Comprehensive Care of Transgender and Gender Non-conforming Patients

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Disclosures

- Financial: None
- I want to encourage everyone here to be an advocate for their transgender and gender non-conforming patients
Overview: The Office Visit

- Before the Clinic
- Check-in
- Waiting Room
- Clinical Care
- Consultations
- After the Office Visit
Before The Clinic

- 46% verbally harassed in the last year
- 9% physically assaulted in the last year
- 18% family unsupportive of transgender identity
- 24% lifetime severe intimate partner violence
- 15% unemployed – 3x general population
- 29% living in poverty – 2x general population

2015 U.S. Transgender Survey (National Center for Transgender Equality)
Before The Clinic

- 39% serious psychological distress past year
  - Nearly 5x general population (8%)
- 40% lifetime suicide attempt
  - Nearly 9x general population (4.6%)
- 7% suicide attempt in the past year
  - Nearly 12x general population (0.6%)
- **1.6% lifetime risk of death by suicide**

2015 U.S. Transgender Survey (National Center for Transgender Equality)
Before The Clinic

That’s not our fault...

- 14% uninsured vs. 11% of general population
- 20% denied care not related to transitioning
- 33% had a negative healthcare experience due to gender identity
- 23% avoided care due to fear of discrimination
- 80% of endocrinologists have treated a transgender patient but have never received training

2015 U.S. Transgender Survey (National Center for Transgender Equality)
62.8% of those who **DID** experience discrimination avoided healthcare

37.2% of those who **DID NOT** experience discrimination avoided healthcare

**THIS MEANS WE CAN MAKE A HUGE DIFFERENCE IF WE ELIMINATE DISCRIMINATION**

Reisner et al: unpublished (National LGBT Health Education Center)
Check-In

- A thought exercise...

What's in a Word?
### Check-In: Gender terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong> (birth sex or assigned sex at birth)</td>
<td>Biological/genetic sex and phenotypic expression</td>
</tr>
<tr>
<td><strong>Gender</strong> (man/woman, male/female)</td>
<td>Society’s perception of a person’s sex</td>
</tr>
<tr>
<td><strong>Gender Identity</strong></td>
<td>Person’s internal sense of their own sex</td>
</tr>
<tr>
<td><strong>Gender Role/Expression</strong></td>
<td>Person’s outward expression of gender</td>
</tr>
<tr>
<td><strong>Gender Variance/Non-conformity</strong></td>
<td>Variation in gender expression/role from convention</td>
</tr>
<tr>
<td><strong>Cisgender</strong></td>
<td>Identifying as sex assigned at birth</td>
</tr>
<tr>
<td><strong>Transgender</strong></td>
<td>Identifying as sex other than birth sex</td>
</tr>
<tr>
<td><strong>Gender Queer</strong></td>
<td>Having a non-binary gender identity</td>
</tr>
<tr>
<td><strong>Transsexual</strong></td>
<td>Medical term for individuals who have transitioned to the opposite sex - some consider pejorative</td>
</tr>
</tbody>
</table>
Check-In: Gender terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersex</td>
<td>Mixed gender anatomical or chromosomal patterns</td>
</tr>
<tr>
<td><strong>Less Stigma?</strong></td>
<td></td>
</tr>
<tr>
<td>Gender Fluid</td>
<td>Dynamic gender roles, expression, identity</td>
</tr>
<tr>
<td>Bigender</td>
<td>Identifying as both male and female</td>
</tr>
<tr>
<td><em><em>Trans</em> (pronounced “trans star”)</em>*</td>
<td>Umbrella term that includes all gender variants</td>
</tr>
</tbody>
</table>

Bad News/Good News?
- Terminology is fluid and will continue to evolve
- Definitions are not universally accepted
- Some may find certain terms offensive

**Solution?** Just ask your patient and mirror their language
Check-In: Intake Forms

Think Outside the Boxes:
Expanding our Understanding of Gender
Check-In: Intake Forms

1. What is the name you prefer to use?
2. What is your legal name?
3. What are the pronouns you prefer to use?
4. What was your sex assigned at birth?
   - Female
   - Male
5. What is your gender identity?
   - Female
   - Male
   - Transgender Male
   - Transgender Female
   - Intersex
   - Genderqueer, Bigender, Non-binary, or other
6. Do you have sex with men, women, both, or neither?
7. Which of the following apply to you regarding sexual orientation (choose all that apply):
   - Heterosexual
   - Straight
   - Homosexual
   - Gay
   - Queer
   - Bisexual
   - Asexual
   - Pansexual
   - Sexual attraction to same gender
   - Sexual attraction to opposite gender
Check-In: Staff

- Educate staff
- Give a heads up to clerks the day of the visit for transgender patients
- Recommend a gender neutral approach if preferences are unclear at first
- Call patients by preferred name/pronouns
- Reassure patients about confidentiality

*They are the front line!*
Gender Identity Disorder has been replaced with...

Gender Dysphoria (DSM V): the distress and unease experienced if gender identity and assigned gender are not completely congruent

Reasoning:
- Transgender ≠ psychological disorder
- Can be transgender and psychologically healthy
- Stigmatization of those who do not conform to gender norms leads to...
- Distress secondary to cultural and social forces

Gender Incongruence: possible terminology in DSM VI

Gender Nonconformity: another widely used term
Gender Affirmation (gender transition) - process of recognizing, accepting, and expressing one’s gender identity.

Most often a person makes **outward changes** to appearance, name, gender presentation, etc.

Involves **social**, **medical**, and **legal** components.

Can greatly improve a person’s mental **well-being** (meta analysis by Murad et al. Clinical Endocrinology 2010.)

- 80% significant improvement in gender dysphoria
- 78% significant improvement in psychological symptoms
- 80% significant improvement in quality of life
- 72% significant improvement in sexual function

There is no one way to affirm one’s gender.

Fisher et al. JCEM 2016 Cross-sectional study
Similar results

Hughto et al. Transgender Health 2016
Systematic Review
Improved QOL and psychological health
Clinical Care  Treatment Options

- Changes in gender expression and role
- Hormone therapy to feminize or masculinize the body
- Surgery and other therapy to change primary and/or secondary sex characteristics
- Voice and communication therapy
- Psychotherapy

Full time or part time

Not an absolute requirement!!
Clinical Care

Anatomy versus identity

- **Mammograms** for trans women and trans men who have breasts
- **Pap smears** for trans men who have cervixes
- Counseling about **testicular self exam** for trans women who have testes

Respect wishes regarding potentially sensitive exams and tests
Consultations  Who to consult?

- Mental Health
- Endocrinology
- Surgery
- Dermatology
- Speech Therapy
- Many others

LG BTQ Advocate
OB/GYN
Prosthetics
Social Work
Drama Therapy
Chaplin Services
Reproductive Health
Consultations - Mental Health

The Basics:

▶ Discuss history and development of gender identity/dysphoria and impact on mental health

▶ Provide information regarding options for gender identity, role, and expression and possible therapeutic interventions

▶ Assess, diagnose, and treat co-existing mental health concerns

▶ Readiness assessment and referral letter for hormone therapy and/or surgery
Consultations Mental Health

**Above and beyond:**
- Provide family therapy/support and information for social/peer support
- Educate and advocate on behalf of clients within their community
  - Schools
  - workplaces
  - Other organizations and events
- Assist clients with making changes in identity documents
Consultations	Endocrinology

- **Hormonal therapy**: medically necessary for many transgender and gender nonconforming individuals with gender dysphoria.
- Some people seek maximum feminization/ masculinization, while others experience relief with an androgynous presentation.
- Individualized based on patient’s goals, risk/benefit, other medical conditions, and social/economic issues.

No one way to affirm gender identity.
Consultations    Endocrinology

**Criteria for hormonal therapy:**

- Persistent, well-documented gender dysphoria
- Capacity to make a fully informed decision and to consent
- Age of majority in a given country
- Reasonable control of mental health concerns
- Reproductive options have been considered and addressed
### TABLE 1A: EFFECTS AND EXPECTED TIME COURSE OF MASCULINIZING HORMONES

<table>
<thead>
<tr>
<th>Effect</th>
<th>Expected Onset</th>
<th>Expected Maximum Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin oiliness/acne</td>
<td>1-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Facial/body hair growth</td>
<td>3-6 months</td>
<td>3-5 years</td>
</tr>
<tr>
<td>Scalp hair loss</td>
<td>&gt;12 months</td>
<td>variable</td>
</tr>
<tr>
<td>Increased muscle mass/strength</td>
<td>6-12 months</td>
<td>2-5 years</td>
</tr>
<tr>
<td>Body fat redistribution</td>
<td>3-6 months</td>
<td>2-5 years</td>
</tr>
<tr>
<td>Cessation of menses</td>
<td>2-6 months</td>
<td>n/a</td>
</tr>
<tr>
<td>Clitoral enlargement</td>
<td>3-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Vaginal atrophy</td>
<td>3-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Deepened voice</td>
<td>3-12 months</td>
<td>1-2 years</td>
</tr>
</tbody>
</table>

### TABLE 1B: EFFECTS AND EXPECTED TIME COURSE OF FEMINIZING HORMONES

<table>
<thead>
<tr>
<th>Effect</th>
<th>Expected Onset</th>
<th>Expected Maximum Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body fat redistribution</td>
<td>3-6 months</td>
<td>2-5 years</td>
</tr>
<tr>
<td>Decreased muscle mass/strength</td>
<td>3-6 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Softening of skin/decreased oiliness</td>
<td>3-6 months</td>
<td>unknown</td>
</tr>
<tr>
<td>Decreased libido</td>
<td>1-3 months</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Decreased spontaneous erections</td>
<td>1-3 months</td>
<td>3-6 months</td>
</tr>
<tr>
<td>Male sexual dysfunction</td>
<td>variable</td>
<td>variable</td>
</tr>
<tr>
<td>Breast growth</td>
<td>3-6 months</td>
<td>2-3 years</td>
</tr>
<tr>
<td>Decreased testicular volume</td>
<td>3-6 months</td>
<td>2-3 years</td>
</tr>
<tr>
<td>Decreased sperm production</td>
<td>variable</td>
<td>variable</td>
</tr>
<tr>
<td>Thinning and slowed growth of body and facial hair</td>
<td>6-12 months</td>
<td>&gt; 3 years</td>
</tr>
<tr>
<td>Male pattern baldness</td>
<td>No regrowth, loss stops 1-3 months</td>
<td>1-2 years</td>
</tr>
</tbody>
</table>
### Consultations

### Contraindications/Cautions

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Feminizing hormones</th>
<th>Masculinizing hormones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely increased risk</td>
<td>Venous thromboembolic disease*&lt;sup&gt;5&lt;/sup&gt;</td>
<td>Polycythemia</td>
</tr>
<tr>
<td></td>
<td>Gallstones</td>
<td>Weight gain</td>
</tr>
<tr>
<td></td>
<td>Elevated liver enzymes</td>
<td>Acne</td>
</tr>
<tr>
<td></td>
<td>Weight gain</td>
<td>Androgenic alopecia (balding)</td>
</tr>
<tr>
<td></td>
<td>Hypertriglyceridemia</td>
<td>Sleep apnea</td>
</tr>
<tr>
<td>Likely increased risk with presence of additional risk factors&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Cardiovascular disease</td>
<td></td>
</tr>
<tr>
<td>Possible increased risk</td>
<td>Hypertension</td>
<td>Elevated liver enzymes</td>
</tr>
<tr>
<td></td>
<td>Hyperprolactinemia or prolactin*&lt;sup&gt;4&lt;/sup&gt;</td>
<td>Hyperlipidemia</td>
</tr>
<tr>
<td>Possible increased risk with presence of additional risk factors&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Type 2 diabetes&lt;sup&gt;4&lt;/sup&gt;</td>
<td>Destabilization of certain psychiatric disorders&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cardiovascular disease</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hypertension</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Type 2 diabetes</td>
</tr>
<tr>
<td>No increased risk or inconclusive</td>
<td>Breast cancer</td>
<td>Loss of bone density</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Breast cancer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cervical cancer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ovarian cancer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uterine cancer</td>
</tr>
</tbody>
</table>

**Estrogen Therapy**
- VTE & Hypercoagulable state
- ESLD
- Estrogen sensitive cancer
- Caution: smoking

**Testosterone Therapy**
- Same as above plus...
- Pregnancy
- Unstable CAD
- Polycythemia
- Caution: untreated OSA
Consultations

Endocrinology

Hormonal Therapy Regimens

- **No controlled trials** of any feminizing/masculinizing hormone regimen have been conducted.

- **Various dosing strategies** have been published.

- **Goals:** develop a feminized or masculinized body while minimizing masculine or feminine characteristics, consistent with a patient’s gender goals.

- **Labs:** check 1-3 months at initiation, then can space out to Q6-12 months.
  - Feminizing: Estradiol 100-200pg/ml, Testosterone <55ng/dL
  - Masculinizing: Estradiol menopausal range, Testosterone 400-600ng/dL
  - CMP, FLP, CBC, prolactin
- **Estrogen plus anti-androgen** is the most common

- **Estrogen:**
  - Oral estrogen, specifically ethinyl estradiol, appears to increase the risk of VTE and is not recommended
  - Transdermal 17-beta estradiol (0.1-0.4mg/day) **Preferred**
  - IM estrogen (valerate 5-20mg IM Q2weeks or cypionate 2-10mg IM weekly)

- **Anti-Androgens**: most commonly used and cost-effective
  - Spironolactone (100-200mg/day): directly inhibits testosterone secretion and binding
  - Cyproterone acetate: not available in the U.S
Consultations

**Endocrinology**
**Feminizing Hormones**

- **GnRH agonists** (leuprolide, goserelin, triptorelin): 
  - Block GnRH receptor and the release of LH and FSH
  - Highly effective, but more expensive
  - **Last two prolong QT**

- **5-alpha reductase inhibitors** (finasteride and dutasteride):
  - Block the conversion of testosterone to dihydrotestosterone
  - Beneficial effects on scalp hair loss, body hair growth, sebaceous glands, and skin consistency

- **Progestins**: 
  - Not recommended
  - Erroneously thought to be necessary for full breast development
  - Can cause depression, weight gain, lipid changes and possibly increased risk of breast cancer and CVD
Consultations

Endocrinology
Masculinizing Hormones

- **Testosterone:**
  - Transdermally or IM
  - Buccal and implantable also available
  - Oral available outside the U.S.
  - IM cypionate or enanthate: cyclic variations that may lead to mood changes and/or fatigue
  - IM undecenoate: not currently available in U.S., but stable, physiologic levels for ~12 weeks

- **Progestins:** most commonly medroxyprogesterone, can be used for a short period to assist with menstrual cessation

- **GnRH agonists** can be used similarly, as well as for refractory uterine bleeding
Consultations

Medically necessary treatment for gender dysphoria

A minimum of 24 hours is suggested before informed consent to ensure sufficient time to absorb the information fully

12 continuous months of hormone therapy and 12 continuous months of living in a gender role that is congruent with gender identity.

Hair removal (if desired) should be pursued pre-op

Hold estrogen/testosterone for 4 weeks pre-op and restart once mobile

Surgery

Gender affirming surgery

Unless a contraindication exists
Consultations  
Gender affirming surgery

**Male to Female:**
- Augmentation mammoplasty (implants/lipofilling)
- Genital surgery: penectomy, orchectomy, vaginoplasty, clitoroplasty, vulvoplasty
- Other: facial feminization surgery, liposuction/filling, voice surgery, thyroid cartilage reduction, gluteal augmentation, hair reconstruction, etc.

**Female to Male:**
- Subcutaneous mastectomy, creation of a male chest
- Genital surgery: hysterectomy/oofrectomy, metoidioplasty or phalplasty, vaginectomy, scrotoplasty, erection and/or testicular prostheses
- Other: liposuction/filling, pectoral implants, etc.

12 months of hormones to maximize breast growth
After The Visit: Trans-Friendly Office Policy

- Protocol for noting preferences
- Consider EMR flags indicating trans patients
- Transgender champion(s)
- Annual transgender competency trainings
- Train new staff on protocols within one month
- Advanced trainings for direct care staff
- Accountability for transphobic responses
- Consider a multidisciplinary approach
Summary

- Discrimination against transgender individuals is longstanding and deeply ingrained in our culture
- They are a vulnerable population, but small changes can go a long way in diminishing the discrimination they face
- Common sense, common courtesy, empathy, and humility are your allies
- As are you colleagues in mental health, endocrinology, surgery, speech, dermatology, and other disciplines
Guidelines/Resources

- World Professional Association for Transgender Health. Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People, 7th version: http://www.wpath.org/publications_standards.cfm
- **National LGBT Health Education Center:** http://www.lgbthealtheducation.org/
- **Center of Excellence for Transgender Health:** http://transhealth.ucsf.edu/
- **The Safe Zone Project:** http://thesafezoneproject.com/


Dhejne, Cecilia; Lichtenstein, Paul; Boman, Marcus; Johansson, Anna L. V.; Långström, Niklas; Landén, Mikael (2011). National Transgender Discrimination Survey: http://www.thetaskforce.org/downloads/reports/reports/ntds_full.pdf


Questions