Transgender Healthcare

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2019
Objectives

- Define Gender Related Terminology
- Examine the transgender experience
- Review treatment options for adolescents
- Review treatment options for adults
The Genderbread Person

Identity ≠ Expression ≠ Sex
Gender ≠ Sexual Orientation
Terminology

Encompasses any individual who crosses over or challenges their society’s traditional gender roles and/or expressions.
Gender Dysphoria DSM-5

- Distress or impairment resulting from incongruence between one’s experienced gender and the sex assigned at birth for at least 6 months with impairment in function due to at least 2 of the following:
  - Marked incongruence between experienced gender and primary or secondary sex characteristics
  - Strong desire to be rid of one’s sex characteristics
  - Strong desire for the sex characteristics of the other gender
  - Strong desire to be of the other gender
  - Strong desire to be treated as the other gender
  - Strong conviction that one has the typical feelings and reactions of the other gender.
Timing of Presentation

- Early childhood – preschool
- Before or during puberty
- End of adolescence
Social Determinates of Health

Adapted from: Healthy People 2020
Effects on SDOH

- Employment – 30% fired, denied promotion or harassed at work in last year. 20% work in underground economy, 12% in sex work
- Home – 30% homeless, 23% housing discrimination
- Health Care – 33% mistreated in clinic in last year
- Family support – 10% reported violence from family member, 8% kicked out of home
- Community support – 59% reported avoiding using a public restroom due to fear of confrontation
- School – 54% experienced verbal harassment, 24% physical, 13% sexual. 17% left school due to harassment.
Harassment and Violence

- In the last year
  - 46% reported harassment
  - 9% reported violence
  - 47% rate of sexual violence (lifetime)
<table>
<thead>
<tr>
<th></th>
<th>US Population</th>
<th>US Trans Pop</th>
<th>US Trans of color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>12%</td>
<td>29%</td>
<td>40%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>5%</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>HIV +</td>
<td>0.3%</td>
<td>1.4%</td>
<td>6.7%</td>
</tr>
<tr>
<td>HIV+ transwomen</td>
<td>-</td>
<td>3.4%</td>
<td>19% (African am)</td>
</tr>
<tr>
<td>Own home</td>
<td>63%</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Severe psychological distress in last month</td>
<td>5%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>Suicide Attempt</td>
<td>4.6%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Physical DV</td>
<td>18%</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>
Health Specific Disparity

- HIV rates (1.4% vs 0.3%)
- Anxiety and Depression (39% vs 5%)
- Suicidality (40% vs 4.6%)
- High risk sexual behavior
- Higher substance abuse (29% vs 10%)

- 20% postponed care due to concerns about discrimination
- 29% had to educate their health care provider about transgender health care
Which of the following terms is from the DSM-5?

A. Gender Incongruence
B. Gender Dysphoria
C. Gender Identity Disorder
D. Transsexual
What determines gender identity?

A. How a person expresses gender (clothes/hairstyle)
B. Taking cross sex hormones
C. How they feel
D. Having gender reassignment surgery
Which of the following is NOT a SDOH?

- A. Access to health care
- B. Genetics
- C. Income status
- D. Level of education
- E. Social support network
- F. Neighborhood you live in
Transgender individuals have higher rates of which health issue?

- A. Osteoporosis
- B. Tobacco Use
- C. Diabetes
- D. Substance Use
What do you like to be called?
What do you consider your gender on the gender spectrum?
Are you a boy, girl or something in the middle? (Child)
What pronouns do you use?

- Gender neutral bathrooms
- Inclusive signs/posters/educational materials
- Non-binary, non heteronormative intake forms
Initial Evaluation

- New patient intake including full history and physical exam
- Labs as determined by risk factors/goals
- Introduce informed consent if applicable
Informed Consent

- Effects of hormone therapy
  - Reversible
  - Permanent
- Risks of hormone therapy
  - Higher doses do not speed or improve transition
  - Tobacco increases risks
  - Fertility may be permanently effected
  - Monitoring blood work will be necessary
  - Hormone use for this purpose is not FDA approved.
Tanner Stage: Downy pubic hair and breast bud palpable under areola only

- A. Stage 0
- B. Stage 1
- C. Stage 2
- D. Stage 3
- E. Stage 4
- F. Stage 5
Child/Adolescent

- Timing is key - earliest stage of puberty (Tanner 2-3)
- Referral to endocrinology
- At OHSU require mental health evaluation and letter
- Puberty blockers GnRH analogues (IE Lupron shot every 3 months)
- Cross sex hormones
- Requires parental consent if <18 years old
- Discuss fertility
Adult - Feminizing

- Estradiol (17-beta estradiol)
- Spironolactone – androgen blocker
- Labs every 3 months during first year, every 6-12 months after.
  - Estradiol <200
  - Testosterone <50
  - BMP – sodium, potassium, renal function
- +/- Progestogen -lacks evidence, anecdotal
  - increase in breast tissue
  - Increase libido
  - caution - mood changes
Effects

**Permanent**
- Breast development (tanner 2-3)

**Variable**
- Reduced or absent sperm count/ejaculatory fluid
- Reduced testicular size

**Reversible**
- Redistribution of subcutaneous tissue
- Reduction in muscle mass
- Reduction in body hair
- Softening of skin
- Arrest/reversible of scalp hair loss
- Reduction in erectile function
- Decreased libido
- Emotional and social functioning
### 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/</td>
<td>3–6 months</td>
<td>1–2 years</td>
</tr>
<tr>
<td>strength</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softening of skin/decreased</td>
<td>3–6 months</td>
<td>Unknown</td>
</tr>
<tr>
<td>oiliness</td>
<td></td>
<td></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</td>
<td>6–12 months</td>
<td>3–6 months</td>
</tr>
<tr>
<td>and facial hair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male pattern baldness</td>
<td>No regrowth, loss</td>
<td>1–2 years</td>
</tr>
<tr>
<td>stops 1–3 months</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Adapted with permission from Hembree et al. (2009). Copyright 2009, The Endocrine Society.

* Estimates represent published and unpublished clinical observations.

* Significantly dependent on amount of exercise.

* Complete removal of male facial and body hair requires electrolysis, laser treatment, or both.
Smoking increase risk of blood clot – counsel on cessation, discuss ASA 81mg, use patch over pills for lower clot risk.
Clot risk low at baseline (1:10,000) increase 2.5-4 fold with estradiol.
Prolactin: ask about headaches, vision changes and galactorrhea
Erectile dysfunction – Viagra or Cialis to treat prn

<table>
<thead>
<tr>
<th>Estradiol</th>
<th>Spironolactone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood clot (DVT, CVA)</td>
<td>Low BP (dizzy)</td>
</tr>
<tr>
<td>Prolactinoma</td>
<td>High Potassium (arrhythmia)</td>
</tr>
<tr>
<td></td>
<td>Low sodium (dizzy)</td>
</tr>
</tbody>
</table>
Masculinization

- Testosterone – injection (IM, SQ), patch, gel, cream (compounded), axillary gel.
- Injections are weekly – every 2 weeks
- Topical products are daily
- My practice: Start ½ initial dose for 1 month (50mg every 2 weeks) then increase to initial dose if tolerating well. (100mg every 2 weeks)
- Labs every 3 months during first year, every 6-12 months after.
  - Total testosterone (panel only if complicated cases)
  - CBC or Hg/Hct
Masculinization Effects

**Permanent**
- Facial hair
- Increase in body hair
- Deepening voice
- Clitoral enlargement
- Frontal and temporal hairline recession (male pattern baldness)

**Reversible**
- Redistribution of body fat
- Increase in muscle mass
- Increase libido, vaginal dryness, amenorrhea (ovulation is variable)
- Emotional and social shifts
- Acne
**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>

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A Adapted with permission from Hembree et al. (2009). Copyright 2009, The Endocrine Society.
B Estimates represent published and unpublished clinical observations.
C Highly dependent on age and inheritance; may be minimal.
D Significantly dependent on amount of exercise.
Risks Masculinization

- Erythrocytosis: Hct > reference range lab value cis male
  - Check T (peak, mid, trough) and adjust dose accordingly
  - More frequent injections at lower dose or transdermal helpful
  - Consider blood donation periodically
  - Consider pathologic causes of polycythemia
- Can worsen (or improve) autoimmune d/o
- Migraines – can be worse with cyclical hormonal changes consider daily transdermal prep to lower risks.
- Hair loss
- Acne
What are the pathologic causes of polycythemia?

- A. Cardiopulmonary disease
- B. Neoplasm
- C. Obstructive Sleep Apnea
- D. Tobacco Use
- E. All of the above
GenderQueer/Non-binary

- Use low doses, go slow
- Adjust based on goals
- For bone health use testosterone dose to keep LH and FSH in premenopausal range (post oophorectomy)
These effects of testosterone are not reversible:

- A. Enlargement of clitoris
- B. Growth of facial hair
- C. Deepened voice
- D. Hair loss
- E. All of the above
Which of the following is true?

- A. Breast growth should start within 3-6 months and may take 2-3 years to fully mature.
- B. Breast growth should start within a month and may take 5 years to fully mature.
- C. Breast growth should start within 3-6 months and may take 5 years to fully mature.
- D. Breast growth should start in 6-9 months and may take 2-3 years to fully mature.
Potential side effects of Spironolactone include all except:

- A. Low blood pressure
- B. Low sodium levels
- C. Low potassium levels
- D. Increased urination
Top Surgery – 1 letter

- Mastectomy
- Breast Augmentation
- (HRT x 1 year)
Bottom Surgery – 2 letters

- Orchietomy
- Vaginoplasty
- Vulvoplasty
- Hysterectomy
- Phalloplasty
- Metoidioplasty
Other surgeries

- Facial feminization
- Tracheal shave
- Vocal cord surgery
  - After behavioral voice therapy if needed
Document Changes
National Center for Transgender Equality – ID Documents Center

- Drivers license
- Social Security Card
- Passport
- Birth Certificate
- Medical Records
- Medical Insurance
- Bank and other accounts
- Lease
- Paycheck
Questions?
In summary....

- Transgender healthcare is super rewarding
- There are lots of great resources
- Just do it!
References

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- National Center for Transgender Equality Documents Center
  https://transequality.org/documents
Terminology

- **Gender Diverse** – perhaps the biggest umbrella term, more dynamic and less stigmatizing than gender non-conforming
- **Transgender** – a broad term for those whose gender identity or expression differs from their sex assigned at birth
- **Transexual** – older term not currently used
- **Gender identity** – the internal sense of being male, female, or elsewhere on the gender continuum
- **Gender expression** – how gender is externalized (IE clothing, hair)
- **Transgender female** – A transgender person designated as male at birth
- **Transgender male** – A transgender person designated as female at birth
- **Genderqueer/Gender nonbinary/Gender fluid** – patients who identify as both or neither genders.
- **Agender** – Person who identifies as genderless or outside the gender continuum.
- **Transitioning** – the process of expressing one’s own gender identity.
- **Cisgender** – Gender identity matches sex assigned at birth
- **Preferred pronouns** – he/him, she/her, they/them/their, ze/hir