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LGBT – Gender Identification and Pharmacist Approach to Care of the Patient

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Disclosure

I have no financial conflicts of interest
to disclose



Objectives

- Provide an overview of the Transgender (TG) community
- Summarize the cultural competencies and awareness of health disparities in the TG community
- Discuss the health care needs of TG patients and how pharmacists can contribute to the treatment plan



Epidemiology

- Current National Statistics
 - 1.4 million adults identify as transgender
 - 0.6% of adult population
- 2015 National Transgender Survey
 - 27,715 participants
 - Next survey in 2020





Gender Identity

Identity	Definition
Gender identity	One's sense of being male or female, both or neither
Transgender	Umbrella term for those whose gender identity and/or expression is different from sex assigned at birth
Transgender man	Born female and identifies as male
Transgender woman	Born male and identifies as female

➤ Ask patients how they want to be addressed

NOTE: *Being TG does not suggest a particular sexual orientation*





Gender Affirmation

- Process where person receives social, legal, psychological and medical support for their gender identity and expression





Clinical Diagnosis

- Transgender ≠ medical term
- DSM-5 Clinical Diagnosis:
 - Gender dysphoria
 - A marked difference between **gender identity** and **birth sex**
 - Desire to be treated as the other gender and change sex characteristics
 - Associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning



Clinical Diagnosis

- Coding Revision
 - Transition from ICD 10 to ICD 11
 - "Gender incongruence codes" from **Mental Health** to a **Sexual Health** category





Overall Goal

- To obtain lasting personal comfort and self acceptance in terms of body and gender role through affirmative psychotherapy and medical and/or surgical therapies
- Allow patients to live authentically





Gender Transition

- Social
 - Dress or use of different names/pronouns
 - Being socially recognized as another gender
- Medical interventions
 - Feminizing or masculinizing hormones
 - Surgery
 - Ex: Breast removal ("top surgery")
- Other interventions
 - Facial hair removal, voice modification, genital tucking, packing, padding and chest binding



"TG persons not only have the same basic health needs in terms of screening, prevention, and treatment as their non-TG counterparts but also have clinical issues specifically related to or associated with gender incongruence"



Health Disparities & the Role of Pharmacists





Health Disparities



Discrimination



Lack of Cultural Competence



Financial Barriers



Health System Barriers



Socioeconomic Barriers



Lack of Provider Expertise in TG Medicine





Discrimination



- **One-third** (33%) of those sought medical attention experienced discrimination
 - Not using appropriate names and pronouns
 - Refusing to fill prescriptions or provide medical treatment
- **Consequences:**
 - Social stress
 - Fear of being disrespected
 - Avoid or delay health visits





Discrimination



- Create a safe and culturally welcoming environment
 - Accountability and respect
 - Avoid insensitive comments and provide non-judgmental care

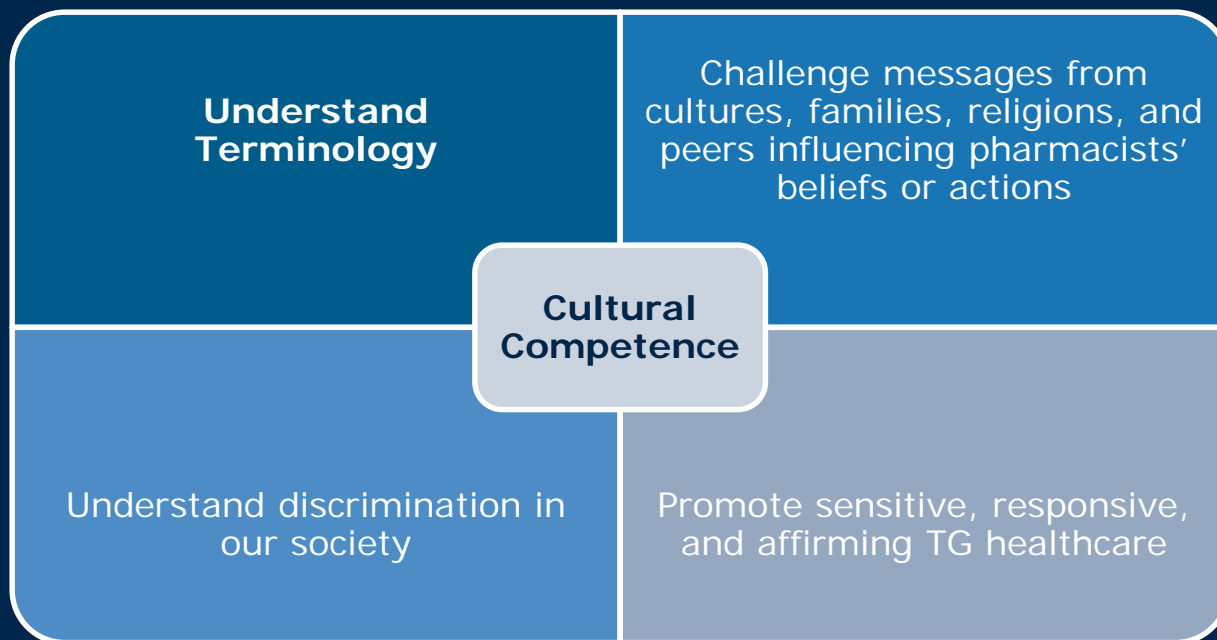
- Communication
 - Appropriate ways to learn about the patient
 - The National LGBT Health Education Center
 - <https://www.lgbthealtheducation.org/>



Poor Cultural Competence



- Contributing factor to health care disparities





Cultural Competence



- Cultural humility
- Staff Training
 - National LGBT Education Center
- Environment
 - Waiting areas/restrooms
- Communication examples:

Instead of:	Say This:
How may I help you, Sir?	How may I help you?
"She is here to pick up her prescription"	The patient is here to pick up a prescription
Do you have a wife/husband?	Do you have a partner or spouse?



Financial Barriers



➤ Lack of income

- In 2015, unemployment rate (15%) was **three-times higher** than U.S. population (5%)
- Nearly **one-third** (29%) were living in poverty compared to the rate in U.S. population (14%)
- Sex work
 - 1 in 5 (20%) have participated





Financial Barriers



- Less likely to have insurance
 - In 2015, 14% were uninsured **compared to** 11% of the U.S. population
 - Less access of preventative health services
 - Chronic conditions
 - Use of underground economy
 - To access medications





Financial Barriers



- Lack of Income/Insurance
 - Ensure that patients know where to access health care regardless of ability to pay
 - Patient Assistant Programs
 - Provide cost-effective options for medications dispensed
 - Assist in the process of insurance denials and prior authorizations
 - Educate patient on dangers of purchasing products of underground economy



Health System Barriers



- Legal documents
 - Federal
 - Passport and Social Security Card
 - State:
 - Florida: Name, Driver's License, and Birth Certificate
- Disparities in electronic medical records
 - Gender identity vs. Birth sex
 - Laboratory references
 - Advocate for two-step process





Health System Barriers



- Examples of legal records not matching physical patient
 - Outpatient
 - Prescription Drug Monitoring Program
 - Inpatient
 - Medication Clarification Process
 - Discharge counseling



Health System Barriers



- Laboratory References
 - Normal values not established for patients receiving hormonal or surgical interventions
 - Depends on patient's current hormone therapy
 - No hormonal/surgical intervention = birth sex values
 - No surgery + **stable** hormone therapy = affirmed gender



Health System Barriers



Lab Measures	Transgender Women on Hormone Therapy		Transgender Men on Hormone Therapy	
	Lower Limit	Upper Limit	Lower Limit	Upper Limit
Alkaline Phosphatase	N/D	Male value	N/D	Male value
Serum Creatinine	N/D	Male value	N/D	Male value
Hemoglobin / Hematocrit	Female value	Male value	Male value*	Male value

N/D = Not defined

*Male value if amenorrheic

➤ Examples:

- Patient CJ (TG woman)
 - Potential ↓ muscle mass, potential ↓ SCr
- Patient CB (TG man)
 - ↑ Testosterone, ↑ Hematocrit



Health System Barriers



- Renal function
 - Preferred Cystatin C-based GFR calculations for marginal renal function
 - Independent of muscle mass
 - More accurate
 - How do we calculate with Cockcroft-Gault Equation?



Socioeconomic Barriers



- Homeless
 - 30% lifetime homelessness
- Mental health
 - 40% attempted **suicide** in their lifetime (9 times the attempted rate in the U.S. population 4.6%)
- Alcohol/substance abuse
 - 29% illicit drug use vs. 10% of U.S population
- Smoking
 - 22% are current smokers vs. 21% of U.S. population
- Health-Related Risks



Socioeconomic Barriers



- Increase cultural competence and provide a welcoming environment
- Medication counseling
 - Ex: Hormone therapy, antidepressants, smoking cessation options, etc.
 - Discuss risks when using hormone therapy





Socioeconomic Barriers



- Counsel on Health Prevention
 - Diet/Exercise
 - Pre-Exposure Prophylaxis (PrEP) or Treatment
 - **1.4%** of TG were living with HIV compared to U.S. general population **0.3%**
 - Hepatitis
 - Hazards of sharing needles
 - Screenings
 - Treat the anatomy that is present: If you have it, check it!
 - Pap-smears, colonoscopy, prostate checks, mammograms, etc.



Lack of Providers with Expertise



➤ Negative Experiences

- 24% had to teach their provider about being transgender for appropriate care
- Verbally harassed
- Refusal to provide care





Education



- Off-label use of medications
 - Risks and benefits
- Drug-Disease Interactions
- Drug-Drug Interactions





Off-label Use of Medications



➤ Benefits of cross-sex hormone therapy

Feminizing Effects	Masculinizing Effects
✓ Decreased testicular size/sperm production	✓ Deepened voice
✓ Erectile dysfunction	✓ Clitoral enlargement (variable)
✓ Breast growth (variable)	✓ Growth in facial and body hair
✓ Body fat redistribution	✓ Cessation of menses and vaginal atrophy
✓ Decreased muscle mass	✓ Atrophy of breast tissue
✓ Thinning and slowed growth of body and facial hair	✓ Decreased percentage of body fat compared to muscle mass





Hormone Therapy



Hormone	Side Effects
Estrogens	
<ul style="list-style-type: none"> Estradiol \$ Conjugated equine estrogens 	<ul style="list-style-type: none"> Migraines Weight gain Mood swings, insomnia Hot flashes
Antiandrogens	
<ul style="list-style-type: none"> Spironolactone \$ 5-Alpha-Reductase Inhibitors <ul style="list-style-type: none"> Finasteride/Dutasteride 	<ul style="list-style-type: none"> Hyperkalemia Polydipsia Impotence Polyuria Orthostatic hypotension Ejaculatory disorders
Gonadotropin-Releasing Hormone Agonists (GnRHs)	
<ul style="list-style-type: none"> Goserelin/Leuprolide/Nadarelin \$\$\$ 	<ul style="list-style-type: none"> Insomnia Headaches
Progestogens	
<ul style="list-style-type: none"> Medroxyprogesterone 	<ul style="list-style-type: none"> Headaches Depression Weight gain Insomnia
Testosterones	
<ul style="list-style-type: none"> Testosterone 	<ul style="list-style-type: none"> Hypertension Acne



Formulations & Dosing



Class	Medication/Formulation	Dose range
Estrogen	• Estradiol – oral	• 2-6 mg/day
	• Estradiol – transdermal patch	• 0.025-0.2 mg/day
	• Estradiol – Parenteral (valerate or cypionate)	• 5-30 mg IM every 2 weeks OR • 2-10 mg IM every week
Antiandrogens	• Spironolactone	• 100 – 300 mg/day
	• GnRHs	• 3.75 mg SQ monthly • 11.25 mg SQ every 3 months
	• Testosterone cypionate	• 100-200 mg SQ (IM) every 2 weeks OR • 50 – 100 mg every week
Testosterone	• Testosterone gel	• 50-100 mg/day
	• Testosterone patch	• 2.5-7.5 mg/day

IM – intramuscular
SQ – subcutaneous



Monitoring Parameters



Test	Recommendations
• BUN/SCr/K	• At baseline and every 3 months or as needed with Spironolactone
• Estradiol	• Every 3 months* and as needed • Maintain estradiol serum levels (100-200 pg/mL) • Maintain testosterone levels < 50ng/dL
• Testosterone	• Every 3 months* and as needed • Maintain testosterone levels (320-1000 ng/dL)
• Albumin**	• Every 3 months* and as needed
• Prolactin	• Only if symptoms of prolactinoma or as needed
• Sex Hormone Binding Globulin (SHBG)	• Every 3 months* and as needed

*in the first year of therapy only

**used to calculate bioavailable testosterone



Clinical Pearls



Hormone	Clinical Pearls
<ul style="list-style-type: none"> Estradiol 	<ul style="list-style-type: none"> Bioidentical hormone to human ovary VTE risk: patch formulation is preferred (first pass effect) Cost effective option Contraindicated in active estrogen sensitive cancers
<ul style="list-style-type: none"> Conjugated equine estrogens 	<ul style="list-style-type: none"> Not accurately measured in estradiol assays
<ul style="list-style-type: none"> Spironolactone 	<ul style="list-style-type: none"> Cost effective option Used for gynecomastia effects Used in combination with lower estrogen dosing to avoid associated risks of high estrogen levels Provides an option for hypertensive patients
<ul style="list-style-type: none"> 5-alpha reductase inhibitors (Finasteride, Dutasteride) 	<ul style="list-style-type: none"> Option for: <ul style="list-style-type: none"> For those unable to tolerate, or with contraindications to use of Spironolactone Those seeking partial feminization Those who continue to exhibit virilized features or hair loss after complete androgen blockade or orchiectomy
<ul style="list-style-type: none"> Gonadotropin-Releasing Hormone Agonists 	<ul style="list-style-type: none"> Once a month or 3-month administration
<ul style="list-style-type: none"> Testosterone 	<ul style="list-style-type: none"> Gel: easy application, less irritation than patches Injection: less frequent dosing than topical applications



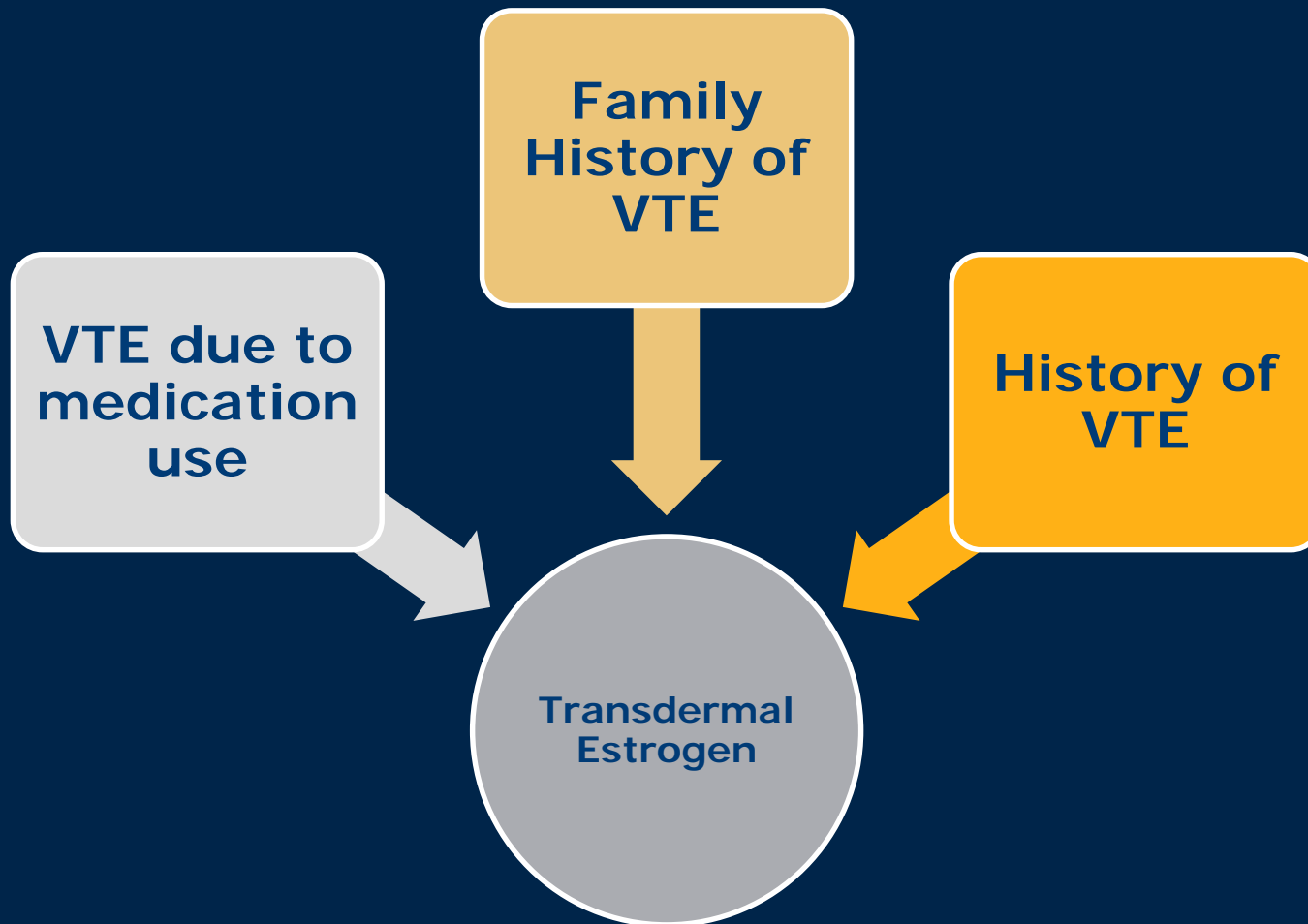
Hormone Therapy Risks



Risk level	Estrogen	Testosterone
• Very high risk	<ul style="list-style-type: none">• Thromboembolic disease	• Erythrocytosis (hematocrit >50%)
• Moderate risk	<ul style="list-style-type: none">• Macroprolactinoma• Breast cancer• Coronary artery disease• Cerebrovascular disease• Cholelithiasis• Hypertriglyceridemia	<ul style="list-style-type: none">• Severe liver dysfunction (transaminases > threefold upper limit of normal)• Coronary artery disease• Cerebrovascular disease• Hypertension• Breast or uterine cancer



VTE Risk





Cardiovascular Risk Assessment



➤ AHA/ACC Guidelines

- Sex-specific calculators for risk and interventions
 - ASCVD Calculator
 - <http://tools.acc.org/ASCVD-Risk-Estimator-Plus/#!/calculate/estimate/>
- No current guidance for TG population

➤ The Center of Excellence for Transgender Health

- Use risk calculator for sex at birth, affirmed gender or an **average** of the two depending on:
 - Age at which patient began using hormone and
 - Total duration of hormone therapy

ASCVD: Atherosclerotic cardiovascular disease



Diabetes Screening



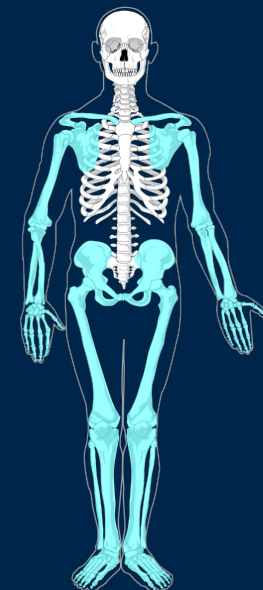
- American Diabetes Association Practice Guidelines
 - Recommendations for screening in transgender patient do not differ from current guidelines
- World Professional Association of Transgender Health – Standards of Care
 - Recommend that diabetes be “reasonably controlled” prior to initiating therapy



Bone Health



- Risk for osteoporosis increases after gonadectomy for both transgender men and women
 - Screening
 - Begin bone density at age 65
 - For risk factors, start between 50-64
 - Currently based on age and sex





HIV Management



➤ PrEP

- No known drug-drug interactions with gender-affirming hormones
- Concurrent treatment with hormone therapy is **NOT** contraindicated

➤ Treatment

- Drug interactions
- Emphasize medication counseling



Drug-Drug Interactions



Antiretroviral	Hormone therapy	Effect	Recommendation
<ul style="list-style-type: none"> • Elvitegravir/cobicistat • All boosted Protease Inhibitors 	<ul style="list-style-type: none"> • Dutasteride • Finasteride • Testosterone 	ARV ↑ Concentrations of GAHT	↓ dose of GAHT drugs as needed to achieve the desired clinical effects and hormone concentrations
<ul style="list-style-type: none"> • Protease Inhibitors/ritonavir • Efavirenz • Etravirine • Nevirapine 	<ul style="list-style-type: none"> • Estradiol 	ARV ↓ concentrations of GAHT	↑ Dose of GAHT to achieve the desired clinical effects and hormone concentrations
<ul style="list-style-type: none"> • Efavirenz • Etravirine • Nevirapine 	<ul style="list-style-type: none"> • Dutasteride • Finasteride • Testosterone 		
<ul style="list-style-type: none"> • Elvitegravir/cobicistat • Protease inhibitor/cobicistat 	<ul style="list-style-type: none"> • Estradiol 	Unclear effect on GAHT	Potential for ↑ or ↓ estradiol concentrations. Adjust estradiol dose to achieve desired clinical effects

ARV: antiretroviral

GAHT: gender-affirming hormone therapy



Take Away Points

**Healthcare
Disparities**

Education

**Improved
Outcomes**

- Focus on gender neutral language
- Create a safe and supportive environment for a marginalized and underserved population
- Provide counseling – we are the medication experts
- Utilize the available resources to become more educated and culturally competent



Assessment

➤ The term transgender encompasses a wide spectrum of individuals whose gender identity, gender expression, or behavior conform to that typically associated with the sex assigned to them at birth?

- True
- False



Assessment

- Pharmacists can play a key role in assisting TG patients with medication access programs

- True
- False



Assessment

- One of the disparities in health care for TG patients is lack of expertise in TG medicine

- True
- False



References

- Brenan M. Nurses again outpace other professions for honesty, ethics. Gallup website. news.gallup.com/poll/245597/nurses-again-outpace-professions-honesty-ethics.aspx. Published December 20, 2018. Accessed December 22, 2019.
- Coleman E, Bockting W, Botzer M, et al. Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People, Version 7. *International Journal of Transgenderism*. 2012;13(4):165-232. doi:10.1080/15532739.2011.700873.
- James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). The Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality.
- Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV. Department of Health and Human Services. Available at <http://aidsinfo.nih.gov/contentfiles/lvguidelines/AdultandAdolescentGL.pdf>. Transgender People with HIV. Accessed December 22, 2019.
- Redfern JS, Jann MW. The Evolving Role of Pharmacists in Transgender Health Care. *Transgend Health*. 2019;4(1):118–130. Published 2019 Apr 11. doi:10.1089/trgh.2018.0038
- UCSF Transgender Care, Department of Family and Community Medicine, University of California San Francisco. Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People; 2nd edition. Deutsch MB, ed. June 2016. Available at transcare.ucsf.edu/guidelines.
- Wylie C Hembree, Peggy T Cohen-Kettenis, Louis Gooren, Sabine E Hannema, Walter J Meyer, M Hassan Murad, Stephen M Rosenthal, Joshua D Safer, Vin Tangpricha, Guy G T'Sjoen, Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline, *The Journal of Clinical Endocrinology & Metabolism*, Volume 102, Issue 11, 1 November 2017, Pages 3869–3903, <https://doi.org/10.1210/jc.2017-01658>