Toward Health Equity for Transgender and Nonbinary People

Sari L. Reisner, ScD
Assistant Professor of Medicine, Brigham and Women’s Hospital/Brigham and Women’s Hospital
Assistant Professor of Epidemiology, Harvard T.H. Chan School of Public Health
Research Scientist and Director of Transgender Health Research, Fenway Health
Continuing Medical Education Disclosure

- **Program Faculty:** Sari Reisner, ScD
- **Current Position:** Assistant Professor of Medicine, Harvard Medical School; Investigator and Director of Transgender Research, Brigham and Women’s Hospital
- **Disclosure:** No relevant financial relationships. Presentation does not include discussion of off-label products.

It is the policy of The National LGBT Health Education Center, Fenway Health that all CME planning committee/faculty/authors/editors/staff disclose relationships with commercial entities upon nomination/invitation of participation. Disclosure documents are reviewed for potential conflicts of interest and, if identified, they are resolved prior to confirmation of participation. Only participants who have no conflict of interest or who agree to an identified resolution process prior to their participation were involved in this CME activity.
Learning Objectives

1. To understand **terminology** and language for transgender and nonbinary health and healthcare
2. To review the **epidemiology** of health conditions and etiology of **health inequities** for the transgender and nonbinary population
3. To characterize **gender affirming** clinical care and research for **health equity**
Overview

- Terminology: Sex, Gender, and Transgender
- Transgender Epidemiology and Health Inequities
- Gender Affirming Clinical Care and Research
Overview

- Terminology: Sex, Gender, and Transgender
- Transgender Epidemiology and Health Inequities
- Gender Affirming Clinical Care and Research
Sex and Gender

- **Sex** and gender core determinants of health
- **Sex** – biological differences
  - Anatomy, chromosomes, hormones, genes, etc.
  - Assigned at birth
- **Gender** – social and cultural distinctions
  - Multidimensional
  - Psychological, social, behavioral
  - Gender identity, gender expression,
Transgender (Trans)

- Gender identity or expression different than sex assigned at birth
  - Trans feminine (TF): Transgender women, trans women, trans female, transgender girls → Male assigned sex at birth
  - Trans masculine (TM): Transgender men, trans men, trans male, transgender boys → Female assigned sex at birth
- Cultural variations: Hijra, travesti, waria, two-spirit
- Gender minorities - NIH

- Cisgender: Not transgender
Nonbinary (NB)

- Gender identity or expression not exclusively male or female
- Identify outside traditional male-female gender binary
  - Genderqueer, bigender, genderfluid
  - They/ them/ their
  - Ze/ hir/ hirs
- Assigned female at birth (AFAB)
- Assigned male at birth (AMAB)
Nonbinary (NB)
Nonbinary Gender Identity in 2015 U.S. Transgender Survey (>22,000)

Gender Identity

Gender Identity by Current Age

James, Herman, Rankin et al. 2016
Nonbinary Gender Identity in 2015 U.S. Transgender Survey (>22,000)

Gender Identity by Current Age

Gender Identity

Nonbinary: 35%
Transgender Women: 29%
Transgender Men: 33%
Other: 3%

Gender Identity by Current Age

- Nonbinary: 61 (18 to 24: 35, 25 to 44: 43, 45 to 64: 47, 65+: 46)
- Transgender Men: 43 (18 to 24: 9, 25 to 44: 47, 45 to 64: 0, 65+: 5)
- Transgender Women: 24 (18 to 24: 4, 25 to 44: 26, 45 to 64: 0, 65+: 5)

James, Herman, Rankin et al. 2016
Nonbinary Gender Identity in 2015 U.S. Transgender Survey (>22,000)

Gender Identity by Current Age

James, Herman, Rankin et al. 2016
## Population Estimate: People Who Identify as Transgender in the U.S.

<table>
<thead>
<tr>
<th>Population</th>
<th>Source</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transgender adults, ages 18+ years</td>
<td>Behavioral Risk Factor Surveillance System, 2014</td>
<td>0.58% (0.36%, 0.95%)</td>
</tr>
<tr>
<td>Transgender adults, ages 18+ years</td>
<td>Meta-analysis (27 studies)</td>
<td>0.87% (0.52%, 1.22%)</td>
</tr>
<tr>
<td>Transgender high school students, grades 9-12</td>
<td>Youth Risk Behavior Survey, 2017</td>
<td>1.8% (1.0%, 3.3%)</td>
</tr>
</tbody>
</table>

Gender Affirmation

- Social
- Psychological
- Medical
- Legal
Medical Gender Affirmation: Paradigm Shift in Transgender Health

- Disorder → Identity

- Gender Diversity ≠ Pathology

- Implications for Clinical Care

History of Diagnostic and Statistical Manual of Mental Disorders:

1973 • Homosexuality removed from DSM

1980 • Transsexualism added DSM-III

1994 • Gender Identity Disorder DSM-IV

2000 • Gender Identity Disorder DSM-IV-TR

2013 • Gender Dysphoria DSM-5

Reisner, Poteat, Keatley et al., Lancet, 2016
Informed Consent Models

- Discussion of risks and benefits of treatment
- Supportive mental health treatment (not gender-evaluating assessments)
- Patients assess and judge beneficence and consent to receive care
Standards of Care

https://www.wpath.org/publications/soc
https://transcare.ucsf.edu/guidelines
Medical Gender Affirmation Improves Mental Health and Quality of Life

Clinical Endocrinology (2010) 72, 214–231

doi: 10.1111/j.1365-2265.2009.03625.x

ORIGINAL ARTICLE

Hormonal therapy and sex reassignment: a systematic review and meta-analysis of quality of life and psychosocial outcomes


*Knowledge and Encounter Research Unit, †Division of Preventive Medicine, Mayo Clinic, Rochester, MN, USA, ‡Department of Psychiatry, Centre Hospitalier de Rouffach, France, §Mayo Clinic Libraries and ¶Division of Endocrinology, Diabetes, Metabolism, Nutrition, Mayo Clinic, Rochester, MN, USA

Transgender Health
Volume 1.1, 2016
DOI: 10.1089/trgh.2015.0008

REVIEW ARTICLE

A Systematic Review of the Effects of Hormone Therapy on Psychological Functioning and Quality of Life in Transgender Individuals

Jaclyn M. White Hughto1,2,* and Sari L. Reisner1,3,4

Open Access
Suicidal Ideation in Last 12 Months by Medical Gender Affirmation (n=19,814)

- Surgical Care: 33.1% Had this type of care, 55.6% Wanted but have not received this type of care.
- Hormone Therapy: 43.0% Had this type of care, 56.7% Wanted but have not received this type of care.

48% Self-Reported Suicidal Ideation in the Last 12 Months

Herman, Conron, Haas, Brown, Liu, Reisner, in prep
Nonbinary vs Binary Gender Minority Adult Health in a State-Wide Non-Probability Sample in Massachusetts (n=452)

- 40.9% nonbinary
- Demographics:
  - Younger age (mean age 28.9 vs 35.1)
  - Trans masculine (77.3% vs 53.2%)
- Gender affirmation:
  - Recognized gender identity at older age (mean age 16.4 vs 12.3)
  - Less likely to have current medical gender affirmation (27.0% vs 74.5%)

Reisner & White Hughto, PLOS One, 2019
Current Mental Health in a Sample of Socially Transitioned Transgender Children

- Prepubescent trans children who had socially transitioned (mean age 7.7)
- Controls matched by gender identity and age within 4 months (mean age 7.8)
- Siblings closest in age to the trans child (mean age 8.3)

<table>
<thead>
<tr>
<th></th>
<th>Transgender (n = 73)</th>
<th>Controls (n = 73)</th>
<th>Siblings (n = 49)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression by gender</td>
<td></td>
<td></td>
<td></td>
<td>.979c</td>
</tr>
<tr>
<td>Natal boys</td>
<td>49.8 (trans-girls)</td>
<td>48.0</td>
<td>48.9</td>
<td></td>
</tr>
<tr>
<td>Natal girls</td>
<td>50.8 (trans-boys)</td>
<td>48.5</td>
<td>49.9</td>
<td></td>
</tr>
<tr>
<td>Anxiety by gender</td>
<td></td>
<td></td>
<td></td>
<td>.664c</td>
</tr>
<tr>
<td>Natal boys</td>
<td>53.7</td>
<td>51.1</td>
<td>52.8</td>
<td></td>
</tr>
<tr>
<td>Natal girls</td>
<td>55.3</td>
<td>50.8</td>
<td>51.5</td>
<td></td>
</tr>
</tbody>
</table>

a) This is the only value that is significantly above the national average (50), although it is still substantially below the clinical (>83) or even preclinical (>60) range.
b) Transgender children who are natal boys and live with a female gender presentation are often called transgender girls or trans-girls; transgender children who are natal girls living with a male gender presentation are often called transgender boys or trans-boys.

c) Significance value of interaction between natal sex and group.
Gender Identity ≠ Sexual Orientation

Sexual orientation

• How a person identifies their physical, romantic, and emotional attraction to others

• Transgender people can be of any sexual orientation

Sexual Orientation Identity

- Queer: 43%
- Bisexual: 16%
- Gay/Lesbian: 10%
- Straight: 12%
- Other Nonbinary: 19%

N=452

Katz-Wise, Reisner, White Hughto, Keo-Meier, Archives Sex Behav, 2016
Overview

- Terminology: Sex, Gender, and Transgender
- Transgender Epidemiology and Health Inequities
- Gender Affirming Clinical Care and Research
A number of different conceptual perspectives can be applied to priority areas of research in order to further the evidence base for LGBT health issues.
Sexual and Gender Minorities (SGM): A Health Disparity Population

National Institutes of Health (NIH)

Reisner, Poteat, Keatley et al., Lancet, 2016

- Gender minority (n=1,443) vs cisgender (n=314,450):
  - Younger in age
  - People of color (lower % non-Hispanic white)
  - Low income, unemployed, uninsured
  - Never married
  - No minor child in the household
  - Not English-speaking
  - Unmet medical care due to cost in last 12 months
  - Limited in any way

Gender minority = Transgender and gender nonbinary adults

Streed, McCarthy, Haas, JAMA Intern Med, 2017
Transgender Health Inequities

- Poor self-rated general health
- HIV infection and other STIs
- Mental health conditions
- Substance use and abuse
- Eating disorders
- Cancer-related risks
- Violence/ victimization
- Preventive screening
- Lack access to culturally competent care
- Homelessness, incarceration
Global Burden of HIV in Transgender Women

Pooled HIV prevalence: **19.1%** (95% CI: 17.4%, 20.7%) in 11,066 transgender women worldwide

Baral, Poteat, Stromdahl et al., Lancet Infect Dis, 2013

Transgender Men (N=361)
- Black/African American: 58% (211)
- Hispanic/Latino: 15% (55)
- White: 16% (56)
- Other: 11% (39)

Transgender Women (N=1,974)
- Black/African American: 51% (1,002)
- Hispanic/Latina: 29% (578)
- White: 11% (212)
- Other: 9% (182)

Mental Health of Transgender Youth: A Matched Retrospective Cohort Study (n=360; Mean age=19.6)

- Depression: Transgender Youth 50.6%, Cisgender Youth 20.6%
- Anxiety: Transgender Youth 26.7%, Cisgender Youth 10%
- Suicide Ideation: Transgender Youth 31.1%, Cisgender Youth 11.1%
- Suicide Attempt: Transgender Youth 17.2%, Cisgender Youth 6.1%
- Self-Harm: Transgender Youth 16.7%, Cisgender Youth 4.4%
- Outpatient MH Services: Transgender Youth 22.8%, Cisgender Youth 11.1%
- Inpatient MH Services: Transgender Youth 45.6%, Cisgender Youth 16.1%

Adjusted Risk Ratios Demonstrating Increased Lifetime MH Burden: 2.36 to 4.30 (all p<0.01)


19 U.S. states and Guam (n=151,456)

Transgender vs cisgender:

- More days per month of...
  - Poor mental health ($\beta=1.74$; 95% CL=0.28, 3.19)
  - Poor physical health ($\beta=2.43$; 95% CL=0.61, 4.24)

- Higher prevalence of...
  - Poor general health (OR=1.7; 95% CI=1.2, 2.4)
  - Myocardial infarction (OR=1.7; 95% CI=1.1, 2.5)
  - Lack healthcare coverage (OR=1.8; 95% CI=1.2, 2.7)
  - Lack a healthcare provider (OR=1.5; 95% CI=1.0, 2.1)
  - Not visiting a dentist in the last year (OR=0.7; 95% CI=0.5, 1.0)

Meyer, Brown, Herman, Reisner, Bockting, Am J Public Health, 2017

- 22 U.S. states – 764 transgender adults
- Subgroup differences:
  - Transgender men/TM (n=239)
  - Transgender women/TW (n=369)
  - Gender nonbinary/NB (n=156)

<table>
<thead>
<tr>
<th>Health Outcomes</th>
<th>TM / TW aOR (95% CI)</th>
<th>NB / TW aOR (95% CI)</th>
<th>NB / TM aOR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent Mental Unhealthy Days (≥ 5 days of last 30 days vs 0-4 days)</td>
<td>1.5 (1.0, 2.2)</td>
<td>0.9 (0.6, 1.4)</td>
<td>0.6 (0.4, 0.9)</td>
</tr>
<tr>
<td></td>
<td>p=0.04</td>
<td>p=0.56</td>
<td>p=0.03</td>
</tr>
<tr>
<td>Poor Self-Rated General Health (Fair/ Poor vs Excellent/ Very Good/ Good)</td>
<td>2.3 (1.2, 4.8)</td>
<td>2.6 (1.1, 5.9)</td>
<td>1.1 (0.5, 2.4)</td>
</tr>
<tr>
<td></td>
<td>p=0.02</td>
<td>p=0.03</td>
<td>p=0.82</td>
</tr>
</tbody>
</table>

Cicero, Reisner, Merwin, et al., PLOS One, 2020
Comparing sexual minority (SM) to heterosexual (het) people *within* the transgender population:

<table>
<thead>
<tr>
<th>Health Outcomes</th>
<th>SM vs Het aOR (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent Mental Unhealthy Days</td>
<td>1.76 (1.19, 2.61)</td>
<td>0.005</td>
</tr>
<tr>
<td>(≥ 5 days of last 30 days vs 0-4 days)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequent Physical Unhealthy Days</td>
<td>1.72 (1.18, 2.53)</td>
<td>0.005</td>
</tr>
<tr>
<td>(≥ 5 days of last 30 days vs 0-4 days)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor Self-Rated General Health</td>
<td>1.69 (1.13, 2.53)</td>
<td>0.011</td>
</tr>
<tr>
<td>(Fair/ Poor vs Excellent/ Very Good/ Good)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-Morbid Problems or Impairments</td>
<td>2.72 (1.70, 4.35)</td>
<td>0.0001</td>
</tr>
<tr>
<td>(≥3 problems or impairments vs 0-2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cicero, Reisner, Merwin, et al., PLOS One, 2020
Why Transgender Health Inequities?

Transgender and Nonbinary → Adverse Health

Why Transgender Health Inequities?

Minority Stress
- Structural disadvantage
- Social & economic exclusion
- Stigma
- Discrimination
- Transphobia
- Violence victimization

Transgender and Nonbinary → Minority Stress → Adverse Health

Bullying
(weighted proportions)

Often bullied (before age 18)

Transgender (N = 274)

Cisgender Straight (n = 1048)

* p<0.05

Transgender-Related Intimate Partner Violence (T-IPV)

- Unique IPV directed at trans people
- Aug 2015-Sept 2016
- 150 trans masculine adults
  - T-IPV: 38.9% lifetime and 10.1% past-year
  - Associated with two- to three-fold increase in odds of PTSD, depression, and global psychological distress (p<0.05)

T-IPV Scale:
(a) forced to conform to an undesired gender presentation or stop pursuing gender transition;
(b) pressured to remain in a relationship by being told no one would date a trans person;
(c) "outed" as a form of blackmail;
(d) had transition-related hormones, prosthetics, or clothing hidden or destroyed

Gender Non-Affirmation from Cis Male Partners: Trans MSM

- Transmasculine people who have sex with men (trans MSM)
- N=857 trans MSM sampled online Nov-Dec 2017 in the US
- 65% age<30; 28% nonbinary; 70% white
- 78% gender non-affirmation, last 6 mo
  - Higher psychological distress (p<0.05)
  - Higher anxiety (p<0.05)
  - Lower odds of HIV testing (p<0.01)
  - Higher odds of past 6-month condomless receptive sex (p<0.01)

Scale: Gender Non-Affirmation from Cisgender Male Partners:

“I have been mis-pronouned/misgendered during or after sex”

“I have crossed boundaries...to validate my gender identity or expression in the sexual encounter”

Reisner, Moore, Asquith, et al. AIDS Behav, 2020
Structural Disadvantage: Incarceration Experiences Among Transgender Women in the United States (n=3878)

National Transgender Discrimination Survey (NTDS): History of jail/prison 19.3% (n=748)

Single adjusted multivariable regression model included: Age, gender identity, race/ethnicity, health insurance, income, education, hormones, surgery, geographic region, HIV status, sex work, substance use, smoking, physical and sexual assault, suicide attempt, data collection mode.

Reisner, Bailey, Sevelius, Women Health, 2014
Health Effects of Stigma, Social Exclusion, and Violence

2019

https://www.huffpost.com/entry/at-least-22-transgender-people-were-killed-in-2019-here-are-their-stories_n_5dd40648e4b03b969717f3d7
Discrimination and Stigma in Healthcare: 2015 U.S. Transgender Survey (USTS, n>22,000 Adults)

- In the last 12 months ...
  - 25% health insurance coverage denial related to being trans
  - 1 in 4 (25%) hormones
  - More than half (55%) surgery
- 33% negative experience with a healthcare provider due being trans
  - verbal harassment, refusal of treatment, had to teach provider to receive appropriate care
- 23% did not see a doctor when needed to due to fear of being mistreated
Visual Gender Nonconforming (GNC) Expression (n=452)

Experienced Discrimination in Past 12 Months

<table>
<thead>
<tr>
<th></th>
<th>Prevalence</th>
<th>aRR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Visual GNC</td>
<td>22%</td>
<td>2.00</td>
<td>1.23, 3.26</td>
</tr>
<tr>
<td>Referent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate Visual GNC</td>
<td>34%</td>
<td>2.04</td>
<td>1.16, 3.58</td>
</tr>
<tr>
<td>High Visual GNC</td>
<td>44%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+Multivariable logistic regression model included: age, gender identity, cross-sex hormone use, surgical gender affirmation, visual gender nonconforming expression, race/ethnicity, income, education, employment, health insurance status, and survey modality.

aRR = Adjusted Risk Ratio. 95% CI=95% Confidence Interval. GNC= Gender Nonconforming.
Discrimination Shapes Healthcare Utilization (n=452)

24% prevalence → Discrimination definition: Mistreatment on the basis of transgender or gender nonconforming identity/presentation (included verbal harassment and physical assault).

![Bar chart showing discrimination and no discrimination in healthcare utilization.]

- Postponed care when needed, resulting in emergency care: 14% vs. 4%
  - Adj. RR: 2.38 (1.76, 3.23)
- Postponed needed medical care when sick or injured: 24% vs. 7%
  - Adj. RR: 3.14 (2.63, 4.43)
- Postponed routine preventive medical care: 30% vs. 13%
  - Adj. RR: 2.43 (1.92, 3.08)

Reisner, Hughto, Dunham, et al. Milbank Quart, 2015
Attributed Reasons for Everyday Discrimination Experienced: A Non-Clinical Sample of Transgender and Nonbinary Adults

Mean (SD) = 4.8 (2.4) [range 0-14]

Reisner, White Hughto, Gamarel, Keuroghlian, Mizock, Pachankis, J Counseling Psych, 2016
**PTSD Symptoms in a Sample of Transgender and Nonbinary Adults (n=412)**

- 44.4% probable PTSD

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Beta (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyday Discrimination (cont.)</td>
<td>0.25 (0.21, 0.30)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Number Reasons for Discrimination (cont.)</td>
<td>0.05 (0.01, 0.10)</td>
<td>0.015</td>
</tr>
<tr>
<td>Childhood Abuse Age &lt; 15 years</td>
<td>0.29 (0.21, 0.37)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Intimate Partner Violence</td>
<td>0.18 (0.10, 0.26)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Depression</td>
<td>0.23 (0.14, 0.32)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Polydrug Use (2+ drugs)</td>
<td>0.13 (0.03, 0.23)</td>
<td>0.009</td>
</tr>
<tr>
<td>Unstably Housed vs Stably Housed</td>
<td>0.24 (0.15, 0.33)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>High Visual Gender Nonconforming Expression</td>
<td>0.17 (0.08, 0.27)</td>
<td>0.0003</td>
</tr>
</tbody>
</table>

Multivariable linear regression model: age, gender spectrum, medical gender affirmation, nonbinary gender identity, race/ethnicity, income, education, sexual orientation, social gender affirmation, survey mode (online vs in-person).

All continuous (cont.) variables z-scored.

Reisner, White Hughto, Gamarel, Keuroghlian, Mizock, Pachankis, J Counseling Psych, 2016
“I just keep putting it off ... putting it off ...and even when I do finally call and make an appointment, I want to tell people that I'm trans* and need a careful provider, but I don't and the anxiety builds up and I don't go to the appointment or keep rescheduling until I absolutely need to... I think a lot of trans people feel this way, as well as other people that face discrimination in the healthcare setting.” (Trans Masculine, Interview, Boston, MA)
Hypothalamic-Pituitary-Adrenal (HPA) Axis: Diurnal Cortisol Predicted by Transition-Related Stress Variables in Transgender Men (n=65)

- Experiencing transition-related stress
  - Predicted higher cortisol levels at the awakening sample
  - Exhibited steeper slopes

DuBois, Powers, Everett, Juster, Psychoneuroendocrinology, 2017
Why Transgender Health Disparities?

Biopsychosocial Determinants
- Social
- Psychological
- Biological

Transgender and Nonbinary → Biopsychosocial Determinants → Adverse Health

Reisner. In Preparation.
Intersectionality Research for Transgender Health Justice (IRTHJ) Framework

Intersectional Causes of Health Inequities

Layer 1: Structures of Domination
- White Supremacy
- Cisgenderism
- Heteropatriarchy
- Capitalism
- Colonialism
- Adultism/Ageism
- Ableism

Layer 2: Institutional Systems
- Housing
- Immigration-Refugee
- Health Care
- Public Health
- Education
- Criminal-Legal
- Foster Care
- Welfare
- Organized Religion

Layer 3: Socio-Structural Processes
- Colonizing
- Gendering
- Class Exploitation
- Racializing
- Pathologizing
- Criminalizing

Structures of Domination

Institutional Systems

Socio-Structural Processes

Transgender Health Inequities

Disrupt the Status Quo

Name Intersecting Power Relations

Center Embodied Knowledge

Transgender Health Justice

Wesp, Malcoe, Elliott, Poteat, Transgender Health, 2019
10 Years of Transgender Health Research: Number of Peer-Review Publications, 2009-2019
10 Years of Transgender Health Research: Number of Peer-Review Publications on Resilience, 2009-2019

Resilience = 3.4% of transgender health research published

Search performed 10/31/19
# Trans Masculine Mental Health: Everyday Discrimination Experiences and Resilience (n=150)

<table>
<thead>
<tr>
<th></th>
<th>Depression, 7 Days</th>
<th>Anxiety, 7 Days</th>
<th>Non-Suicidal Self-Injury, 12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence (%)</td>
<td>25.7%</td>
<td>31.1%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Multivariable Models</td>
<td>AOR (95% CI)</td>
<td>AOR (95% CI)</td>
<td>AOR (95% CI)</td>
</tr>
<tr>
<td>Everyday Discrimination, Last 12 Months</td>
<td>1.08 (1.03, 1.13)*</td>
<td>1.09 (1.03, 1.15)*</td>
<td>1.06 (1.01, 1.13)*</td>
</tr>
<tr>
<td>Resilience Score, Current</td>
<td>0.81 (0.71, 0.93)*</td>
<td>0.77 (0.66, 0.90)*</td>
<td>0.78 (0.66, 0.91) *</td>
</tr>
</tbody>
</table>

BSI = Brief Symptom Inventory-18. Multivariable models included any variable with an association <= 0.10 and used backward selection. Depression: Education. Anxiety: Income. NSSI: Age. Resilience score range 10-36; mean = 13.0 (SD=3.3).

*p<0.05

McDowell, White Hughto, Reisner, BMC Psychiatry, 2019
What Protective Factors Have Been Identified in Transgender and Nonbinary Health Research?

- Transgender community connectedness
- Social support (peers, families)
- Gender affirmation
- Transgender pride/identity pride
- Hope/optimism
- Positive coping
- Spiritual beliefs
- Collective self-esteem
- Activism and advocacy
Overview

- Terminology: Sex, Gender, and Transgender
- Transgender Epidemiology and Health Inequities
- **Gender Affirming Clinical Care and Research**
Beyond Bathrooms

- Sensitive, responsive, and gender affirming clinical care
- Trust and reciprocity between transgender communities and healthcare contexts
- Engage transgender and nonbinary communities
Comprehensive Transgender Healthcare: The Gender Affirming Clinical and Public Health Model of Fenway Health

Sari L. Reisner, Judith Bradford, Ruben Hopwood, Alex Gonzalez, Harvey Makadon, David Todisco, Timothy Cavanaugh, Rodney VanDerwalker, Chris Grasso, Shayne Zaslow, Stephen L. Boswell, and Kenneth Mayer

ABSTRACT: This report describes the evolution of a Boston community health center's multidisciplinary model of transgender healthcare, research, education, and dissemination of best practices. This process began with the development of a community-based approach to care that has been refined over almost 20 years where transgender patients have received tailored services through the Transgender Health Program. This program began as a response to unmet clinical needs and has grown through recognition that our locally culturally responsive approach that links clinical care with biobehavioral and health services research, education, training, and advocacy promotes social justice and health equity for transgender people. Fenway Health's holistic public health efforts recognize the key role of gender affirmation in the care and well-being of transgender people worldwide.

KEYWORDS: Health equity, Health care, Transgender

INTRODUCTION

Transgender people have an assigned sex at birth that differs from their current gender identity or expression. This report describes the evolution of Fenway Health's multidisciplinary model of transgender health care, research, education, training, and dissemination of its practice. This includes the development of, and changes to, a community-based approach spanning almost two decades. Opportunities for future growth of transgender care and research locally and globally are discussed, with a focus on the linkage of clinical care with health research, education, training, and advocacy to promote social justice and health equity for transgender people across the world.
Fenway Health in Boston, MA: Transgender Health Program Growth, 1997-2019

- Number (N) of Patients
- Year

- 1997 (EHR Starts in Use)
- 2000 ('04 THP Starts)
- 2005 ('06 New Coord.)
- 2009 ('07 New Protocols)
- 2012 ('10 New Pgm Asst.)
- 2013 (11/'12 New Med Dir)
- 2014 (New Pt Advocate)
- 2015 (Decentralization)
- 2016
- 2017
- 2018
- 2019
Fenway Health in Boston, MA: Transgender Health Program Growth, 1997-2019

Number (N) of Patients

Year

1997 (EHR Starts in Use)
2000 ('04 THP Starts)
2005 ('06 New Coord.)
2009 ('07 New Protocols)
2012 ('10 New Pgm Asst.)
2013 (11/'12 New Med Dir)
2014 (New Pt Advocate)
2015 (Decentralization)
2016
2017
2018
2019

0 500 1000 1500 2000 2500 3000 3500 4000 4500

11 41 116 366 879 1208 1456 2017 2939 3454 3763 4238
Gender Affirming Clinical Care

- Be sensitive of language used with all patients
- Ask patients the name and pronouns they use
- Don’t assume a patient wants to medically affirm their gender
- Don’t assume a person’s sexual orientation based on gender identity
- Assess for social stressors
- Provide contextualized healthcare grounded in the lived experiences of transgender and nonbinary patients
Gender Affirming Research

Integrated and Gender-Affirming Transgender Clinical Care and Research

Sari L. Reisner, ScD,* Asa Radix, MD, MPH,† and Madeline B. Deutsch, MD, MPH‡

Abstract: Transgender (trans) communities worldwide, particularly those on the trans feminine spectrum, are disproportionately burdened by HIV infection and at risk for HIV acquisition/transmission. Trans individuals represent an underserved, highly stigmatized, and under-resourced population not only in HIV prevention efforts but also in delivery of general primary medical and clinical care that is gender affirming. We offer a model of gender-affirmative integrated clinical care and community research to address and intervene on disparities in HIV infection for transgender people. We define trans terminology, briefly review the social epidemiology of HIV infection among trans individuals, highlight gender affirmation as a key social determinant of health, describe exemplar models of gender-affirmative clinical care in Boston MA, New York, NY, and San Francisco, CA, and offer suggested “best practices” for how to integrate clinical care and research for the field of HIV prevention. Holistic and culturally responsive HIV prevention interventions must be grounded in the lived realities the trans community faces to reduce disparities in HIV infection. HIV prevention interventions will be most effective if they use a structural approach and integrate primary concerns of transgender people (eg, gender-affirmative care and management of gender transition) alongside delivery of HIV-related services (eg, biobehavioral prevention, HIV testing, linkage to care, and treatment).

Key Words: HIV, transgender, prevention, models of clinical care, health inequities

(© Acquir Immuno Defic Syndr 2016;72:S235-S242)

From the ‘General Pediatrics, Harvard Medical School, Boston Children’s Hospital, Boston, MA; Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA; The Fenway Institute, Fenway Health, Boston, MA; TCallen-Lorde Community Health Center, New York.

OVERVIEW

Despite the disproportionate burden of HIV infection facing transgender communities, particularly for trans feminine spectrum people worldwide, transgender individuals continue to represent an underserved, highly stigmatized, and under-resourced population in both general clinical care and HIV prevention services. The aim of this article is to describe and present a model of gender-affirmative and integrated clinical care and community research for transgender people to address and intervene on disparities in HIV infection. To do this, we first define terminology pertaining to transgender people, briefly review the epidemiology of HIV infection and risks in transgender communities, describe exemplar models of gender-affirmative clinical care for transgender people in Boston MA, New York, NY, and San Francisco, CA, and offer suggested “best practices” for integrating clinical care and research in transgender care. It is our assertion that any holistic HIV prevention intervention for transgender people will need to address clinical issues and integrate primary concerns of transgender people (eg, gender-affirmative care, management of gender transition, and medical gender affirmation) alongside delivery of HIV-related services (biobehavioral prevention, testing, linkage to care, and treatment). Integration of gender-affirmative clinical care and research represents a holistic and structural approach to intervene on HIV disparities for transgender people.

TERMINOLOGY

Transgender and gender nonconforming people (trans or gender minority) have a gender identity or expression that differs from their assigned sex at birth. Trans people are a diverse group. There is varied terminology used to describe gender minority people in different geographic and cultural contexts and settings; language and terms also continuously evolve.

Introduction

The past three decades have seen exponential growth in the range and depth of evidence-based guidelines in a broad range of medical disciplines [1]. The term “evidence-based medicine” first appeared in a brief article published in 1992 in the Journal of the American Medical Association (JAMA) by the Evidence-Based Medicine Working Group [2].
Lesotho: standing up for transgender health and rights

Living proudly as a transgender man in the small sub-Saharan country of Lesotho has come at a serious price. My public activism on issues of sexual orientation and gender identity and expression makes me vulnerable to threats to my personal safety. The widespread instances of “corrective” rape against transgender men and lesbian women mean that I must constantly be careful and vigilant in every kind of public space, from entertainment venues to walks home from work. Gender prejudice is a norm in Lesotho, so in addition to these fears and the work I do as Director of the People’s Matrix Association (Matrix Support Group), gaining my family’s acceptance is its own burden.

Beyond fears for discrimination and violence in public and even private settings, there are country-wide infrastructure challenges, such as poor internet connection and capacity stressors. Like many such organisations, resources are limited at the People’s Matrix Association and there are few opportunities for professional development, which makes planning and implementation work extremely challenging. All of which seriously affects my professional and personal life, as I sometimes must sacrifice my personal resources just to keep the organisation running. The late hours this work often requires further endangers my personal safety, not to mention affecting my relationship with partners and friends.

There is hope, however, and that is that I am not alone in this struggle. In the past 6 months, I have gained a mentor guiding me in the organisational development process, strengthening my self-esteem as I work toward achieving dignity for all transgender people in Lesotho.

Tampese Motsingeng

South Africa: access to gender-affirming health care

My own reality as a transgender woman of colour from rural South Africa is what brought me to the fight for justice for other transgender women in South Africa and beyond.

In South Africa, the legacy of colonialism, institutionalised inequality, and apartheid shaped the current reality of people of colour, especially for transgender people of colour. All of these intersecting factors lead to a complex array of challenges I can only begin to address:

- The legal context makes life difficult. South African law allows for transgender people to change names and gender markers, but the law is implemented inconsistently. When legal documents do not match the identities of transgender persons, it presents a huge challenge for accessing health and other social services.
- The health context also affects our lives. There are only two facilities in South Africa where gender-affirming surgeries are done, and both have a shocking waiting list of many years. Often when transgender people do not get to be their authentic and true selves, the mental-physical disconnect factors into transgender people not “taking care” of themselves. This manifests in high-risk behaviours like sex work that increase HIV risk.
- The social context also presents challenges. A Transcendence study on violence against transgender women in South Africa showed that 85% of trans women have experienced violence in one way or the other, and the picture is worse for trans women of colour. Another problem for many communities of colour is ritual circumcision. This practice is fraught with gendered implications, since the ritual represents becoming a man, which directly conflicts with the feminine identities of transgender women. However, to reject this tradition often means rejection from families, financial ruin, homelessness, and health risks.

Leigh Ann van der Merwe

Leigh Ann van der Merwe is the Coordinator and Founder of SHE (Social, Health and Empowerment Funded Collective of Transgender And Intersex Women of Africa). Leigh Ann was born in Ugie, Eastern Cape of South Africa. Leigh Ann has extensive experience in research pertaining to public health, sexual and reproductive health, and feminism. She holds a certificate in Community Journalism from the University of South Africa and is currently enrolled in the postgraduate programme in Public Health at the University of the Western Cape. Over the past 8 years, Leigh Ann has held positions with several local and international agencies and non-governmental organisations, and has presented and consulted extensively on transgender women’s issues. She was also a fellow in the Open Society/ Australian American Foundation/Transgender Centre of Excellence programme.
Barriers and Facilitators to Research Participation

- Social and economic vulnerabilities shape HIV research participation for transgender women
- 5 online focus groups (n=41) from Aug 2017-Jan 2018
  - 4 English, 1 Spanish
  - Atlanta, Baltimore, Miami, New York City, Washington DC

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited opportunities</td>
<td>Peer involvement/engagement</td>
</tr>
<tr>
<td>Mistrust</td>
<td>Monetary incentives</td>
</tr>
<tr>
<td>Fear of mistreatment</td>
<td>Non-monetary incentives</td>
</tr>
<tr>
<td>Safety and confidentiality</td>
<td>Flexibility and choices</td>
</tr>
<tr>
<td>Competing priorities</td>
<td>Multiple modalities/methods</td>
</tr>
<tr>
<td>HIV stigma</td>
<td>Transcenteredness</td>
</tr>
</tbody>
</table>

Reisner, Chaudhry, Cooney, et al., BMJ Open, 2020
Cervical Cancer Screening: Barriers to Pap Test Uptake for Trans Masculine (TM) People

- Low uptake of provider-administered Pap tests for cervical cancer screening
  - More than 1 in 3 (37%) not up-to-date
- 32 TM qualitative interviews to understand perceived barriers and facilitators
  - Gender dysphoria and discomfort
  - Gendered nature of testing
  - Long-term use of testosterone
  - Difficulty accessing healthcare
- Interest in self-collection methods

“If I could do the HPV swab myself I’d be more inclined to do that on a regular regime … Simply cause it means I’m not as vulnerable.” (Trans male/genderqueer, 50 years-old)
Study Aim

- To assess performance characteristics and acceptability of self- vs provider-collection methods for high-risk human papillomavirus (hr-HPV) testing in cervical cancer screening in adults

http://www.transmaschealth.org

PI: Reisner
- Cavanaugh
- Deutsch
- Potter
- Peitzmeier

http://www.transmaschealth.org

Reisner, Deutsch, Peitzmeier, et al., PLOS One, 2017
Results: Prevalence of hr-HPV in TM (n=131)

- **16.0%** (21/131) tested positive for hr-HPV types via provider-collected cervical sample DNA hybridization assay (gold standard)

- **13.0%** (17/131) positive for hr-HPV types via self-collected frontal/vaginal sample using a DNA hybridization assay
  - hr-HPV prevalence was not statistically significant comparing the collection methods (p=0.48)

- **Kappa = 0.75** (SE=0.08); 95% CI = 0.59, 0.92; p <0.0001
  - Did not differ by randomization arm (p=0.66)

- Sensitivity = **71.4%**
- Specificity = **98.2%**
Results: Qualitative Interviews

More than 90% of TM preferred the self-collection method

“[Self-swabbing] still wasn’t easy, but, I mean, I feel comfortable with taking care of my own medical issues. And so the empowerment of being able to -- in a most intimate way, and not have to be objectified or subjected to or be reduced to a subject or, less than that, by -- there’s no judgment when you have to do it yourself. You don’t have to worry about everybody else’s interference in the middle of your own moment where you need privacy.”
Take-Home

- Empowerment
- Voice
- Choice
- “With” not “on” communities


Summary, Gaps, and Opportunities

- Gender diversity ≠ pathology
- Gender affirmation is a key determinant of health
- Transgender people have worse health than cisgender people for many indicators
- Need data about the health of nonbinary people
- Biopsychosocial factors influence health
- Intersectionality
- Identify risks and resiliencies
- Gender affirming and socially contextualized approaches to healthcare
“Despite substantial gaps in empirical research, there are sufficient actionable data ... surrounding health risks and resiliencies for transgender people that need interventions.”


THE LANCET

http://www.thelancet.com/series/transgender-health

Contact:
sreisner@bwh.harvard.edu
Please cite this presentation as follows: