Modern Approaches to Transgender and Nonbinary Youth with HIV

Michelle Collins-Ogle, MD, FAAP, FPIDS, AAHIVS
Montefiore Adolescent and Youth Sexual-health Clinic, Inc. (MAYS)
Associate Professor of Pediatrics
Einstein College of Medicine
Pediatric and Adolescent HIV
Children’s Hospital at Montefiore

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We continue to grow and evolve and welcome you on our journey.
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Speaker Disclosures

Speaker: Michelle Collins-Ogle, MD, FAAP, FPIDS

Disclosures: No financial conflicts of interest
Learning Objectives

Upon completion of this presentation, learners should be better able to:

- Review the nuances when assessing transgender and nonbinary youth for HIV/STI screening and linkage to HIV care
- Adopt strategies for engaging transgender persons in effective patient-provider communications to improve sexual health and HIV outcomes
- Apply the latest guidelines and recent clinical evidence on safety, efficacy, and adherence to improve PrEP initiation and monitoring in diverse patient groups
- Describe the impact of the 4 Us on prioritizing HIV prevention in transgender and non-binary youth of color
Global Threat of HIV in Children

- Globally in 2022, 1.5 million children are infected with HIV (under 15 yo)
- In 2022, 84,000 AIDS related deaths occurred in children
- In 2022, 130,000 new HIV infections are in children
- Since 2010, new HIV infections among children decreased by 58%
- Youth, ages 15-24 account for 27% of all new infections
  - Youth face barriers accessing sexual and reproductive health services
  - Delayed diagnosis and underestimate of new infections

Globally HIV Remains a Significant Challenge in Children

- 2.1 million people are living with HIV globally.
- Only 43% are on antiretroviral treatment.

[Map showing global distribution and percentage of children on antiretroviral treatment in different regions.]
“My mom doesn’t know I’m gay. Don’t tell her I have AIDS.”

M. Collins Ogle: Used with permission.
Men Who Have Sex With Men (MSM) accounted for 70% of youth newly diagnosed with HIV in 2019.

Of those, 79% were Young Men of Color, primarily in the South.

CDC. (2019). Fact Sheet: HIV and Youth.
Polling Question #1

What percent of adolescents 13-24 yrs. are virally suppressed?

A. 14%

B. 35%

C. 27%

D. 50%

E. There is no data in this age group
People with Diagnosed HIV in 44 States and the District of Columbia by Age, 2019*

For every 100 people with diagnosed HIV aged 13 to 24:
- 80 received some HIV care
- 59 were retained in care †
- 63 were virally suppressed ‡

For every 100 people with diagnosed HIV aged 25 to 34:
- 78 received some HIV care
- 56 were retained in care †
- 63 were virally suppressed ‡

For every 100 people with diagnosed HIV aged 35 to 44:
- 76 received some HIV care
- 56 were retained in care †
- 63 were virally suppressed ‡

For every 100 people with diagnosed HIV aged 45 to 54:
- 76 received some HIV care
- 58 were retained in care †
- 67 were virally suppressed ‡

For every 100 people with diagnosed HIV aged 55 and older:
- 75 received some HIV care
- 60 were retained in care †
- 67 were virally suppressed ‡

For comparison, for every 100 people overall with diagnosed HIV, 76 received some care, 58 were retained in care, and 66 were virally suppressed.

* Data not available for children aged 12 and under.
† Had 2 viral load or CD4 tests at least 3 months apart in a year.
‡ Based on most recent viral load test.

Review of Program Objectives

- Review the nuances when assessing transgender and nonbinary youth for HIV/STI screening and linkage to HIV care

- Adopt strategies for engaging transgender persons in effective patient-provider communications to improve sexual health and HIV outcomes

- Apply the latest guidelines and recent clinical evidence on safety, efficacy, and adherence to improve PrEP initiation and monitoring in diverse patient groups

- Describe the impact of the 4 Us on prioritizing HIV prevention in transgender and non-binary youth of color
Novel Approach to HIV Treatment for Transgender Youth
Transgender Population in the US and New York

- According to the Centers for Disease Control, 1 million people identify as Transgender, 0.6% of adult population in 2016.
- Transgender youth ages 13-17 make up 0.7% of the youth population, about 150,000 people.
- Bronx population about 1.4 million.
- Estimated 5000-9000 trans individuals in the Bronx.
- 78,600 (.43% of population) in NYS identify as Transgender.
Polling Question # 2

Which of the following is NOT CORRECT about HIV risk in transgender and nonbinary youth?

1. Transgender adolescents with HIV experience homelessness at higher rates than their cisgender counterparts.

2. Transgender and nonbinary youth should be virally suppressed before initiating hormone therapy.

3. The majority of transgender adolescents with HIV enter healthcare as asymptomatic and with minimal immune dysfunction.

4. Mental health challenges and substance use disorder are important co-morbidities for transgender adolescents with HIV.

5. 'You can’t trick me;' all statements are correct.
Adolescents and Youth Susceptibility to HIV/STI

- Vulnerable HIV/STI
  - Independence
  - Health insurance
  - Homeless
- Exploring Sexuality
  - Gender Identity
  - Sexual abuse
- Peer Relationships
  - Gender power imbalance
- Body Image
  - Trans / homophobia

Michelle Collins-Ogle, MD
Challenges with LGBTQ Youth with HIV

- Same developmental challenges as all youth
- Must develop healthy, integrated identity amidst negative stereotypes/prejudice, often without family support
- More susceptible to emotional distress, psychiatric morbidity, multiple disparities, stigma, abuse, violence, isolation, suicide
- Particular challenges of TG youth: childhood to adolescence
- Sexuality and healthy relationships
Viral Suppression among Transgender Adults and Adolescents Served by the Ryan White HIV/AIDS Program, 2019

VIRAL SUPPRESSION AMONG TRANSGENDER ADULTS AND ADOLESCENTS SERVED BY THE RYAN WHITE HIV/AIDS PROGRAM, 2019 – US AND 3 TERRITORIES

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Transgender Clients Overall</th>
<th>20-24 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>7,943</td>
<td>619</td>
</tr>
<tr>
<td>≥ 5 PERCENTAGE POINTS LOWER THAN TRANSGENDER CLIENTS OVERALL</td>
<td>RWHAP OVERALL (88.1%)</td>
<td>73.8</td>
</tr>
</tbody>
</table>

N REPRESENTS THE TOTAL NUMBER OF CLIENTS IN THE SPECIFIC POPULATION.
INCLUDES TRANSGENDER CLIENTS AGED 15 YEARS AND OLDER.
VIRAL SUPPRESSION: ≥ 1 OAHIS VISIT DURING THE CALENDAR YEAR AND ≥ 1 VIRAL LOAD REPORTED, WITH THE LAST VIRAL LOAD RESULT < 200 COPIES/ML.
* GUAM, PUERTO RICO, AND THE U.S. VIRGIN ISLANDS.

Status Neutral Approach: Adolescent focused Care

- Decreases Stigma
- Dramatically decreases new HIV infections

Supports optimal health through continual engagement in comprehensive care

- Increases opportunities for more efficient service delivery
- Improves health equity
Status Neutral Approach and Adolescents

Goals - Meet youth where they are, destigmatize sexual health and gender affirming care

1. Expand access to pediatric and adolescent people at risk for Sexually Transmitted Infections including HIV. End the epidemic!
2. Expand access to gender affirming care for pediatric and adolescent people.
3. Provide options to care for people with HIV.
Building a program focused on adolescents and young adults

Montefiore Adolescent and Youth Sexual-health Clinic (MAYS)

**Division of Pediatric Infectious Diseases**
People with HIV, PrEP, PEP
High Risk HIV negative Transgender / Non-binary
**HIV exposed (uninfected / infected) babies**
**Other STI exposures (Syphilis, GC, Hep B/C)**

**Division of Allergy and Immunology**
People with HIV, PrEP, PEP

**Division of Adolescent Medicine**
Gender Affirming Care

**Division of Psychiatry / Behavioral Health**
Oval Center - Adult Infectious Diseases
“I didn’t keep my appointments because I didn’t care. Now I love myself for the first time, I feel happy.”

M. Collins Ogle: Used with permission. MAYS image
Case # 1: Meet Jazzay

19 y/o Latina transgender teenage girl presents for routine visit

Medical History
➢ Last saw a medical provider 3 years ago at the beginning of the COVID-19 pandemic.
➢ Has been on estradiol and spironolactone since age 17.
➢ Gender affirming surgery include breast augmentation 1 year ago.
➢ Had HIV screen before her last surgery (nonreactive). She has never had an STI screen.
➢ No new medical issues and at the clinic for routine monitoring.

Social history
➢ Lives with grandmother; separated from long term partner 2 years ago.
➢ Has sex with cisgender men (oral and anal), sometimes with condoms.

I’m just here for a check-up!
Case # 1 (Cont’d)

Physical Examination
▪ General: Well developed, appears stated age
▪ Skin: No lesions
▪ Cardiac/Respiratory: Normal
▪ Breast: Clinical breast exam normal
▪ Genital: Normal male genitalia – +genital warts

Laboratory Values
▪ CBC, BMP: Normal
▪ AST, ALT: Normal
▪ Serum estradiol: 200 pg/ml
▪ Serum testosterone: 19 ng/dL

STI Testing
▪ Syphilis: Nonreactive
▪ 3 site testing for GC/Chlamydia: Negative
▪ HIV 1/2/Ab: REACTIVE

Medications
▪ Oral estradiol 6 mg once daily
▪ Oral spironolactone 200 mg daily

Michelle Collins-Ogle, MD
Polling Question #3

19 y/o Latina transgender woman presents for routine visit and has a reactive HIV Ab/Ag test

Which of the following is true regarding next steps?

A. ART should not be initiated until HIV confirmatory testing is done
B. ART should be initiated immediately
C. Gender-affirming hormone therapy is associated with reduced ART efficacy
D. ART should not be initiated until viral load is determined
Case # 1: Clinical Course

19 y/o Latina transgender woman presents for routine visit and has a reactive HIV Ab/Ag test

Maria was counseled about HIV and offered rapid initiation of ART
• She agreed and was started on BIC/FTC/TDF one tablet daily

She asked several questions:
Will BIC/FTC/TDF affect my hormone levels?
Can I stay on my current dose of estradiol?
I heard these medicines can cause bone problems. Do I need to worry?
Barriers to Viral Suppression in Transgender / Nonbinary Youth

Transphobia

Barriers to Healthcare

Barriers to Education & Employment (lack of ID)

Sex Work

Substance Abuse

Stress-Depression

HIV/STI Risk

Radix 2015
<table>
<thead>
<tr>
<th>Potential Effect</th>
<th>ARV Drugs</th>
<th>Affected GAHT Drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Least Potential Impact on GAHT</td>
<td>All NRTIs Unboosted INSTIs: BIC, DTG, RAL NNRTIs: RPV, DOR</td>
<td>None</td>
</tr>
<tr>
<td>ARV Drugs that may Increase GAHT</td>
<td>EVG/c, PI/r, PI/c</td>
<td>Testosterone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Finasteride</td>
</tr>
<tr>
<td>ARV Drugs that may Decrease GAHT</td>
<td>PI/r</td>
<td>Estradiol</td>
</tr>
<tr>
<td></td>
<td>EFV, ETR, NVP</td>
<td>Estradiol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Testosterone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Finasteride</td>
</tr>
<tr>
<td>ARV Drugs with Unclear Effect on GAHT</td>
<td>EVG/c and PI/c on estradiol</td>
<td>Estradiol</td>
</tr>
</tbody>
</table>

ARV = Antiretroviral; GAHT = Gender Affirming Hormone Therapy; NRTI = Nucleoside Reverse Transcriptase Inhibitor; BIC = Bictegravir; DTG = Dolutegravir; RAL = Raltegravir; NNRTI = Non-Nucleoside Reverse Transcriptase Inhibitor; RPV = Rilpivirine; DOR = Doravirine; EVG/c = Elvitegravir/Cobicistat; PI/r = Protease Inhibitor/Ritonavir; PI/c = Protease Inhibitor/Cobicistat; EFV = Efavirenz; ETR = Etravirine; NVP = Nevirapine.

Tailoring HIV Prevention Services for Transgender Youth
Case # 2: Meet Angel

A 17 y/o transgender teenage female presents for initial visit to start hormone therapy

Medical history
➢ Has taken her friend’s estradiol for about 9 months
➢ Thinks she had a UTI a few months ago (burning)
➢ Has been well otherwise

Medications
➢ No current medications

Social history
➢ Intermittently lives with her 30-year old cisgender boyfriend; denies partner violence
➢ Can’t live as female at home; couch surfs
➢ Current alcohol and marijuana use
➢ Has sex with cisgender men (anal receptive / oral)
➢ Sometimes engages in survival sex to pay bills / eat (no condoms)
How Do You Engage Angel?

Medical History cont.
➢ Last HIV/STI testing about 1 year ago: HIV - nonreactive
➢ Had been on TDF/FTC a year ago but stopped
➢ No gender affirming surgeries
➢ She has never been diagnosed with an STI

Social history
➢ Unemployed
➢ Uses marijuana / alcohol
➢ Unstable housing

I’m just here for my hormones!
A 17 y/o transgender teenage female presents for initial visit to start hormone therapy

Physical Examination

- **General**: Thin, not cachectic
- **Skin**: Non pruritic; hyper-pigmented macular, copper color lesions on trunk, palms and soles
- **Breast development**: Tanner 1
- **Genital**: Normal male genitalia; no lesions, sores or vesicles

Laboratory Values

- **CBC, BMP**: Normal
- **AST, ALT**: Mildly elevated
- **Total / Direct Bili**: Elevated
- **Estrogen/Testosterone**: Unremarkable
- Hep A Ab+; Hep B Core / Surface Ag & Ab-
- Hep C Ab -

STI Testing

- **HIV**: Nonreactive
- **Syphilis RPR**: 1:64, *T. pallidum* Ab+
- 3 site testing for GC/Chlamydia: Rectal GC+

Angel (Cont’d)
Is Angel a candidate for HIV pre-exposure prophylaxis (PrEP)?

A. Yes; she should start TDF/FTC along with oral GAHT now
B. No; she did not bring it up or ask about PrEP
C. Maybe; more discussion is needed about HIV risk and prevention
D. No; PrEP and GAHT should not be initiated simultaneously
E. Both B and D

GAHT = Gender Affirming Hormone Therapy; PrEP = Pre-Exposure Prophylaxis; FTC = Emtricitabine; TDF = Tenofovir Disoproxil Fumarate; TAF = Tenofovir Alafenamide.
A 17 y/o transgender teenage female presents for an initial visit to start hormone therapy.

- Angel was treated for STIs
  - LA Benzathine Penicillin 2.4 million units for secondary syphilis
  - Ceftriaxone 500 mg IM for Rectal GC

- She is concerned about FTC/TDF PrEP and estradiol levels
  - Discussed the risks and benefits of initiating hormone therapy

- Does she need parental consent?
  - ✓ For PrEP?
  - ✓ For gender affirming care?

- Discussed with her the ongoing risk for acquisition of HIV
  - ✓ Survival Sex / Syphilis and GC
Rationale for integrating gender affirming care and HIV prevention

- HIV estimated prevalence 9.2% for all transgender persons nationally with a significantly higher prevalence for transgender women at 14.1%. A paucity of published data exists defining the risk of HIV in transgender or non-binary (TGNB) youth. *Becasen JS, et al. Am J Public Health 2018 Nov 29

- Recent CDC data reported the urgent need for more HIV prevention and treatment services in this population.

- TGNB youth have several risk factors for HIV infection, including unstable housing, under/uninsured, unemployment, and substance use disorder.

- We assessed key social determinants of health (SDOH) in TGNB youth and the impact on their ability to prioritize and access HIV prevention in our PrEP program in the Bronx, NY
Methods: Assess gaps in understanding risks

- From 10/2021-8/2022 we conducted an assessment of 101 sexually active TGNB youth 14-27 years to evaluate potential barriers to HIV prevention by querying the 4 U's: 1) Unemployed, 2) Uninsured/Underinsured, 3) Unstable housing, and 4) substance Use disorder.

- The assessment also questioned medical gender affirmation and HIV/STI prevention. Information obtained was used to assess knowledge gaps that affect their understanding of HIV risk.

- Based on results, we created and implemented a research tool, ARTISTA (Assess Risk for Transmitted Infections in Sexually active Transgender Adolescents) to improve gaps in understanding HIV/STI risk in TGNB youth.
Transgender and Non-binary youth at risk for HIV

**Table 1:** Demographics of TGNB youth attending the MAYS clinic Bronx, NY

<table>
<thead>
<tr>
<th></th>
<th>Sexually active TGNB youth assessed for HIV risk and PrEP awareness (N=101)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transgender female, (49%)</td>
<td>51 (50.4%)</td>
</tr>
<tr>
<td>Mean Age (years)</td>
<td>20 ± 2.7 years</td>
</tr>
<tr>
<td>TGNB Youth of Color</td>
<td>66%</td>
</tr>
<tr>
<td>PrEP initiation and adherence</td>
<td>24% (10/41)</td>
</tr>
</tbody>
</table>
Social Determinants of Health in TGNB Youth in the Bronx

Figure 1: Assessment of Key SDOH in TGNB Youth of Color in the Bronx: 4 U’s

- 23% Unemployment
- 11% Unstable Housing
- 10% Underinsured
- 40% Substance Use Disorder
Gender affirming care is associated with access and willingness for STI testing and counseling to inform them of their individual risk for HIV.

SDOH, specifically the 4 U’s negatively impact TGNB youth of color in the Bronx and are prioritized over HIV prevention.

We are restructuring our PrEP program to better understand the impact of ARTISTA and SDOH on improved PrEP uptake in TGNB youth of color.
Additional references and resources

What can clinicians do to improve comprehensive care?

• Educational materials designed to improve clinicians' ability to provide evidence-based, high-quality care for transgender patients. The World Professional Association for Transgender Patients (WPATH) [https://www.wpath.org](https://www.wpath.org) provides guidelines for healthcare clinicians. Another excellent source for transgender clinicians is University of California, San Francisco (UCSF) Transgender Care & Treatment Guidelines. [https://transhealth.ucsf.edu](https://transhealth.ucsf.edu)

• Host a clinic event: “Birthday clinic visit” Trans-girls Lunch and Learn; Transitioning awards.

• Recognize and document trauma as well as PTSD in transgender Youth. It is key to their overall health and may help in ongoing high-risk behaviors. Providing mental health services needs to be incorporated as part of comprehensive healthcare.
**Crisis Text Line**: employs nonconsensual active rescue using 911, first responders and potential law enforcement.

Text HOME to 741741

**National Suicide Prevention Hotline**: employs nonconsensual active rescue using 911, first responders, and potential law enforcement.

Call 1-800-273-8255.

**988**: employs nonconsensual active rescue using 911, first responders and potential law enforcement

**GLBT National Hotline**: 888-843-4564

**National Sexual Assault Telephone Hotline by RAINN**: 800-656-4673

**National Domestic Violence Hotline**: 1-800-799-7233

**Sex, Gender, and Relationships Hotline (SGR Hotline)**: 415-989-7374

Anti-violence Project hotline: 212-714-1141

**National Council on Alcoholism and Drug Dependence, 24-hour Hopeline**: 800-622-2255

**Thrive Lifeline**: for marginalized people in STEM fields

**Trans Lifeline**: U.S. 877-565-8860; Canada 877-330-6366
MATEC Resources

- National Clinician Consultation Center
  [http://nccc.ucsf.edu/](http://nccc.ucsf.edu/)
  - HIV Management
  - Perinatal HIV
  - HIV PrEP
  - HIV PEP line
  - HCV Management
  - Substance Use Management

- AETC National HIV Curriculum
  [https://aidsetc.org/nhc](https://aidsetc.org/nhc)

- AETC National HIV-HCV Curriculum
  [https://aidsetc.org/hivhcv](https://aidsetc.org/hivhcv)

- Hepatitis C Online
  [https://www.hepatitisc.uw.edu](https://www.hepatitisc.uw.edu)

- AETC National Coordinating Resource Center
  [https://aidsetc.org/](https://aidsetc.org/)

- Additional Trainings
  [https://matec.info](https://matec.info)
Contact Information

Michelle Collins-Ogle, MD, FAAP, FPIDS
Associate Professor of Pediatrics
Division of Pediatric Infectious Diseases
Medical Director, Montefiore Adolescent and Youth Sexual-health (MAYS) Clinic
Pediatric and Adolescent HIV
Children's Hospital at Montefiore
Pediatric Hospital of Albert Einstein College of Medicine
3411 Wayne Avenue, 7th Floor, Bronx, NY 10467
718-741-2470 Office
718-654-6692 Fax
mogle@montefiore.org