The “Year” in Review: Mental Health

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HAMBURG, GERMANY

Aim

A synoptic review of notable new literature
on mental health in transgender care, with focus on articles with
relevance for healthcare decision-making

Methods

Broad systematic search for articles in English using Pubmed

Methods

- Search strategy:
  - Transgender/gender diverse, gender incongruence/dysphoria etc
  - Mental health outcomes etc
  - Between January 2023 to August 2025
  - Adults
  - Full-text availability

- Grouping the 1500 articles to Thematic categories
- Selection of representative articles within each Theme

Results

Themes

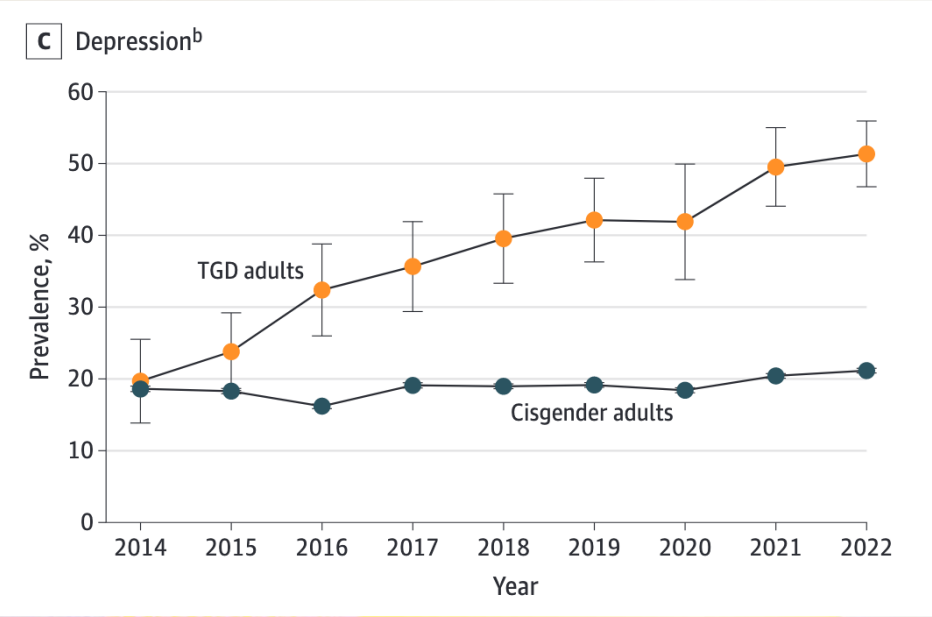
- Mental health disparities, their correlates and minority stress
- Healthcare systems and access to care
- (Outcome measures)
- Mental health outcomes with gender affirming treatments
- Psychological interventions for gender dysphoria
- Detransition and regret

Mental health disparities

↑ prevalence of mental health conditions in TGD people

↑ mental health disparities over time (Australia and the US)

More studies address health disparities and needs of older TGD people

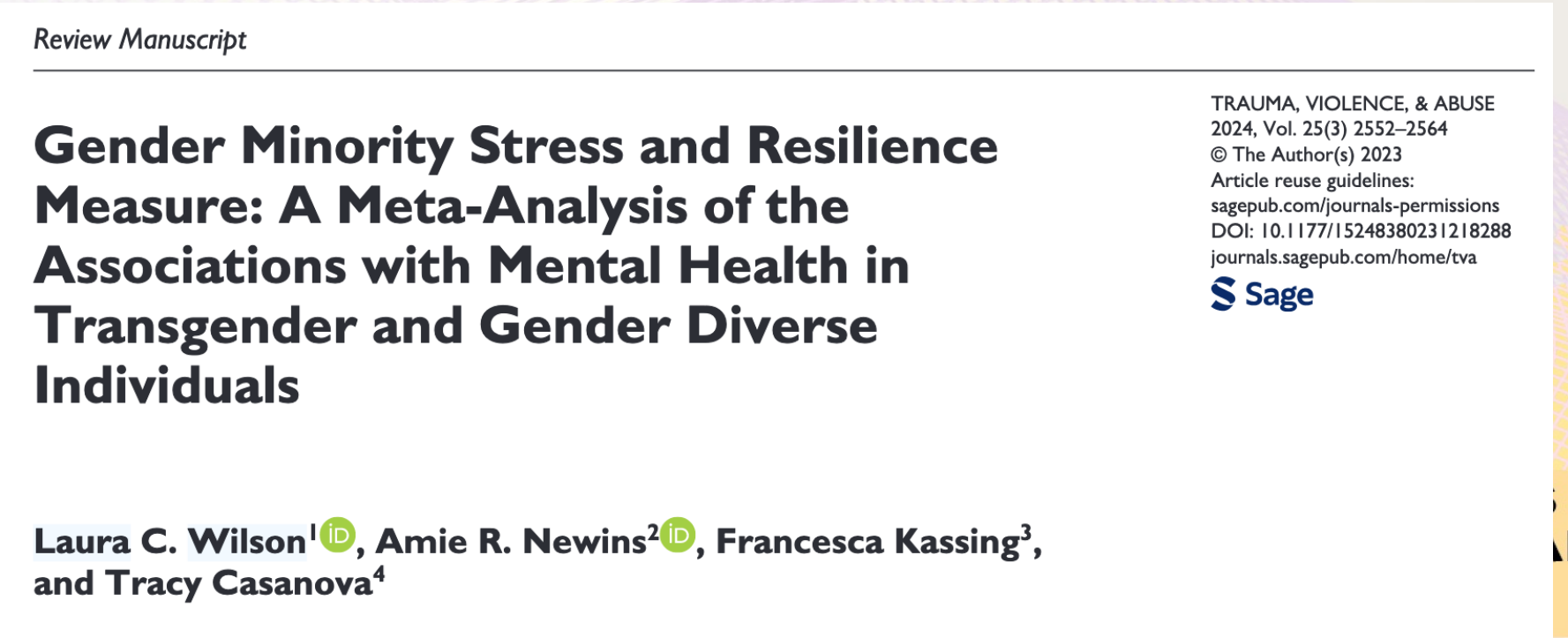


(Scheim et al., 2024, Lu et al., 2025, Glintborg et al., 2025, Saxby et al., 2025, Liu et al., 2024, Brady et al., 2024)

Mental health disparities – minority stress

↑ depression and anxiety with increased minority stress

↓ depression and anxiety with increased resilience



Review Manuscript

Gender Minority Stress and Resilience Measure: A Meta-Analysis of the Associations with Mental Health in Transgender and Gender Diverse Individuals

Laura C. Wilson[1], Amie R. Newins[2], Francesca Kassing[3], and Tracy Casanova[4]

TRAUMA, VIOLENCE, & ABUSE
2024, Vol. 25(3) 2552–2564

DOI: 10.1177/15248380231218288
journals.sagepub.com/home/tva
Sage

Mental health disparities – structural stigma

↓ gender affirming interventions (GAI) with higher structural stigma

↓ depression and ↑ life satisfaction with GAI

- mediated through ↑ identity concealment

International Journal of Transgender Health

ISSN: 2689-5269 (Print) 2689-5277 (Online) Journal homepage: www.tandfonline.com/journals/wijt21

Structural stigma, gender-affirming interventions, and identity concealment as determinants of depression and life satisfaction among trans adults in 28 European countries

Berk C. Ünsal, Yagmur Ar-Karci, Zsolt Demetrovics & Melinda Reinhardt

Mental health disparities – summary

- Increasing support for mental health disparities among TGD people, and concerning trends with increasing disparities over time
- Minority stress is associated with depression and anxiety
- Both proximal and distal stressors are important for mental health outcomes

Healthcare systems and access to care

- 1/3 of TGD people not disclosing their mental health diagnoses incl. ASD during assessment (Adams et al., 2025)
- TGD people experience stigma and mistreatment while under psychiatric inpatient care (Clark et al., 2025)
- Misgendering and/or deadnaming on discharge letters were common (22%) in the ED setting (Symes et al., 2025)
- Possible to enhance effectiveness of post-violence health services for TGD people (Kaptchuk et al., 2025)

Healthcare systems and access to care

AFFIRM framework (Quint et al., 2025)

(1) Affirms in individual interactions
(2) Flexible and accessible
(3) Fights systemic oppression
(4) Interacts with community
(5) Retains patients in care
(6) Multidisciplinary

Healthcare systems and access to care

WPATH vs IC

- More psychiatric diagnoses
- Longer assessments for hormones
- Fewer non-binary people

Transgender Health
Volume 8, Number 2, 2023

DOI: 10.1089/trgh.2021.0069

Open camera or QR reader and scan code to access this article and other resources online.

ORIGINAL ARTICLE

Gender-Affirming Hormone Therapy for the Trans, Gender Diverse, and Nonbinary Community: Coordinating World Professional Association for Transgender Health and Informed Consent Models of Care

Pravik Solanki,[1] David Colon-Cabrera,[2,3] Chris Barton,[1] Peter Locke,[4] Ada S. Cheung,[5] Cassandra Spanos,[5] Julian Grace,[4] Jaco Erasmus,[3] and Riki Lane[1,3,*]

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Healthcare systems and access to care

- Healthcare is not always a safe and inclusive space for TGD people
  - This applies for general, mental and transgender healthcare
- Initiatives to improve healthcare systems, like AFFIRM-framework
- Emerging research on different models of care like WPATH and IC

Mental health outcomes with GAI

Mental health outcomes with GAI

Published studies until May 2022

6 qualitative studies (N=171, range: 10-67)

21 cross-sectional (N=37,913, range: 42-21598)

19 prospective cohorts (N= **3491**, range: 14-898) incl.

5 studies with cisgender controls

3 studies with TGD untreated controls

nature human behaviour

Article

https://doi.org/10.1038/s41562-023-01605-w

A systematic review of psychosocial functioning changes after gender-affirming hormone therapy among transgender people

Received: 28 February 2022

Accepted: 12 April 2023

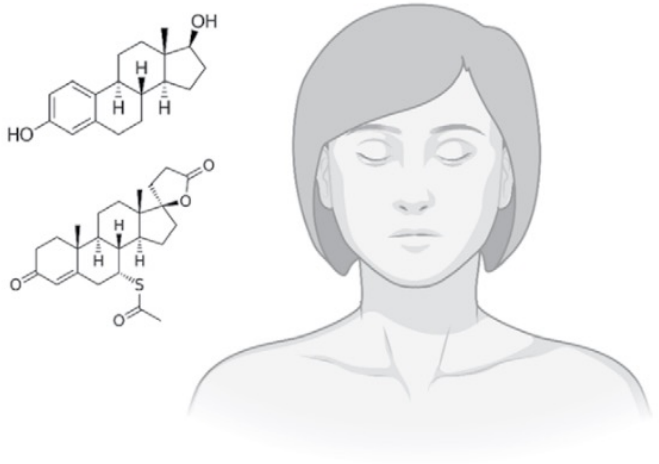
Published online: 22 May 2023

David Matthew Doyle [1], Tom O. G. Lewis [2] & Manuela Barreto [2]

This systematic review assessed the state and quality of evidence for effects of gender-affirming hormone therapy on psychosocial functioning.

Mental health outcomes with GAI

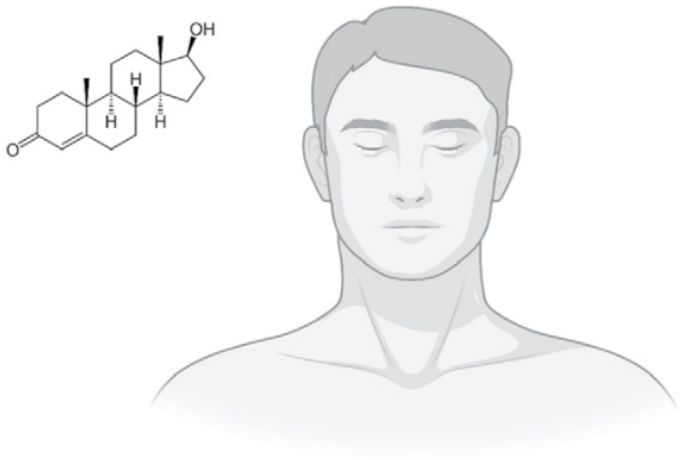
Feminizing hormone therapy



Stronger evidence
↓ Psychological distress
↓ Depressive symptoms

Weaker evidence
↑ Quality of life
↑ Emotional imbalances
↑ Emotional expressiveness

Masculinizing hormone therapy



Stronger evidence
↓ Psychological distress
↓ Depressive symptoms

Weaker evidence
↓ General anxiety symptoms
↓ Social anxiety symptoms
↑ Quality of life
↑ Affective dampening
↑ Anger expression

nature human behaviour

Article

https://doi.org/10.1038/s41562-023-01605-w

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Mental health outcomes with GAI

Published studies until October 2022

30 prospective cohorts

GAHT:

↓ gender dysphoria

↓ depression, suicidality

↑ body satisfaction

mixed results on anxiety, self esteem and QoL

GAS

↓ gender dysphoria

↓ depression

↑ body satisfaction

↑ psychological and social rel. domains of QoL

SPECIAL ARTICLE

Royal Australasian College of Surgeons

Do hormones and surgery improve the health of adults with gender incongruence? A systematic review of patient reported outcomes

Kelsey Ireland *, Madeleine Hughes† and Nicola R. Dean†‡

*Plastic Surgery Department, Christchurch Hospital, Christchurch, New Zealand
†Flinders University, Adelaide, Australia and
‡Plastic Surgery Department, Flinders Medical Centre, Adelaide, Australia

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Mental health outcomes with GAI - hormones

RCT on immediate initiation of testosterone treatment vs no treatment

Follow-up at 3 months (same as waiting list for treatment)

- ↓ gender dysphoria
- ↓ depression
- ↓ suicidality (from 52% → 5%)

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Mental health outcomes with GAI - hormones

↑ self rated quality of life (EQ-VAS)

JAMA Network | Open

Research Letter | Diabetes and Endocrinology

Testosterone and Quality of Life in Transgender and Gender-Diverse Adults Seeking Masculinization

A Secondary Analysis of a Randomized Clinical Trial

Brendan J. Nolan, PhD; Sav Zwickl, PhD; Peter Locke; Ada S. Cheung, PhD

Mental health outcomes with GAI - hormones

- 3592 TGD participants (IC clinics)
- Follow-up: 2016-2019
- Data from EHR (LEGACY study)
- 20000 observations

JAMA Network | Open

Original Investigation | Public Health

Gender-Affirming Hormone Therapy and Depressive Symptoms Among Transgender Adults

Sari L. Reisner, ScD, MA; David R. Pletta, PhD, MPH; Alex S. Keuroghlian, MD, MPH; Kenneth H. Mayer, MD; Madeline B. Deutsch, MD, MPH
Jennifer Potter, MD; Jaclyn M. W. Hughto, PhD, MPH; Alexander Harris, MPH; Asa E. Radix, MD, PhD, MPH

Patients on GAHT had a 15% lower risk of moderate to severe depressive symptoms compared to those without GAHT after adjusting for confounding factors

Mental health outcomes with GAI - surgery

3134 patients with GD and GAS

Mostly chest masculinization (71%)

Follow-up up to 10 years

Proper control group of TGD

people without treatment

PLASTIC SURGERY FOCUS: SPECIAL TOPICS

Gender-Affirming Surgery Improves Mental Health Outcomes and Decreases Antidepressant Use in Patients with Gender Dysphoria

Kilmer, Lee H. MD; Chou, Jesse MD; Campbell, Christopher A. MD; DeGeorge, Brent R. MD, PhD; Stranix, John T. MD

Author Information

Plastic and Reconstructive Surgery 154(5):p 1142-1149, November 2024. | *DOI:* 10.1097/PRS.0000000000011325

↓ mental health conditions, suicidal ideation/attempts

↓ SSRI/SNRIs

Mental health outcomes with GAI - FFS

- Promising results for psychosocial outsomes
- Preoperative depression predicts FFS psychosocial outcomes

ORIGINAL ARTICLE

Effect of Gender-affirming Facial Feminization Surgery on Psychosocial Outcomes

Rachel M. Caprini, BS, Michelle K. Oberoi, MD,* Dillon Dejam, BS,* Candace H. Chan, BS,* Hi'ilani M.K. Potemra, MS,* Katarina B.J. Morgan, D.D.S,† Amy Weimer, MD,‡§ Mark S. Litwin, MD, MPH,§‖¶# Abie H. Mendelsohn, MD,§** and Justine C. Lee, MD, PhD*§✉*

Annals of Surgery Publish Ahead of Print
DOI:10.1097/SLA.0000000000006489

Patient-Reported Preoperative Depression as a Predictor of Psychosocial Outcomes After Gender-Affirming Facial Feminization Surgery

Jeremiah M. Taylor, BS[1]; Nghiem H. Nguyen, BA[1]; Kelly X. Huang, BS[1]; Miles J. Pfaff, MD, MHS[2]; Kavitha Ranganathan, MD[3]; Rebecca C. Rada, DO, MBA, MS[4,9]; Mark S. Litwin, MD, MPH[5-7,9], Marco A. Hidalgo, PhD[8,9]; Justine C. Lee, MD, PhD[1,9]

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Mental health outcomes with GAI - summary

- Both metaanalyses and new studies confirm positive effects of GAI on gender dysphoria, depression, suicidality
- Some promising results for FFS
- The research field and available evidence would benefit with more properly controlled studies and homogenous outcome measures

Psychological interventions

- RCT with 177 TGD people living in remote areas in northern Germany
- 4 months follow-up
- significant in averting worsening psychological distress in service users, outperforming the wait list control group.
- From a societal perspective, i2TransHealth was unlikely to be cost-effective

Effect of the i²TransHealth e-health intervention on psychological distress among transgender and gender diverse adults from remote areas in Germany: a randomised controlled trial

Timo O Nieder, Janis Renner, Susanne Sehner, Amra Pepić, Antonia Zapf, Martin Lambert, Peer Briken, Arne Dekker**

Psychological interventions

- Aim to adress minority stress and improve psychological health
- Feasibility, acceptability and prel. efficacy for TGD adults in Romania

- “LGBTQ-affirmative CBT shows feasibility, acceptability, and preliminary efficacy among TGE individuals living in Romania, with promise for other high-stigma contexts.”

Psychological interventions - summary

- Promising intervention studies to adress minority stress and improve mental health and resilience

Detransition and regret (qualitative)

- Some participants experienced their care as lacking the opportunity to clarify their individual treatment needs prior to undergoing medical/surgical transition.
- Decisional regret emerged as a theme alongside dissatisfaction with providers' "informed consent" procedures, such that participants felt they would have benefitted from a more robust discussion of risks/benefits of interventions prior to treatment decision-making.
- Overall, participants recommended an individualized approach to care that is inclusive of mental healthcare supports.


PLOS ONE

RESEARCH ARTICLE

Exploring the gender care experiences and perspectives of individuals who discontinued their transition or detransitioned in Canada

Kinnon R. MacKinnon[1,2*], Wren Ariel Gould[2], Gabriel Enxuga[1], Hannah Kia[3], Alex Abramovich[2,4], June S. H. Lam[2,5], Lori E. Ross[2]

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Detransition and regret (qualitative)

- Participants' decision to transition was influenced by
  - others who suggested or encouraged them to transition,
  - gender dysphoria,
  - body image concerns, and
  - poor mental health.
- Participants reported
  - external e.g. negative experiences with health service providers) and
  - internal (e.g. regret regarding insufficient exploration) stressors with being transgender.
- Outcomes of detransitioning included
  - relational change, increased self-acceptance, improved well-being, and loss of trans community.

Detransition and regret (quantitative)

Regret after Gender-Affirming Surgery: A Multidisciplinary Approach to a Multifaceted Patient Experience

Breanna Y. Jedrzejewski, MPH, MD[1]
Mary C. Marsiglio, PhD[2]
Jess Guerriero, MSW[2]
Amy Penkin, LCSW[2]
Kara J. Connelly, MD[3]
OHSU Transgender Health Program "Regret and Request for Reversal" Workgroup[1–7]
Jens U. Berli, MD[1]

Portland, OR; and Tucson, AZ

Background: Lasting regret after gender-affirming surgery (GAS) is a difficult multifaceted clinical scenario with profound effects on individual well-being as well as being a politically charged topic. Currently, there are no professional guidelines or standards of care to help providers and patients navigate this entity. This article summarizes the authors' Transgender Health Program's cohesive multidisciplinary lifespan approach to mitigate, evaluate, and treat any form of temporary or permanent regret after GAS.

Methods: A multidisciplinary (primary care, pediatric endocrinology, psychology, social work, plastic surgery, urology, gynecology, and bioethics) workgroup including cisgender, transgender, and gender-diverse professionals met for a duration of 14 months. The incidence of individuals who underwent GAS at the authors' program between 2016 and 2021 and subsequently expressed desire to reverse their gender transition was reported.

Results: Among 1989 individuals who underwent GAS, six (0.3%) either requested reversal surgery or transitioned back to their sex assigned at birth. A multidisciplinary assessment and care pathway for patients who request reversal surgery is presented in the article.

Conclusions: A care environment that welcomes and normalizes authentic expression of gender identity, affirms surgical goals without judgment, and destigmatizes the role of mental health in the surgical process are foundational to mitigating the occurrence of any form of regret. The authors hope this can provide a framework to distinguish normal postoperative distress from temporary forms of grief and regret and regret attributable to societal repercussions, surgical outcomes, or gender identity. (*Plast. Reconstr. Surg.* 152: 206, 2023.)

PATIENT SAFETY

PSYCHOSOCIAL INSIGHTS

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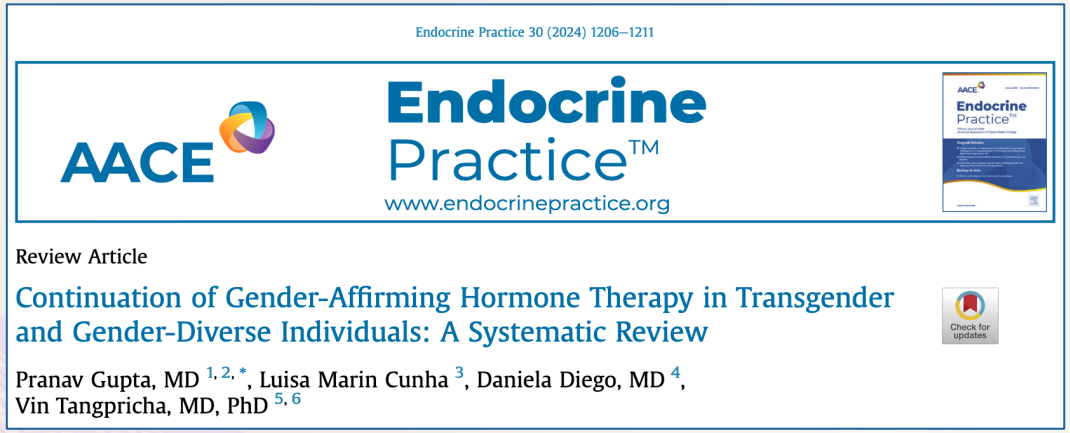
Detransition and regret (quantitative)

- Published studies until October 2024
- Focus on GAHT, no surgery
- Detransition defined as discontinuation with or without detransition to gender assigned at birth
- A total of approx. 3200 **adults** included



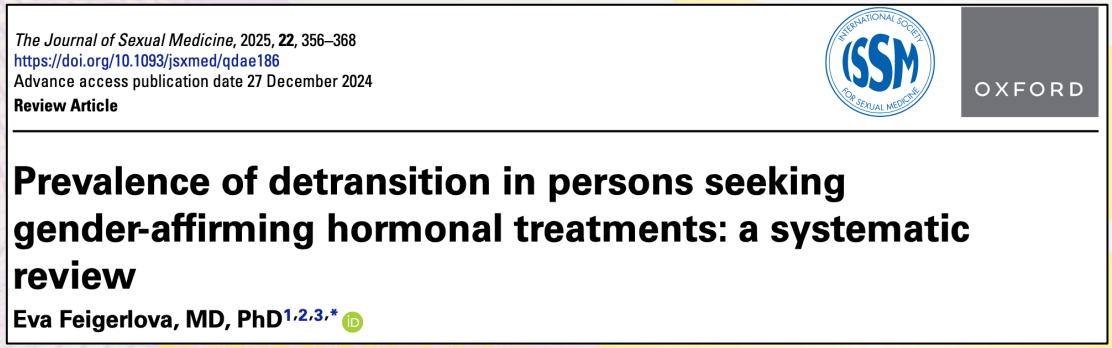
Endocrine Practice 30 (2024) 1206–1211

AACE Endocrine Practice™
www.endocrinepractice.org

Review Article

Continuation of Gender-Affirming Hormone Therapy in Transgender and Gender-Diverse Individuals: A Systematic Review

Pranav Gupta, MD [1, 2, *], Luisa Marin Cunha [3], Daniela Diego, MD [4], Vin Tangpricha, MD, PhD [5, 6]



The Journal of Sexual Medicine, 2025, **22**, 356–368
https://doi.org/10.1093/jsxmed/qdae186
Advance access publication date 27 December 2024
Review Article

ISSM International Society for Sexual Medicine

OXFORD

Prevalence of detransition in persons seeking gender-affirming hormonal treatments: a systematic review

Eva Feigerlova, MD, PhD[1,2,3,*]

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Detransition and regret (quantitative)

Study	Follow-up	n,% discont GAHT	n,% change in GI
Gupta, 2023	5 years(mean)	5 of 264 (1.9%)	2 of 264 (0.8%)
Boyd, 2022	5 years(mean)	8 of 41 (20%)	4 of 41 (9.8%)
Hall, 2021	not reported	12 of 175 (6.9%)	2 of 175 (1.1%)
Glintborg, 2022		108 during 1844 py (0.06/py)	Not reported
Roberts, 2022	4 years	19% of 325 transfeminine 35.6% of 627 transmasculine	Not reported

Detransition and regret (summary)

- Increasing understanding for the experiences of people who detransition
- In the few studies looking at detransition, after hormonal treatment, defined as treatment discontinuation and change of GI, the prevalence was between 1-10%.

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