Considerations in Hormone Therapy and the Primary Care Needs of the Aging Transgender Population

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2019 Opportunity Conference, JustUs Health
Disclosures

• Professional relationships with JustUs Health
  ▪ Dr Hamp is on the board of JustUs Health
  ▪ Dr Thorp is on the advisory board for JustUs Health’s Bush Foundation Innovation Grant

• Discussion of off-label use of medications
“LGBT elders experience stigma, discrimination and victimization across the life course.”

- Institute of Medicine
LGBTQ Health Disparities

- Higher rates substance use & abuse
- Higher prevalence mental health issues
- LGBT youth - 2-3x more likely to attempt suicide, be homeless
- Transgender - high prevalence of suicide / attempts, victimization
- MSM - higher rates HIV, STIs, substance use
- Young MSM & transgender women - higher risk HIV (esp African American)
- WSW - more likely overweight / obese, less likely to obtain preventive services

★ LGBT Elders - isolated, lack of culturally appropriate services

Fenway, HHS (Healthy People), CDC, IOM
Key Issues

- **LGBTQ elders:**
  - Came of age in a very restrictive cultural context
  - LGBTQ elders have survived by being silent about their identities

★ **Discrimination:**
- Effects of long term discrimination
- Long term lack of legal recognition
- Economic disparities

★ **Social Isolation**
- More informal support networks, families of choice
- Long term care, housing

★ **Culturally competent healthcare**
- Hormone considerations in aging transgender / GNC individuals
Demographics

• 2.7 million LGBTQ adults >50 years old
  – 1.1 million >65 years old
• 20% are people of color
• MN stats: 10,500 - 28,000 >65 in Twin Cities metro
• General lack of data

PFund, SAGE, Williams Institute
Cultural Context

• Culturally marginalized, frequently viewed as a sin, disease, crime
  – Homosexuality removed as a DSM diagnosis in 1973, gender identity disorder removed in 2013
• LGBTQ elders have survived by being silent about their sexual orientation and gender identities
• Slow progress starting in the late 1960s with Stonewall with many ups and downs
  – Baby boomers are more likely to be “out” with the social unrest that began with Stonewall
  – Older LGBTQ are much less likely to be out
  – MN: 59% out 48-54yo, 33% out >75

Fenway, MAP/SAGE, PFund
LGBTQ Generations

- Dr Karen Fredriksen-Goldsen
  - Invisible Generation
    - Born 1910s-1920s
  - Silenced Generation
    - Born 1930s-1940s
  - Pride Generation
    - Born 1950s-1960s
    - Stonewall

Fredriksen, MAP/SAGE
“Many of these older adults came of age during a time when they could be arrested or forced to undergo unwanted and harmful medical treatments to change their sexual orientation or gender identity.”

–Aging & Health Report
Discrimination

• Cumulative effect of discrimination and fear can lead to adverse health outcomes

• Non-disclosure of sexual orientation associated with adverse outcomes

• Legacy of the medical community diagnosing LGBTQ identities as pathology

• 82% of LGBTQ elders report being victimized at least once
  – 64% at least three times

• 13% reported being denied health care

Fenway, Meyer, IOM, HHS, AHR
Legal Context

- LGBTQ elders have lived most of their lives without the recent legal protections that now exist
  - Yet there is still a lot of legal instability
- Access to insurance
- Unstable housing, economic distress
- Higher poverty levels compared to non-LGBTQ elders
- HHS and JCO guidelines / accreditation about healthcare facility visitation

Fenway, MAP/SAGE, Emlet
MN LGBTQ Elders

- **2002**: 90% of LGBTQ elders did not feel they would be treated “well” by aging services providers
  - Separate survey of aging services providers found lack of confidence in ability to work with LGBT elders
- **2012**: LGBTQ elders twice as likely to believe they would receive sensitive care
- 96% would access services that were designated as LGBT sensitive
- 94% felt there was a need for LGBT specific senior housing and social services

TTS, GLBT Generations, PFund
Social Isolation

• Healthy People 2020: Elderly LGBT individuals face additional barriers to health because of isolation and a lack of social services and culturally competent providers
  – Legal recognition
  – Chosen families
  – Lack of funding
Social Isolation

• LGBT seniors are twice as likely to live alone
  – 2x as likely to be single, family estrangement
  – 3-4x less likely to have children

• Chosen families, informal care networks
  – Many LGBTQ elders care for each other
  – AIDS epidemic decimated many care networks

• Vulnerable to abuse (isolation, reliance on others)
• 1/3 LGBTQ elders don’t have a will or healthcare directive

Healthy People, Sage, Aging & Health Report, Improving...
Long Term Care

• LGBTQ seniors living in LTC facilities are at high risk of overt discrimination, neglect and abuse

• LGBTQ elder top concerns:
  – 1. Discrimination from staff & residents
    • 89% worried about it, 43% experienced it
  – 2. Isolation
    • Restriction of visitors, refusal to accept medical POA
  – 3. Abuse and neglect
    • Denied medical treatment, refusal to use pronouns
Spirit on Lake

1 / MPR News / Jon Collins

2 / Ann Heisenfelt, AP
Culturally Competent Health Care

“LGBT people experience a lifetime of substandard medical care, during which barriers and disparities exacerbate medical outcomes that become insurmountable without family and community support.”
Hormone Considerations

• Lack of culturally competent providers
• Older LGBT adults are less likely to be out and open than younger LGBT adults
• Less preventive screening, decreased access to transition related services and primary care
Cardiovascular Disease

• Higher rates of CV risk factors
• Hormones affect metabolic parameters
• Masculinizing hormones: no evidence of higher CV disease, but potential worsening of CV risk factors
  – No known increased morbidity / mortality
• Feminizing hormones: evidence isn’t as clear
  – VTE risk and lipid derangements likely mitigated with transdermal formulations
• Attention to CV risk factors
• Shared decision making

UCSF, Streed et al
VTE

• Known thromboembolic risk, primarily estrogen
• Demonstrated increased risk with ethinyl estradiol
• Transdermal formulations and sublingual administration of oral estrogen have been shown to decrease VTE risk in trans women
• Personal / family history
  – Prothrombotic conditions
  – Smoking status
• Shared decision making
Metabolic effects

• Diabetes
  – Effects of hormones unclear

• Lipid profile may be adversely affected

• Osteoporosis
  – Insufficient evidence to guide recommendations
  – Consider at age 65, earlier if risk factors, and if off hormones 5 years & s/p gonadectomy
Transgender Hormone Therapy

- Testosterone carries risk of exacerbating risk factors (BP, insulin resistance, dyslipidemia)
- Estrogen carries VTE risk, which can be mitigated by transdermal formulations and/or lower doses
- Ongoing attention to risk factors (BP, lipids, tobacco, glucose metabolism)
- Shared decision making - risk / benefit ratio shifts with age
- When to stop hormones?

Streed
Cross-Gender Feminizing Hormones

**Hormone Therapy:** Goal is for testosterone to be in the normal female range or below, with estradiol levels in the normal female pre-menopausal range.

- **Anti-androgens:** spironolactone 50-200 mg daily with or without finasteride 5 mg daily
- **Estradiol:** Transdermal 0.2 to 0.3 mg; Oral 6-8 mg daily; Injectable Estradiol Valerate 4-8 mg or Estradiol Cypionate 2-4 mg weekly
- **Progesterone** is optional: Micronized Progesterone 200 mg daily for 3-4 years, onset 1-2 years after starting Estradiol

**Body Changes:** *Changes that are permanent

- Scalp hair growth varies
- ↓ muscle mass
- Softer skin, ↓ oil
- ↓ libido/erections/ejaculate

**Breast growth**

*↓ testes, ↓ sperm*

↓ body hair

Redistribution of body fat
Medication Side Effects:
Feminizing Medical Treatment

- Spironolactone- dry mouth, thirst, headache, dizziness, vomiting, diarrhea (usually in the first 1-3 months of use)
- Estrogen-
  - hot flashes, headaches, mood swings (usually in the first few weeks of use)
  - Mental health instability
  - Blood clots
  - Weight gain
  - Elevated blood pressure
  - Elevated triglycerides
  - Diabetes
Feminizing Gender Affirmation Procedures

• Top surgery
  – Breast augmentation / augmentation mammoplasty

• Bottom surgery
  – Orchiectomy, penectomy, vaginoplasty
  – Prostatectomy is not part of gender affirmation surgery
Other Feminizing Procedures

• Laser hair removal, electrolysis
• Facial feminization procedures
  – Tracheal shave (Adam’s apple reduction), brow bossing, etc
  – Vocal cord procedures
Masculinizing Treatments

Hormone Therapy
• Goal is for testosterone to be in the physiologic male range.
  – **Injectable Testosterone Cypionate or Enanthate** – typical dose of 60-80 mg IM weekly
  – **Topical Testosterone Gels** in 1%, 1.62% or 2%
  – **Testosterone Undecanoate (Aveed)** every 10 weeks (EXPENSIVE!)
  – **Testosterone Pellets (Testopel)** inserted every 4 months (EXPENSIVE!)

Body Changes: *Changes that are permanent
• ↑ facial/body hair, ↓ scalp hair*  ↑ muscle mass
• Oily skin, acne  ↑ libido
• Vaginal atrophy  ↓ breast size
• Cessation menses/amenorrhea  Clitoral enlargement*
• Deepening of voice*
Medication Side Effects:
Masculinizing Medical Treatment

- Decreased estrogen- hot flashes, headaches, mood swings (in the first few months), vaginal dryness (can last years).
- Testosterone-
  - Mood swings/mental health instability- especially with bipolar, schizophrenia, other mood disorders.
    - Worsen ADHD symptoms
  - Irregular vaginal bleeding
    - If testosterone levels get too high, the testosterone starts metabolizing to estrogen via aromatase.
  - Acne
  - Polycythemia (increased blood viscosity) and blood clots
  - Weight gain - Elevated blood pressure
  - Diabetes - Elevated cholesterol
Masculinizing Gender Affirmation Procedures

• Top surgery
  – Mastectomy / chest reconstruction

• Bottom surgery
  – Hysterectomy, vaginectomy, metoidioplasty, phalloplasty, scrotoplasty
When to stop hormones?

• No standard approach
• Shared decision making
• Patient perspectives
  – Ongoing dysphoria?
  – Do they feel they need the hormonal support?
• Medical co-morbidities, past medical history, family history
• Age
• History of complications
• Risk / benefit ratio
• Social considerations
Other Primary Care Considerations

• What are other issues to consider in aging transgender individuals?
• What do you think providers need to know about aging trans and NB folks? LGBTQ community? General population?
Other Primary Care Considerations: Sexual Health

- Patient knowledge re: STIs/HIV
  - Less condom use
- Provider assumptions
  - Less screening
  - Open ended questions about risk making no assumptions about anatomy
- Not being out to your provider impairs communication further
- Comprehensive screening regardless of sexual orientation and gender identity
  - Gender of partners, numbers of partners, type of sex
- Erectile dysfunction, atrophic vaginitis, etc.
Other Primary Care Considerations: HIV / AIDS

- Aging issues in general in HIV / AIDS community
- PrEP
- The only difference in treatment of HIV+ individuals on hormones is avoiding amprenavir & fosamprenavir in those on feminizing hormones
  
  • Caution with TMP-SMX treatment / prevention of OIs and spironolactone
    - Hyperkalemia risk - avoid in older individuals
    - Often diagnosed at later stages in older adults

UCSF
Other Primary Care Considerations

- **Mental Health**
  - Closely linked to discrimination
  - Dramatically increased rates of suicide attempts
  - Co-morbidities may or may not be related to gender dysphoria
  - Coming out, transitioning
  - Legacy of medical pathologization
    - DSM
    - Traditional mental health model of accessing hormones vs informed consent
  - Trauma informed, gender affirming care
    - Referrals as needed

- **Substance use** - including tobacco, alcohol
Cancer Screening is Anatomy Based

- Screen based on anatomic inventory per cisgender guidelines
- UCSF CoE Transgender Health:
  - “As a rule, if an individual has a particular body part or organ and otherwise meets criteria for screening based on risk factors or symptoms, screening should proceed regardless of hormone use.”
Cancer Screening - Trans Men

- Colon cancer: same guidelines as for cisgender individuals
- Breast cancer:
  - Can consider chest wall / axillary exam annually if s/p mastectomy
  - Mammography per cisgender guidelines if no mastectomy, or if only a reduction was done
- Cervical cancer: same guidelines as for cisgender women, unless s/p total hysterectomy
  - “If you have it check it”
  - Cervical atrophy from testosterone can make pathology evaluation challenging
Cancer Screening - Trans Women

• Colon cancer: same guidelines as for cisgender individuals
• Breast cancer: mammography > 50 q2 years
• Prostate cancer: shared decision making
  – PSAs can be falsely low if on feminizing hormones– limit to high risk patients
• Pap tests not indicated in neovaginas
Summary

• LGBT elders have experienced a lifetime of discrimination and inequalities, which results in health disparities
• LGBT elders have survived by being silent about their identities
• Discrimination, social isolation and lack of culturally competent health care are major issues
  – Incorporate sociopolitical aspect into clinical care
• Transgender care is anatomy based, not “Gender” based
• Shared decision making is key in the management of hormones in context of aging
Medical Resources

- WPATH: World Professional Association for Transgender Health
- GLMA: Health Professionals Advancing LGBT Equality
- UCSF Center of Excellence for Transgender Health
  - Primary care protocols - http://www.transhealth.ucsf.edu
- National Center for Transgender Equality
- Fenway Health & National LGBT Health Education Center
  - Webinars, multiple resources
- Fenway Guide to LGBT Health, 2nd Ed. (ACP)
- SAGE: Services & Advocacy for GLBT Elders
- Transline (at Lyon / Martin Health Services): Web based medical consultations
- Journals: www.liebertpub.com
  - LGBT Health
  - Transgender Health
- MedLine clearinghouse: https://medlineplus.gov/gaylesbianbisexualandtransgenderhealth.html
Training Resources

• National Resource Center on LGBT Aging: www.lgbtagingcenter.org
• SAGE Services & Advocacy for Gay Lesbian Bisexual & Transgender Elders: www.sageusa.org
• LGBT Aging Project: www.lgbtagingproject.org
• Minnesota:
  – Training to Serve: www.trainingtoservec.org
  – Outfront MN: www.outfrontmn.org
  – JustUs Health: www.justushealth.org
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- Movement Advancement Project & SAGE Report: Understanding Issues Facing LGBT Older Adults
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Photo Credits

1: https://www.mprnews.org/story/2013/09/24/spirit-on-lake-lgbt-seniors