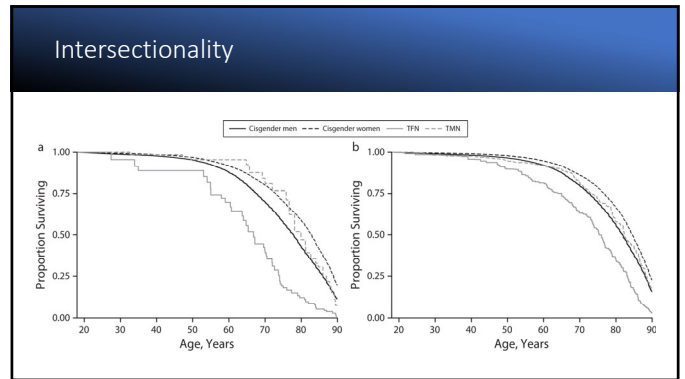
### Breast Cancer & GAC

- FtM individuals had a higher risk of developing breast cancer in comparison to cisgender men [standardized incidence ratio (SIR) = 63.4; 95% confidence interval (CI), 32.2–124.9] but a lower risk than cisgender women (SIR = 0.42; 95% CI, 0.07–2.41).
- Similarly, MtF individuals were at higher risk of developing breast cancer in comparison to cisgender men (SIR = 22.5; 95% CI, 5.54–91.8) and at lower risk than cisgender women (SIR = 0.30; 95% CI, 0.22–0.42).

12



13



14

### 20YR Data Puberty Blockers

- Of all 266 AMAB who started GnRHa at our center, 9 (3.4%) discontinued treatment.
- Six (2.3%) ceased treatment because of abating GD.
- In 2 AMAB (0.8%), GnRHa treatment ended due to psychological or social issues hindering transition.
- In 1 individual (0.4%), GnRHa was discontinued due to compliance issues.
- Of all 616 AFAB, 5 (0.8%) broke off GnRHa. In 3 (0.5%), remission of GD led to discontinuation.
- In 2 (0.3%), GnRHa was suspended due to compliance issues.
- A temporal trend in people stopping GnRHa was not observed.

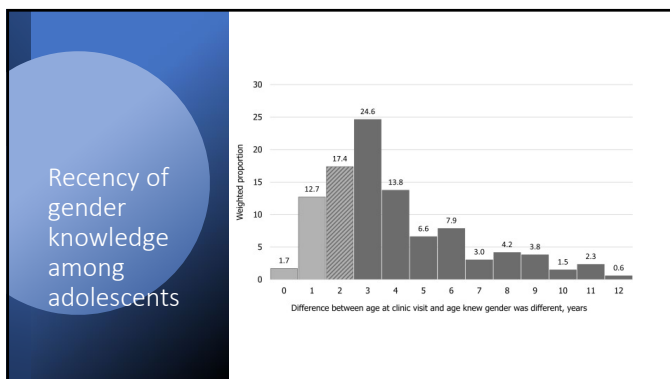
15

### TGY Supported In Their Identities

	Transgender (n = 73)	Controls (n = 73)	Siblings (n = 49)	P
Depression	50.1	48.4	49.3	.320
Anxiety	54.2 <sup>a</sup>	50.9	52.3	.057
Depression by gender <sup>b</sup>				.979 <sup>c</sup>
Natal boys	49.8 (trans-girls)	48.0	48.9	
Natal girls	50.8 (trans-boys)	48.5	49.9	
Anxiety by gender				.664 <sup>c</sup>
Natal boys	53.7	51.1	52.8	
Natal girls	55.3	50.8	51.5	

- <sup>a</sup> Anxiety and Depression T scores by Sex and Sample
- <sup>b</sup> \*This is the only value that is significantly above the national average (50), although it is still substantially below the clinical (>63) or even preclinical (>60) ranges
- <sup>c</sup> \*Transgender children who are natal boys and live with a female gender presentation are often called transgender girls or trans-girls; transgender children who are natal girls living with a male gender presentation are often called transgender boys or trans-boys.
- <sup>d</sup> \*Significance value of interaction between natal sex and group.

16



17

### Citations

Krupka E, Curtis S, Ferguson T, Whitelock R, Askin N, Millar AC, Dahl M, Fung R, Ahmed SB, Tangri N, Walsh M, Collister D. The Effect of Gender-Affirming Hormone Therapy on Measures of Kidney Function: A Systematic Review and Meta-Analysis. *Clin J Am Soc Nephrol*. 2022 Sept;7(9):1309-1315. doi: 10.2215/CJN.01890222. Epub 2022 Aug 16. PMID: 35977728; PMCID: PMC9625103.

Jue JS, Weinzreich L, Alameddine M. Comment: A Retrospective Analysis of Creatinine-Based Kidney Function With and Without Sex Assigned at Birth Among Transgender Adults. *Ann Pharmacother*. 2023 Apr;57(4):503-504. doi: 10.1177/10600280221111794. Epub 2022 Jul 19. PMID: 35850547.

van Zijden LM, Weijjes CM, van Diemen JJK, Thij A, den Heijer M. Cardiovascular disease in transgender people: a systematic review and meta-analysis. *Eur J Endocrinol*. 2024 Feb;119(2):133-154. doi: 10.1093/euradv/ekad010. PMID: 38302717.

Poteat TC, Rich AJ, Jiang H, Wirtz AJ, Radix A, Reiser SL, Harris AB, Cannon CM, Lesko CR, Malik M, Williams J, Mayer KH, Streed CG Jr. Cardiovascular Disease Risk Estimation for Transgender and Gender-Diverse Patients: Cross-Sectional Analysis of Baseline Data From the LITE Plus Cohort Study. *AJPM Focus*. 2023 Mar 25;3(3):100296. doi: 10.1016/j.ajpmf.2023.100296. PMID: 37790560; PMCID: PMC10546528.

Quintela-Castro FCA, Revilla YSS, Alves DB, Chiepe L, Nascimento LS, Chiepe KCMB, Barrolos RM, Costa BM, Enriquez-Martinez DG, Rossini IV, Belletini-Santos T. Lipid profile and risk of cardiovascular disease in adult transgender men receiving cross-sex hormone therapy: a systematic review. *Nutr Rev*. 2023 Sep 11;81(10):1310-1320. doi: 10.1093/nutrit/nuad003. PMID: 3677932

Streed CG Jr, Beach LR, Caceres BA, Dowden NL, Moreau RL, Mulheirlee M, Poteat T, Radix A, Reiser SL, Singh V. American Heart Association Council on Peripheral Vascular Disease, Council on Arteriosclerosis, Thrombosis and Vascular Biology, Council on Cardiovascular and Stroke Nursing, Council on Cardiovascular Radiology and Intervention, Council on Hypertension, and Stroke Council. Assessing and Addressing Cardiovascular Health in People Who Are Transgender and Gender Diverse: A Scientific Statement From the American Heart Association. *Circulation*. 2021 Aug 10;144(6):e138-e148. doi: 10.1161/CIR.0000000000001003. Epub 2021 Jul 8. Erratum in: *Circulation*. 2021 Aug 10;144(6):e150. PMID: 34235936; PMCID: PMC8383087.

18

## Citations

Pothuri VS, Anzelmo M, Gallaher E, Ogunlana Y, Alabadi-Wahle S, Tan B, Crippin JS, Hammill CW. Transgender Males on Gender-Affirming Hormone Therapy and Hepatobiliary Neoplasms: A Systematic Review. *Endocr Pract*. 2023 Oct;29(10):822-829. doi: 10.1016/j.eprac.2023.05.011. Epub 2023 Jun 5. PMID: 37286102.

Hashemi L, Zhang Q, Getahun D, Jajuja GK, McCracken C, Pisezna J, Roblin D, Silverberg MJ, Tangpricha V, Vupputuri S, Goodman M. Longitudinal Changes in Liver Enzyme Levels Among Transgender People Receiving Gender Affirming Hormone Therapy. *J Sex Med*. 2021 Sep;18(9):1662-1675. doi: 10.1016/j.jsxm.2021.06.011. Epub 2021 Aug 5. PMID: 34366264; PMCID: PMC8444147.

Stangl TA, Wiepjes CM, Defreyne J, Conemans E, D Fisher A, Schreiner T, T'Sjoen G, den Heijer M. Is there a need for liver enzyme monitoring in people using gender-affirming hormone therapy? *Eur J Endocrinol*. 2021 Apr;184(4):513-520. doi: 10.1530/EJE-20-1064. PMID: 33524005.

Corso G, Gandini S, D'Ecclesio O, Mazza M, Magnoni F, Veronesi P, Galimberti V, La Vecchia C. Risk and incidence of breast cancer in transgender individuals: a systematic review and meta-analysis. *Eur J Cancer Prev*. 2023 May 1;32(3):207-214. doi: 10.1097/CEJ.0000000000000784. Epub 2023 Feb 16. PMID: 36789830

van Velzen D, Wiepjes C, Nota N et al. Incident diabetes risk is not increased in transgender individuals using hormone therapy. *J Clin Endocrinol Metab*. 2022 Apr 19;107(5):e2000-e2007. doi: 10.1210/clinem/dgab934. PMID: 34971391; PMCID: PMC9016430.

19

## Citations

van der Loos MATC, Klink DT, Hannema SE, Bruinsma S, Steensma TD, Kreukels BFC, Cohen-Kettenis PT, de Vries ALC, den Heijer M, Wiepjes CM. Children and adolescents in the Amsterdam Cohort of Gender Dysphoria: trends in diagnostic- and treatment trajectories during the first 20 years of the Dutch Protocol. *J Sex Med*. 2023 Feb 27;20(3):398-409. doi: 10.1093/jsmed/qdæ029. PMID: 36763938

Olson KR, Durwood L, DeMeules M, McLaughlin KA. Mental Health of Transgender Children Who Are Supported in Their Identities. *Pediatrics*. 2016 Mar;137(3):e20153223. doi: 10.1542/peds.2015-3223. Epub 2016 Feb 26. Erratum in: *Pediatrics*. 2018 Aug;142(2). PMID: 26921285; PMCID: PMC4771131.

Bauer GR, Lawson ML, Metzger DL; Trans Youth CAN! Research Team. Do Clinical Data from Transgender Adolescents Support the Phenomenon of "Rapid Onset Gender Dysphoria"? *J Pediatr*. 2022 Apr;243:224-227.e2. doi: 10.1016/j.jpeds.2021.11.020. Epub 2021 Nov 16. PMID: 34793826.

20