



The American Osteopathic College of Occupational and Preventive Medicine 2024 Midyear Educational Conference



**Gender Experience
and
Aviation Mental
Health Standards**

Chris Flynn, MD
Aerospace Psychiatrist
March 22, 2024
He/Him/His

russell hill, flickr.com

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Disclosure Information


Chris Flynn, MD

1. Physician employee of the Federal Aviation Administration (FAA)
2. The views presented today are my own, and do not reflect an official US Government position
3. I will discuss off label use of medications, but not investigational use medications in this talk

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Christopher (Chris) Flynn, MD



- Board Certified Psychiatry, 30+ years
- USAF, Flight doc and Psychiatrist: Active 1987-94, ANG/Reserves 1995-2013
- NASA, Flight Doc and Psychiatrist: 1996-2004
- US Dept of State, Psychiatrist: 2005-09, 2013-17
- Baylor/Menninger Clinic, Psychiatry Fitness for Duty evaluator: 2011-13
- FAA, HIMS Consultant: 2011-13, 2019
- VAMC-Cheyenne WY, Staff Psychiatrist: 2017-19
- FAA, Assistant Chief Psychiatrist: 2019 to present

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"I Know NOTHING!"

I hope not - at the end of the talk...

luke the joker, flickr.com


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It's a Bit Confusing: Gender, Sex, Interest Orientation

- About 0.5 to 1.3% of children, adolescents and adults are a gender identity different from their birth sex: LGBTQIA+

Gender	(birth) Sex	Sexual (Interest) Orientation
Binary	Female	Asexual
Cis	Male	Bisexual
Nonbinary	Intersex	Gay
Trans		Homosexual
		Pansexual
		Straight

Pronouns:
He/Him/His
She/Her/Her
They/Them/Their
Ze (zee)/Hir (hear)/Hir (hear)




Reimagine Gender; reimaginegender.org
Zucker KJ. Epidemiology of gender dysphoria and transgender identity. Sex Health 2017; 14(5): 404-11.
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Gender: Physiology and the Brain

- This network facilitates sexual behavior, sexual changes in physical features, and cycles of fertility and gametogenesis

Hormones	Receptors	Brain Locations
Estrogen*	EstrogenR α, β	- Medial Amygdala ^D
Follicle Stimulating H.	FSHR-R in ovary, testis	- Bed Nuclei of Stria Terminalis ^A
Luteinizing H.	LHCGR in ovary, testis	- Medial Preoptic Area & Ventromedial hypothalamus ^{B, A, O}
Progesterone	ProgesteroneR	- Prefrontal Cortex ^I
Testosterone*	AndrogenR	- Limbic System ^O
*Dihydroepiandrosterone		



Sexual (Desire, Arousal, Orgasm, Inhibition)
Jennings KL, de Lencastre L. Neural and Hormonal Control of Sexual Behavior. Endocrinology 2020; 161(10): bqaa150.
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Gender: Cultural Aspects of Identity

- Culture influences a person's identity of gender:



India's Hijra, (since 1226)



Female Warriors, (in 1800's, reported Dahomey warriors in Benin)



Female Athletes, (in 2008, Danica Patrick Won at Indy)

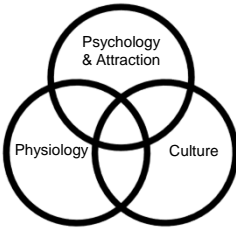


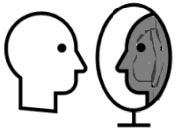
Male Beauty Pro's, (in 1960 Pablo Manzoni began @ Elizabeth Arden)

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Gender Difficulty: I'm not living my own identity

- I can't "be" what everyone is pressuring me to "be" or try to "love" who everyone wants me to "love" – I know what I feel





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Gender Experiences: What Creates Mental Health Problems?

- Being forced to live in a conflicting identity** (gender affirming care improves mental health and quality of life)
- Being attacked emotionally** (verbal abuse, social isolation, loss of future goals, labeled "bad", rejection, loss of relationships, loss of employment, being "Outed", illegal to seek treatment, "approvals" to change name and gender, "approvals" to qualify for insurance reimbursement, cyber bullying/attacks, "conversion" therapy)
- The Mental Health Community was Very Slow to Understand**
 - DSM I & II (1952, 1968): non 'standard' gender = sexual inversion
 - DSM III (1980): psychosexual disorder
 - DSM IV & TR (1994, 2000): gender identity disorder
 - DSM-5 & TR (2013, 2022): gender dysphoria







Bubba Copeland, Mayor & Pastor

February 13, 2024 AOCOPM Mid-Year Conference

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Gender Experiences: What Creates Mental Health Problems?

- Being attacked physically** (targeted for physical assault, sexual assault, murder)
 - Matthew Shepard, killed 1998
 - Rita Hessner, killed 1998
 - Pulse Nightclub, 49 killed, 2016
 - Nex Benedict, attacked 2024



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Gender Experiences: Mental Health Condition Prevalence

- Depression: adults 52% (vs. 26% in cisgender population)
- Anxiety: adults 23% (vs. 7.3% in cisgender population) and in patients with Gender Dysphoria 31%
- Substance Abuse: youth x2.5 - 4 more likely, adults x1.5 more likely
- Trauma/PTSD: 22-38% (vs. 1.6% in cisgender population)
- Suicidal Behaviors: lifetime ideation 46.6%, attempts 27.2% [victimization, self-injury and substance misuse increased risk; social support, gender affirming care were protective]




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DSM-5 Criteria for Gender Dysphoria (GD)

- Symptoms create significant distress; or social, occupational or other impairment for at least 6 month's duration
- Incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics
- Strong desire to be of an alternative gender and be treated as the other gender
- Strong conviction that one has the typical feelings and reactions of the alternative gender & different from one's assigned gender
- Specify if with a sex development disorder. Specify if post-transition.



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Aeromedical Concerns for Gender Dysphoria (GD)

- General Principles: stable symptom remission of GD and any other co-occurring Mental Health Condition(s):

- Are there current or prior coexisting mental health conditions?
- Was there hospitalization, suicide behaviors, substance disorder?
- Past and Current Treatment (*ECT, Ketamine, Mood Stabilizers, etc.*)?
- Current Mental Health Status as judged by a World Professional Association for Transgender Health (WPATH) provider?
- Any evidence of cognitive concerns?
- AMEs may follow the FAA Gender Dysphoria decision grid to submit a package for medical certification*



* Federal Aviation Administration. (2023). Gender Dysphoria. In Aviation Medical Examiner Guide https://www.faa.gov/ame_guide/app_process/exam_tech/item48/amd/gd

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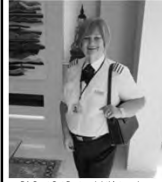
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Aviators (N=15) with Gender Dysphoria (GD), 2019-2023

- Convenience sample (only for discussion): but many Genders, Diagnoses, Treatments and Outcomes are represented



BA Capt Cat Burton, igbtistoryuk.org

- All outcomes possible: Flying with Waiver (53%), Unrestricted certificate (20%), Not Flying (27%)
- Many Genders possible: Transmale 27%, Transfemale 53%, Binary 7%
- All therapies possible: Hormone Therapy 73%, Surgery 60%, Neither 13%
- Many Diagnoses: Mood 47%, Anxiety 33%, Substance 7%, Other 53%

* 15 consecutive pilots or pilot applicants between Oct 2019 and December 2023

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Principles of Gender Dysphoria (GD) Treatment

- Medical Treatment Principles are best: provide correct treatment as early as possible. 'Acceptance by others' is a powerfully positive therapy.



inda3dots, flickr.com

- Delay in treatment; or conversion therapy worsens outcomes for GD patients; [forced conversion therapy has x2.2 greater lifetime risk for suicide vs. not therapy]
- Biological Therapies are effective: Puberty suppression, Gender Affirming Hormone Therapy (GAHT), Gender Affirming Surgery
- Psychological Therapies work: Dialectical Behavioral Therapy (DBT), CBT, Family therapy.
- Social Approaches help: school, religion (6% suicide attempt risk vs. 13% with religious rejection) and community support.

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Gender Dysphoria (GD) Aviator Case Example*

- Gender incongruence since childhood; silent suffering
- Married (2 children); attempted to "fit" for acceptance
- In mid-30s began discussion with spouse; leads to divorce
- Hard to Transition: children's responses, legal process for name change, one Gender at work/true Gender socially (if able), fears employer/FAA reactions, heavy emotional strain
- Psychotherapy + SSRI for anxiety/depression
- Stops flying, begins GAHT, establishes new support network
- Symptom remission, receives Special Issuance



andy holden, flickr.com

* Hybrid case example of several aviators
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Gender Dysphoria (GD): Take Home Concepts to Consider ?

- As Physicians: can we "...ameliorate suffering and contribute to human well being..."* by providing safety, dignity and respect for LGBTQIA+ individuals ?
- Knowledge, compassion, with early & effective treatment are pillars of our work. GD is not a 'new condition':
 - 1931 was 1st transfeminine surgery
 - 1946 was 1st transmasculine surgery
- Aeromedical mental health decisions follow standard principles: safe return to flying when "stable symptom remission with effective & acceptable treatments"



CDR Emily Shilling E/A-18 pilot, usnavy.gov

* American Medical Association. Declaration of professional responsibility: medicine's social contract with humanity. <http://www.ama-assn.org/uploads/declaration-of-professional-responsibility>. Freeman J. Advocacy by Physicians for Patients and for Social Change. Virtual Mentor 2014; 16(9): 722-5.

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Questions ?

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