



The Privilege of Providing Care: Basics of Best Practices for Caring for Trans Patients with HIV Infection.

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Vanderbilt Comprehensive Care Clinic

Dec 9, 2016

- [Mentimeter.com](https://www.mentimeter.com)

Menti.com

I work as a(n):

- A. MD
- B. NP/PA
- C. RN/LPN
- D. Social Worker
- E. Dietician
- F. Other

Menti.com

I prescribe hormone therapy to my patients:

A. Yes

B. No

Menti.com

I prescribe antiretroviral therapy to my patients.

A. Yes

B. No

Objectives

- Be familiar with appropriate terminology.
- Discuss issues related to HIV infection within the transgender community.
- Be acquainted with basic health maintenance issues.
- Basics on hormone therapy and surgical options.

VANITY FAIR



“Call me Caitlyn”

by BUZZ BISSINGER Photos by ANNIE LEIBOVITZ

A person with dark hair is shown in profile, looking out a window. Their hand is resting on their forehead. The background is a bright, slightly blurred outdoor scene. The overall mood is contemplative and serene.

'A Whole New Being'

How Cricket Nimmons Seized
the Transgender Moment

By DEBORAH SONTAG

Photographs by TODD HEISLER

Video by KASSIE BRACKEN


DEC. 12, 2015

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U.S. INTERNATIONAL 中文

The New York Times

Monday, August 17, 2015

 Today's Paper

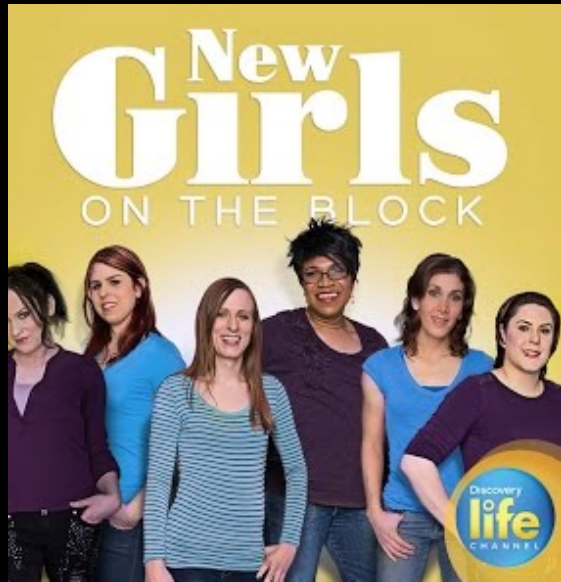
 Video

 75°F

Hang Seng -0.74% ↓

The Quest for Transgender Equality

 Share  Tweet  612



JUNE 9, 2014

TIME

THE TRANSGENDER TIPPING POINT

America's next
civil rights frontier

BY KATY STEINMETZ



Laverne Cox, a star of *Orange Is the New Black*, is one of an estimated 1.3 million Americans who identify as transgender

TIME.COM

Your formal education:

I received formal education on how to care for transgender individuals/gender minority populations:

- A. Yes, and it was adequate
- B. Yes, but it was not adequate
- C. No, nothing. Zilch. Nada.

Why is this important?

- Survey of 132 Deans of Medical Education
- Median time dedicated to teaching LGBT-related content in curriculum was 5 hours
- 9 reported 0 hours taught during preclinical years
- 44 reported 0 hours during clinical years
- 128 taught students to ask patients if they “have sex with men, women, or both” when obtaining a sexual history

Discrimination

I have experienced discrimination in the course of my medical care.

A. Yes

B. No

Education

I have had to educate my medical providers about trans issues.

A. Yes

B. No

Why is this important?

- The 2008–2009 U.S. National Transgender Discrimination Survey
- 28% of transgender adults experienced harassment in medical settings
- 19% reported being refused care
- 28% postponed care because of discrimination
- 50% of those who received care reported having to teach their clinicians about transgender care.

Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who are LGBT, Gender Nonconforming, or Born with DSD

A Resource for Medical Educators

First Edition, 2014

Edited for the AAMC by:

Andrew D. Hollenbach, Ph.D.

Kristen L. Eckstrand, Ph.D.

Alice Dreger, Ph.D.

mededportal.org

Browse Resources

Cultural Humility with Lesbian, Gay, Bisexual, and Transgender Populations: A Novel Curriculum in LGBT Health for Clinical Medical Students



Lesbian, gay, bisexual and transgender (LGBT) individuals encounter documented health disparities in the United States, perpetuated in part by limited LGBT-related content in medical education curricula. Myriad national medical associations acknowledge these curricular deficits and call for LGBT-related curricular content inclusion in undergraduate medical education. Furthermore, recognition of the effects of discriminati...

More publications like this:

- [Challenging Pelvic Exam](#)
- [LGBTQI* Defined: An Introduction to Understanding and Caring for the Queer Community](#)
- [An LGBTI-Inclusive Sexual History Taking Standardized Patient Case](#)
- [Preparing Future Physicians to Care for LGBT Patients: A Medical School Curriculum](#)
- [A Same-Sex Couple Copes with End-of-Life Issues: A Case Materials Guide](#)

Concepts

- Transgender- umbrella term for all people whose internal sense of their gender is different from societal norms for one's sex assigned at birth.
- Some transgender people who do not identify as either male or female, but rather identify outside of a gender binary.
 - Genderqueer, gender nonconforming, non-binary
 - 41% in one MA study on substance abuse identified as nonbinary/nonconforming

Policy brief: Transgender people and HIV: WHO July 2015

Flores et al. How many people identify as transgender in the US? The Williams Institute 2016.

Keroughlian et al, Drug Alcohol Dependence 2015.

Concepts

- Transition- the process that transgender people undergo to express their gender identity.
- “The process of bringing the body and mind into alignment.”
 - Physical (hormones, surgery), social, legal, psychological, linguistic, intellectual, and spiritual aspects of self.

Basic Concepts

- Biologic gender may differ from gender identity.
- Gender identity is distinct from sexual orientation.
- Sexual behaviors may differ from sexual orientation.

How many individuals identify as transgender?

- Numbers are difficult to define, as definitions and gender identity are fluid.
- 1 per 11,900 men, 1 per 30,400 women in the Netherlands identify as transgender.
- 1.4 million US Adults
- For approximately 66%, begins in childhood.

Gooren, NEJM 364;13, 2011

Schuster NEJM 2016.

Flores et al. How many adults identify as transgender in the US? The Williams Institute 2016.

However... Limitations of Research

- Reliance on convenience samples.
- Inconsistent or inaccurate definitions of transgender populations.
- *Conflation of transgender and LGB groups or MSM.
- Does not capture those that identify as nonconforming.



The Failure of the EMR... and other things.

- No reliable system nationwide for collecting sex and gender identity information
- Lack of reliable HIV surveillance data for transgender populations
- Inadequate EMR
- Provider discomfort with discussing sex and gender identity with patients
- Health departments not equipped to account for sex and gender identify information

POLICY BRIEF

TRANSGENDER PEOPLE AND HIV

JULY 2015



World Health
Organization

HIV and Transgender: A Global View

- Data are lacking!
- HIV prevalence data are less robust
 - Sampling challenges, lack of population size estimates, stigma
- Transgender people remain severely underserved in the response to HIV
- In one study in Canada only 46% of transwomen had ever been tested for HIV.

Transwomen and HIV

Transwomen have an odds of HIV infection that is ___ times greater than the general population?

- A. 2x
- B. 10x
- C. 25x
- D. 50x

A Global View

- Pooled HIV prevalence of 19% in transwomen in 15 countries.
- Transwomen had odds of HIV infection 49x greater than the general population.

**“All human beings
are born free and equal
in dignity and rights”**

- ARTICLE 1 OF THE UNIVERSAL DECLARATION OF HUMAN RIGHTS

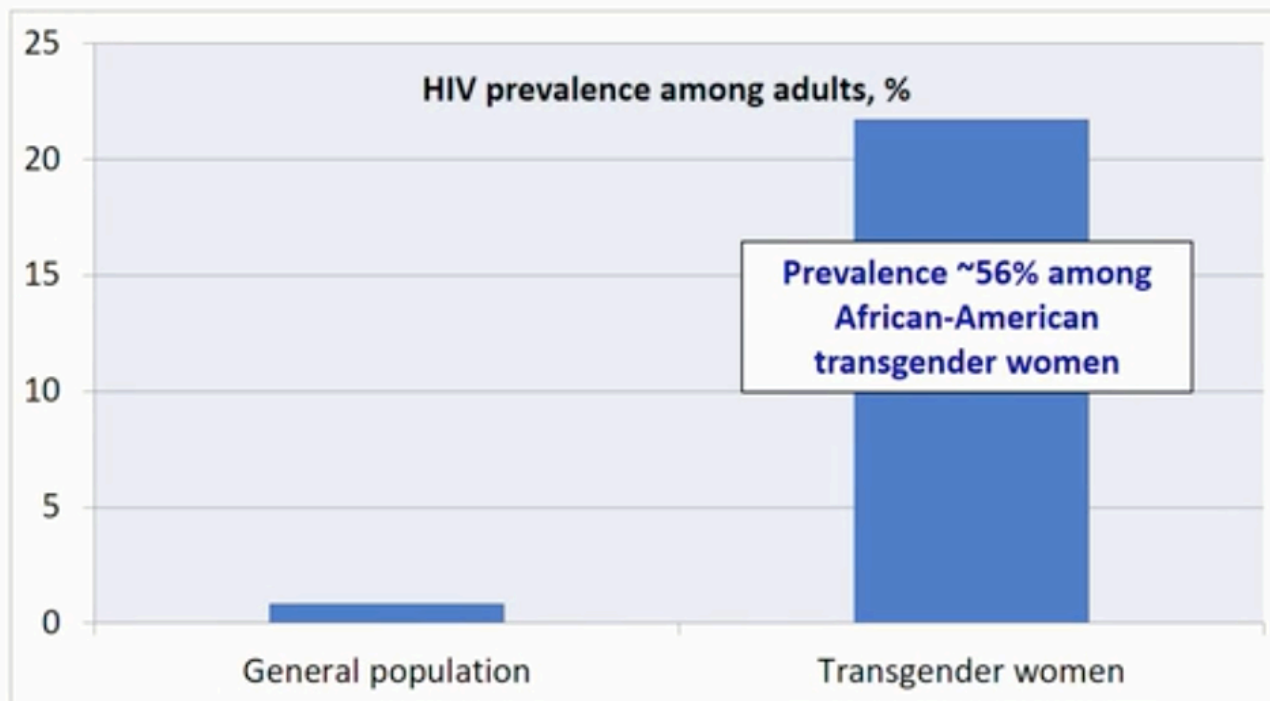
A Global View- Transmen

- The only published studies on HIV prevalence among transgender men are from North America.
- The most recently published meta-analysis found only two studies with laboratory-confirmed HIV status among transgender men.
 - One of the studies found no infections among participants
 - The other found a prevalence of 2% (one HIV-positive participant)

A Local View

- Which of the following is true about transwomen with HIV:
- A) The highest risk is in African American transwomen
- B) They are more likely to be tested in non-medical settings
- C) They *may* have higher viral loads than cisgender counterparts
- D) They are less likely to be virally suppressed
- E) All of the above

HIV disproportionately burdens transgender women.



1. Baral SD, Poteat T, Stromdahl S, Wirtz AL, Guadamuz TE, Beyrer C. Worldwide burden of HIV in transgender women: a systematic review and meta-analysis. *Lancet Infect Dis.* 2013;13(3):214.
2. Herbst JH, Jacobs ED, Finlayson TJ, et al. Estimating HIV prevalence and risk behaviors of transgender persons in the United States: a systematic review. *AIDS Behav.* 2008;12(1):1.

A Local View: U.S.

- 11-28% of trans-women were HIV positive.
- More than half (52%) of testing events with transgender persons occurred in non-clinical settings.
- 3x higher community viral load than in non-trans individuals.
- Compared with MSM, transwomen are less likely to achieve viral suppression.

<http://www.cdc.gov/hiv/group/gender/transgender/index.html>

http://transhealth.ucsf.edu/pdf/Sevelius_HIV_Specialist_Dec13.pdf

Herbst et al, AIDS Behav. 2008 Jan;12(1)

Das et al. PLOS ONE. 2010;5(6). Wiewel et al. AJPB Research 2016.

Special Challenges

- STIGMA
- Intimate partner violence
- Difficulty accessing education, employment, housing
- Lack of access to HIV testing, care, prevention
- Transwomen in NYC with HIV
 - 50% had history of substance use, sex work, homelessness, incarceration, sexual abuse

Concerns

Top 5 Health Concerns for Trans PLWHA:

1. Accessing gender-affirming, non-discriminatory health care
2. Hormone therapy
3. Mental Health Care
4. Personal care (nutrition, etc)
5. Antiretroviral therapy

Bundling Care

- 400 Transwomen with HIV in the US
- Receiving hormone Rx and ART in the same clinic was associated with:
 - ART use
 - Suppressed viral load

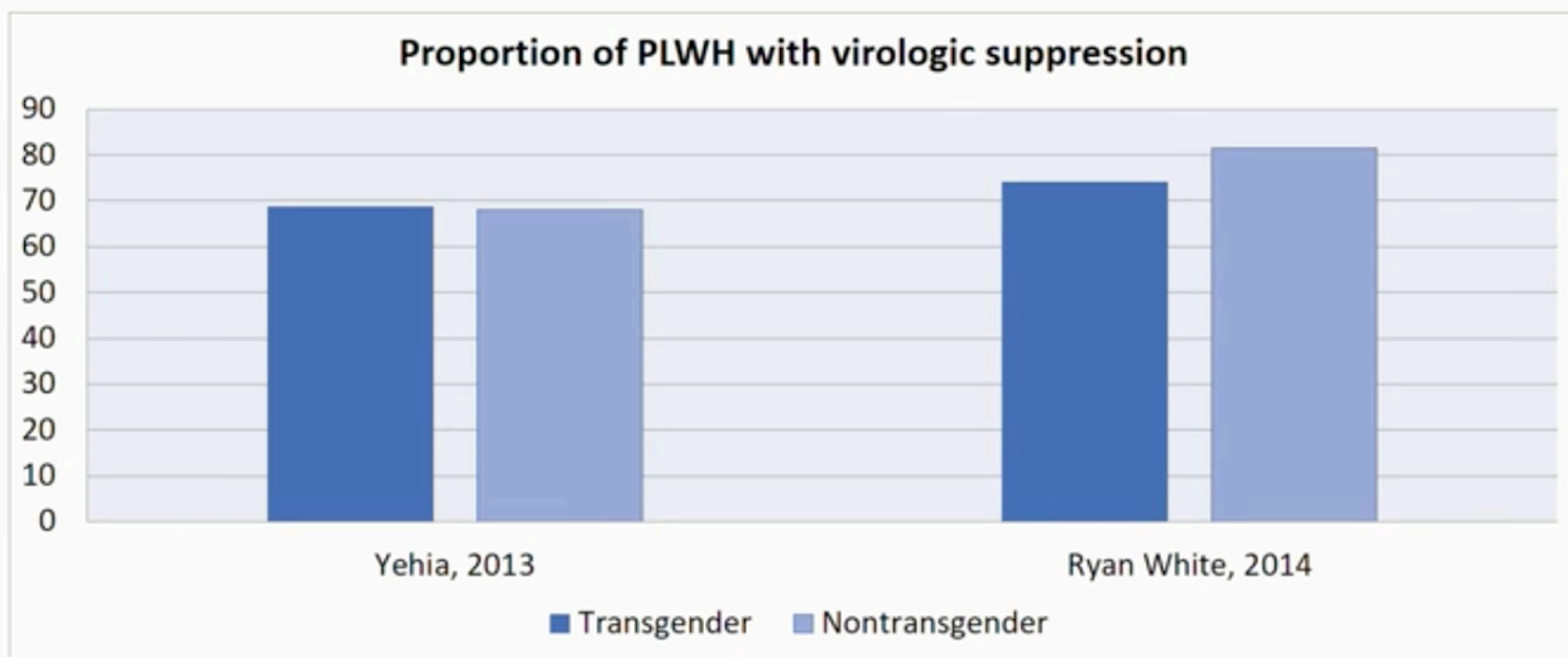


A blue and white name tag form. The top section is blue with the word "Hello" in white. Below that is a white box with the text "My name is" in blue. Underneath is another white box, and then a blue box with the text "My preferred pronoun is" in white. At the bottom is a final white box.

Deutch et al, National HIV Prevention
Conf 2015, Abstract 1886.

HIV and STIs in Transgender Populations, IDWeek 2016,
Dr. Kevin Ard, National LGBT Health Education Center Oct 2016

Virologic suppression in transgender compared to non-transgender people



1. Health Resources and Services Administration. Ryan White HIV/AIDS Program Annual Client-Level Data Report 2014. Available at: <http://hab.hrsa.gov/data/servicesdelivered/2014rwhapdatareport.pdf>.
2. Yehia BR, Fleishman JA, Moore RD, Gebo KA. Retention in care and health outcomes of transgender persons living with HIV. Clin Infect Dis. 2013;57(5):774.

Health Maintenance
and
Basic Healthcare

- Transhealth.ucsf.edu
- *Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People*
- *Care of the HIV Infected Transgender Patient*
 - <http://www.hivguidelines.org/clinical-guidelines/transgender/care-of-the-hiv-infected-transgender-patient/>

Basic Care: Psychosocial Assessment

“As part of the routine management of HIV-infected patients, clinicians should perform a psychosocial assessment at baseline and at least annually in HIV-infected transgender patients.”

Psychosocial Assessment

- Support network
 - Family and partner contacts, including level of knowledge and support of patient's gender identity
 - Stability in relationships
- Transgender-related discrimination or violence
- Housing status*
- Employment and insurance
 - If employed, are the patient's employer and coworkers accepting of the patient's gender identity?
 - If insured, can the patient be reimbursed for transgender-related care?
- Educational level
- Legal issues
 - Living will and healthcare proxy
 - Permanency planning for dependents
 - Potential obstacles to legal gender change and name change

Harm Reduction

Clinicians should assess for the following behaviors in HIV-infected transgender patients:

- Silicone use- ARDS
- Hormones obtained without prescription, including specific hormones used
- Needle-sharing among those who inject hormones, silicone, and/or drugs
- Genital taping
- Sexual risk behaviors

A word on STIs...

- US systematic review:
 - Self-report of lifetime STI 21.1%
 - Higher in MTF > FTM
- Prospective study of 230 MTF people in NYC
 - Syphilis incidence 3.6% per year
 - GC/CT incidence 4.2%/4.5% per year
- Retrospective study of 145 in Boston
 - Prevalence syphilis 2.8%
 - Prevalence GC/CT 2.1% each

Physical Exam

- “Should be relevant to the anatomy that is present, regardless of gender presentation, and without assumptions as to anatomy or identity.”
- Keep in mind potential prior negative experiences within the health care setting, including discrimination as well as physical or emotional abuse.

Basic Care: Physical Exam

- May be traumatic for the patient
 - Explain each step of exam
 - Consider mental health referral
 - Defer if patient not comfortable
- However, every effort should be made to provide the appropriate care
- Ensure patient understands risks of deferral

Basic Care: Pap Smears

- Clinicians should perform routine cervical Pap tests in any FTM patient with HIV with cervical tissue.
- Not indicated if no cervical tissue present.
- Transmasculine persons are less likely to be up to date on cervical cancer screenings
- Must notify the laboratory that the sample being provided is indeed a cervical pap smear.
- The use of testosterone or presence of amenorrhea should be indicated on the requisition.

Tucking/Binding

- Skin breakdown
- Tucking of testes/penis
 - Hernias
 - External inguinal ring complications
 - Perineal skin breakdown
 - Abnormal CT findings

Mammograms

When are mammograms indicated for transwomen?

- A. As soon as feminizing hormone therapy is begun.
- B. After 5 years on feminizing therapy.
- C. Only if breast augmentation is performed.
- D. No one can figure out when to do mammograms in the medical community anyway....

Cancer Screening- Breast Cancer

- Complicated by lack of consensus
- Dutch study of 50 transgender women found that 60% had "dense" or "very dense" breasts on mammography.
- Only 3 cases in 3,566 in VA population.
- Start after 5 years of feminizing hormone use.

Breast Cancer Screening

- “Screening mammography should be performed every 2 years, once the age of 50 and 5-10 years of feminizing hormone use criteria have been met. Providers and patients should engage in discussions that include the risks of overscreening and an assessment of individual risk factors.”

Prostate Cancer

- In 320 women in Belgium who had undergone vaginoplasty, PSAs, along with transvaginal ultrasound and digital vaginal examination of the prostate revealed lower PSA and prostate volume than what would be expected in a non-transgender men of corresponding age.
- Anti-androgens may lower PSAs. Removal of gonads and exposure to estrogen further reduces risk.

Prostate Cancer

- Transgender women who have undergone vaginoplasty have a prostate anterior to the vaginal wall, and a digital neovaginal exam examination may be more effective.
- When PSA testing is done in transgender women with low testosterone levels, it may be appropriate to reduce the upper limit of normal to 1.0 ng/ml.

Hormonal Therapy

Overview of transgender health care issues

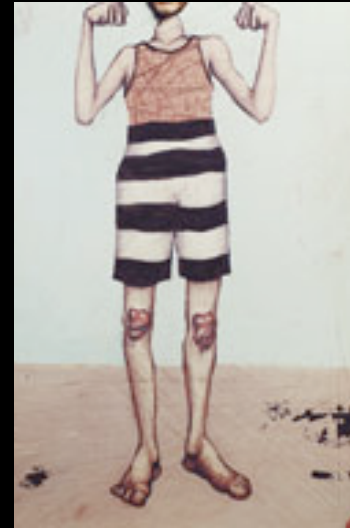
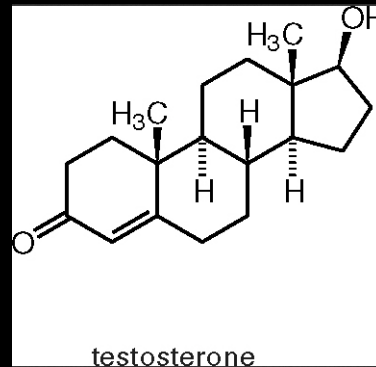
hormones

Goals of treatment:

1. Safely reduce endogenous sex hormones



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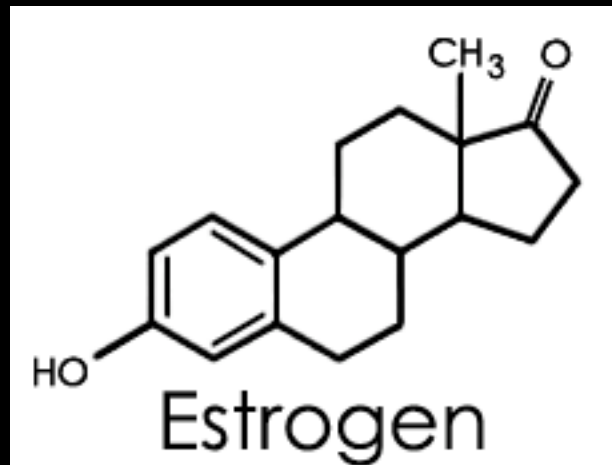


Overview of transgender health care issues

hormones

Goals of treatment:

2. Safely administer exogenous cross-gender hormones



Overview of transgender health care issues

hormones

Goals of treatment:

3. Achieve desired secondary sex characteristics

TABLE 14. Feminizing effects in MTF transsexual persons

Effect	Onset ^a	Maximum ^a
Redistribution of body fat	3–6 months	2–3 yr
Decrease in muscle mass and strength	3–6 months	1–2 yr
Softening of skin/decreased oiliness	3–6 months	Unknown
Decreased libido	1–3 months	3–6 months
Decreased spontaneous erections	1–3 months	3–6 months
Male sexual dysfunction	Variable	Variable
Breast growth	3–6 months	2–3 yr
Decreased testicular volume	3–6 months	2–3 yr
Decreased sperm production	Unknown	>3 yr
Decreased terminal hair growth	6–12 months	>3 yr ^b
Scalp hair	No regrowth	^c
Voice changes	None	^d

^a Estimates represent clinical observations. See Refs. 81, 92, and 93.

^b Complete removal of male sexual hair requires electrolysis, or laser treatment, or both.

^c Familial scalp hair loss may occur if estrogens are stopped.

^d Treatment by speech pathologists for voice training is most effective.

(Hembree et al., 2009, p. 3145)



Slide courtesy of Meghan Hayes, NP

Overview of transgender health care issues

hormones

“To date, no controlled clinical trials of any feminizing/masculinizing hormone regimen have been conducted to evaluate safety or efficacy in producing physical transition”
(WPATH, 2012, p. 47)

Hormone Therapy

- Analysis of 28 studies; 1093 MTF, 801 FTM
- 80% reported significant improvement in gender dysphoria
- 78% reported significant improvement in psychological symptoms
- 80% reported significant improvement in quality of life
- 72% reported improvement in sexual function

Standards for Hormone Therapy

- World Professional Association for Transgender Health (WPATH) 2012
- Endocrine Society Clinical Practice Guidelines 2009
- NEJM Review 2011
- Tom Waddell Health Center Protocols
- Fenway Community Health Clinic

Standards of Care
for the Health of Transsexual,
Transgender, and Gender-
Nonconforming People

The World Professional Association for Transgender Health



WPATH WORLD PROFESSIONAL
ASSOCIATION for
TRANSGENDER HEALTH

Informed Consent

- Hormone therapy may lead to irreversible physical changes
- Document in medical record that all information about risks/benefits have been explained, including impact on reproductive capacity

Hormone Therapy- Feminizing Rx

- Body fat redistribution, decreased muscle mass, softening of skin
- Enlarged breasts
- Decreased libido/spontaneous erections
- Male sexual dysfunction, decreased sperm production/testicular volume
- Thinning of body and facial hair
- *Hormones will not effect pitch of voice.
- *Breast size generally not reversible.

Timeline

TABLE 14. Feminizing effects in MTF transsexual persons

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Scalp hair	No regrowth	^c
Voice changes	None	^d

FTM- Testosterone

	Endocrine Society	Tom Waddell
Oral Testosterone undecanoate	Dose 160-240 mg/d	Dose
Parenteral Testosterone cypionate	Dose 100-200mg IM q 2 wk	Dose 100-400mg IM q2-4wk
Testosterone undecanoate	1000 mg IM q12 wks	
Transdermal Testosterone gel 1%	Dose 2.5-10 g/d	Dose Apply daily
Testosterone patch	2.5-7.5 mg/d	2.5mg patch, 1-2 per day

MTF Hormone Therapy

- Anti-androgen therapy + estrogen
- Anti-androgens reduce endogenous testosterone levels down to levels found in biologic females
- Anti-androgens:
 - Spironolactone/Finasteride
 - GnRH Agonists (goserelin acetate)
 - Bilateral orchiectomy

Estrogen Therapy

- Nonprescription use, inquire about illicit use
- Ethinyl estradiol not recommended- associated with 3x increased risk for CV event
- Response is variable
- Stop estrogens prior to major surgery, resume 1 week after
- Consider adding ASA for smokers, >40, obese, cardiac risk factors

MTF- Estrogen

	Endocrine Society	Tom Waddell
Oral Estradiol	2.0-6.0mg/d	Starting: 2-3mg/d Typical: 4mg/d Max: 8mg/d
Parenteral Estradiol valerate	2-10mg IM q week	Starting: 20-40mg IM q2wks Typical: 40mg IM q2 wks Max: 40-80mg IM q 2 wks
Transdermal Estradiol patch	0.1-0.4 mg twice weekly	Starting: 0.1-0.2mg/d Typical: 0.2-0.3mg/d Max: 0.3mg/d

Drug Interactions with ART?

- Not much data- thought to be safe!
- Most interactions between PI and estrogens decrease estrogen level
- If estrogen is continued but PI's are stopped, can lead to sudden increase in estrogen levels and increased risk of adverse events
- Hormonal contraception does not effect PrEP efficacy in cisgender women
- Watch for TMP/SMX and spironolactone-hyperK!

Surgery

Surgery

- Should not be done until:
 - Patient is of legal age
 - Patient has lived continuously for at least 12 months in gender role
- Chest surgery for FTM can be done earlier
- After surgery, hormonal therapy must continue

Surgery

- Letter required from mental health professional
- 1 referral for breast/chest surgery
- 2 referrals for TAH/BSO, orchiectomy, genital reconstructive surgeries
- Criteria for letter laid out in WPATH guidelines
- Often not an option

MTF SRS

- Penectomy
- Orchiectomy
- Construction of neovagina
- Penile skin/colon for vaginal lining
- Scrotal skin for labia



FTM SRS

- TAH/BSO
- Mastectomy
- Metoidioplasty or Phalloplasty
- Vaginectomy
- Scrotoplasty



SRS

- Medicare as of May 2014 will cover SRS
- 9 state Medicaid programs cover transgender related health care to some extent
- No more than 10 surgeons nationwide perform vaginoplasties, and that fewer than six perform both male-to-female and female-to-male genital surgery

How can we help?

- Support! Act as an ally/advocate for our patients.
- Address the risk of verbal and physical assault
- Help with emotional challenges related to disclosing gender identity
- Discussing medical options for gender affirmation (e.g., hormone therapy).
- Offer appropriate clinical care based on a person's anatomy regardless of gender identity (e.g., Pap tests for a transgender man who has a cervix).
- We need a National Trans Continuum of Care.

Improving Care

- Make health care settings welcoming for transgender patients!
- Use correct names/pronouns and reflect in EMR when possible.
- Train ALL staff- including front desk.
- For researchers, avoid lumping MSM and transgender individuals into a single group.
- Include nonbinary/nonconforming individuals!

Conclusion

- Transwomen are at dramatically increased risk for HIV infection
- Physical exams may be traumatic but appropriate health maintenance should be goal
- ART and Hormone therapy are likely safe and there may be benefits to providing both together
- We can always strive to do better and provide compassionate care

Questions?



- Thank you!

And now for... TransCare Bingo!

- Rules:
- First to 5 in a row wins!
- Answers must be correct...
- This is all in good fun 😊

#1

- This test is indicated for transwomen with breast tissue who have received hormone therapy for 5 years or more.

#2

- Considered by many to be the Gold Standard for Trans-related health care.

#3

- The odds of HIV infection for transwomen is ___ times higher than the general population.

#4

- In one study, the community HIV viral load for trans individuals living with HIV was __ times higher than cisgender individuals with HIV.

#5

- Health care providers should screen for _____ at each clinic visit.
- (Two possible correct answers)

#6

- As of May 2014, _____ will now cover sexual reassignment surgery.

#7

- Screening for off-label silicone injection can be an example of _____.

#8

- Hormone therapy will not affect _____.

#9

- Risks for cardiovascular complications with estrogen therapy are increased with _____ use.

#10

- Star of Orange is the New Black.

#11

- Nearly ___% of transgender adults experienced harassment in a medical setting according to one study.

#12

- A super informative conference for all things Trans-empowering.

#13

- A term to describe an individual whose self-identity conforms with the gender that corresponds to their biological sex.

#14

- Shown to improve mental and sexual health of those who are prescribed this.

#15

- Not recommended for hormone therapy for cross-sex purposes, _____ is associated with a 3x increased risk for cardiovascular events.

#16

- A television show starring Jeffrey Tambor transitioning.

#17

- Electronic health records can help improve the care of transgender patients by including the patient's preferred _____.

#18

- Antiretroviral therapy is not thought to have serious interactions with hormonal therapy, but caution should be used when starting or stopping this class of antiretroviral:

#19

- This surgery, using a pedicled or a free vascularized flap, is a lengthy, multi-stage procedure that can include urinary complications.

#20

- Caring for trans patients is a unique and special _____ for medical providers.

#21

- Compared with MSM, transwomen living with HIV are less likely to achieve ____.

#22

- Harm reduction may include screening for _____ use, which could lead to ARDS or disseminated *S. aureus* infections.

- Thank you!

Table 1. Diagnostic Criteria for Gender Identity Disorder.*

Strong and persistent cross-sex identification (not merely a desire for any perceived cultural advantages of being the other sex)

Children (at least four criteria must be met)

Repeatedly stated desire to be a member of the other sex or insistence on actually being a member of the other sex

In boys, preference for cross-dressing or simulating female attire; in girls, insistence on wearing only stereotypically masculine clothing

Strong and persistent preferences for cross-sex roles in make-believe play or persistent fantasies of being a member of the other sex

Intense desire to participate in the stereotypical games and pastimes of the other sex

Strong preference for playmates of the other sex

Adolescents and adults (at least one criterion must be met)

Stated desire to be of the other sex

Frequent attempts to pass as the other sex

Desire to live or be treated as the other sex lives or is treated

Conviction of having the typical feelings and reactions of the other sex

Discomfort with original sex or sense of inappropriateness in the role of that sex

Children (at least one criterion must be met)

In boys, assertion that penis or testes are disgusting or will disappear, assertion that it would be better not to have a penis, or aversion to rough-and-tumble play and rejection of male stereotypical toys, games, and activities; in girls, rejection of urinating in a sitting position, assertion that she has or will have a penis, assertion that she does not want to have breasts or menstruate, or marked aversion to normative feminine clothing

Adolescents and adults (at least one criterion must be met)

Preoccupation with getting rid of primary and secondary sex characteristics (e.g., request for hormones, surgery, or other procedures to physically alter sexual characteristics and simulate the other sex) or belief in having been born with the wrong sex

No concurrent physical intersex condition

Clinically significant distress or impairment in social, occupational, or other important areas of functioning

* These criteria were adapted from the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* (fourth edition, text revision).⁴

Risks of Hormone Rx- Mortality

- 966 MTF and 365 FTM individuals
- Median f/u 18.5 years
- MTF received estrogens + cyproterone acetate
- FTM parenteral/oral testosterone or testosterone gel

Risks of Hormone Rx- Mortality

- MTF group had 51% higher mortality than general population
 - Suicide, HIV/AIDS, cardiovascular disease, drug abuse
 - No increase in total cancer mortality
 - Lung and hematological cancer mortality rates were elevated
 - Current ethinyl estradiol use 3x higher rate CV death
- FTM group no difference in mortality from general population

Risks- Feminizing Therapy

- VTE- 20 fold increase in one cohort
 - Ethinyl estradiol (OCP's)
- Higher with oral estrogens, *lowest with transdermal*
 - Age, smoking status increase risk
- Androgen deprivation + estrogen therapy → increased triglyceride levels, insulin resistance, blood pressure

Risks- Masculinizing Therapy

- 712 FTM from 1975 to 2004
- Average dose 250mg IM q 2-3 weeks

- Benefits/Observations

- Virilization of clitoris, skin
- Ovaries appeared polycystic
- Bone mass preserved
- Spatial ability improved

- Risks

- Verbal fluency diminished
- Hct increased
- Weight, visceral fat increased
- Lipid profile changes

POLICY BRIEF

TRANSGENDER PEOPLE AND HIV

JULY 2015



World Health
Organization