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Gender non-conforming children & youth

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Objectives

- After this presentation, I hope you :
  - Know terms relevant to care for transgender people
  - Know the basics of what transgender people need from all healthcare providers
  - How & when medical transition should happen for children & adolescents

Let's start where I started: DSDs (disorders of sexual development/intersex)

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- Male and female are not as clear as we would like them to be (and assume they are!)
  - XX can = male ($_{\text{xx male}}$), XY can = female ($_{\text{turner,swyer,CAIS}}$)
  - Females can have testes ($_{\text{CAIS}}$), males can have ovarian tissue ($_{\text{true hermaphrodite}}$)
  - A male can have a uterus ($_{\text{PMD}}$) and a female a phallus ($_{\text{CAH}}$)
- The only organ that conclusively determines gender is the brain
- Therefore, the only way a doctor can know for sure is to ask the patient

LGBTQ Language: Sex

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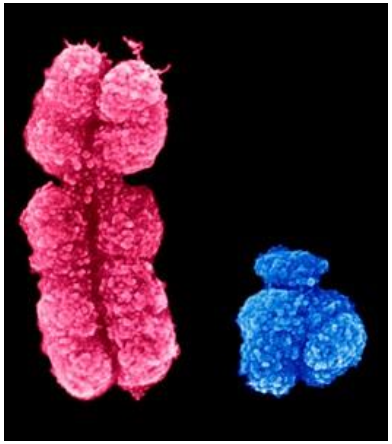
- **Sex (Assigned at birth)**
  - Typically based on appearance of physical anatomy

  (ASAB= Assigned Sex At Birth)

  - Can include:
    - Chromosomes,
    - reproductive organs
    - Internal genitalia
    - External genitalia
    - etc

- **Intersex**
- **Female**
- **Male**



Slide courtesy of K. Imborek, MD

LGBTQ Language: Gender

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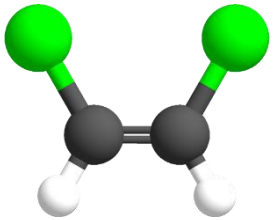
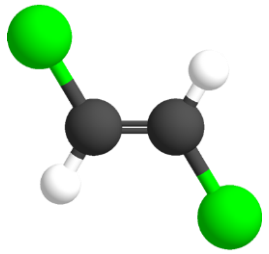
- **Gender Expression**
  - Clothing, mannerisms, voice
- **Gender Norms**
  - Social and cultural expectation of expression
- **Gender Identity**
  - Personal sense as a gendered being

- **Cisgender**
  - Man
  - Woman
- **Transgender**
  - Transman
  - Transwoman
  - Non-binary





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Transgender Terms

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- **Transman/Transboy:<u>F</u>**emale **<u>T</u>**o **<u>M</u>**ale
- **Transwoman/Transgirl: <u>M</u>**ale **<u>T</u>**o **<u>F</u>**emale

- **Transition**
  - Process of moving from one gender to another
  - May no longer identify as trans* after transitioning to affirmed gender
  - "Pre-op" and "post-op" are outdated and should be avoided

Slide courtesy of K. Imborek, MD

Non-Binary

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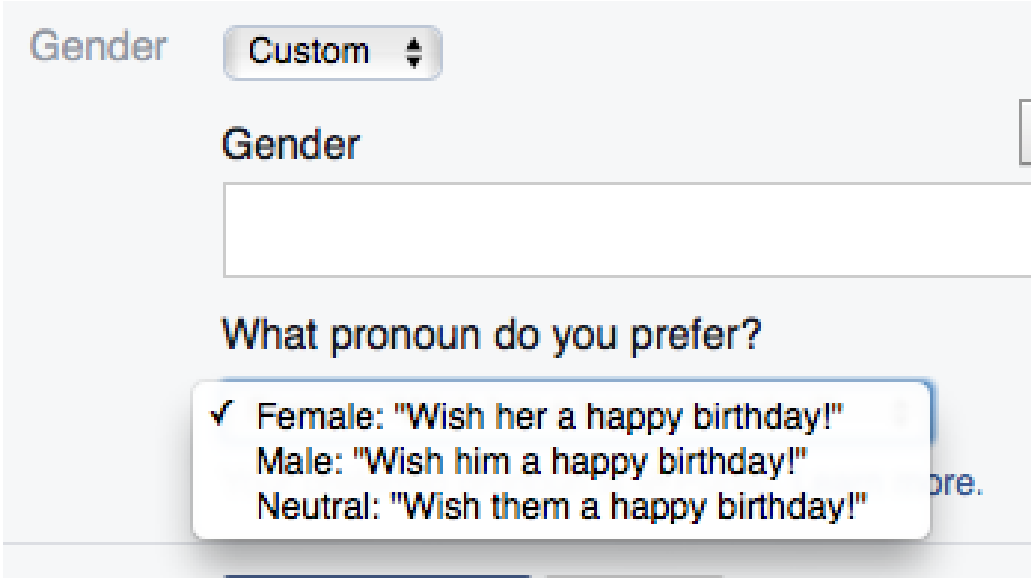
- **Third gender**
- **Genderquer**
- **Gender fluid**
- **Pronouns:**
  - She, her, hers
  - He, him, his
  - They, them, theirs
  - Ze, zir, zirs
  - Ne, nem, nirs



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A little history!

I love medical history!

A trans* timeline (modern medicine only)

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- **1910** Magnus Hirschfeld introduces the term "transvestites",
  - To distinguish from people who are homosexual.
- **1920s-30s** sex reassignment surgery first developed in Germany
- **1929** estrogen was isolated
- **1935** testosterone was isolated &synthesized
- **1942** FDA approves estrogen therapy (Premarin)
- **1950**s testosterone enanthate (the first non-toxic testosterone) becomes available
- **1953** The physician Harry Benjamin introduces the term "transsexuals",
  - To distinguish transgender people from transvestites.
- **1955** The American psychologist John Money introduces the distinction between "sex" and "gender".
- **1965** The word transgender was first used medically (by Dr. John F. Oliven)
  - However- transgender was given its meaning by Virginia Prince (a trans woman) in the 1970s
- **1966** The term 'gender identity' is first used

Some historic trans people

- **1917** USA: Dr. Alan L. Hart, (1890-1962) (expert in TB)
  - undergoes hysterectomy and gonadectomy.
  - He (successfully) lived the rest of his life as a man.
- **1951** USA: Christine Jorgensen
  - first transgender woman in the US to be widely known for having sex reassignment surgery (in 1951)
  - also treated with estrogen

But what about children?

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- **1980s-90s** Prof. Dr. **Peggy T. Cohen-Kettenis** established the first treatment center for transgender children and adolescents (in the Netherlands)
  - Her team is the source of nearly all scientific evidence on transgender children
  - We all use their protocol
- **2007** Dr. **Norman Spack** established the first US treatment center for trans children and adolescents

What do doctors need to know to care for trans* patients?


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 1.5 million Americans who identify as transgender
time.com


GT
WHAT A MAN!
The incredible journey of Aydian Dowling
Righteous
Lost legends
The gay and bi men who changed the world

Name and Pronouns

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- The most important thing when caring for trans patients: ~~ANY~~
- Use their preferred name
  - "what do you like to be called"
- Use their preferred pronouns
  - "what pronouns do you prefer"
    - (pronouns are not required to match gender identity- pronouns are public, gender identity is private)
- If the parent doesn't use their name or pronouns: you should still use their preferred name and pronouns
- If you make a mistake: apologize and move on

Non- binary Pronouns

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- Emily is a 17 yo gender queer person, sex assigned at birth male. They complain of abdominal pain that has affected them for the past month. Emily states that they have tried Tums without relief of their pain.

- Jordan is a 16 yo gender queer person, sex assigned at birth female. Ze complains of abdominal pain that has affected zir for the past month. Jordan states that ze has tried Tums without relief of zirs pain.

Concerns from Trans Patients

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- Access to care
- Respect
  - Use their preferred name and pronouns
  - don't ask about or look at their genitals unless you need to in regards to their specific concern
- Cost
- Provider knowledge/comfort

Barriers specific to kids

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- Parents!
  - In Iowa, there is no "emancipated minor" for the purposes of trans care
  - Consent of at least one guardian (with at least 50% custody) is required to undergo therapy
- Access!
  - There are not enough providers who will see pediatric patients
- Cost
  - Not as much of a problem as for adults, actually . . .

Why treat trans* children?

*very similar to why we treat adults

Note: Children know their gender as young as 2 years of age!

Depression!

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- rates of depression are 2-3 times higher in transgender youth vs. non-transgender peers[1]
  - data suggest this is caused by discrimination, peer rejection and lack of social support[2]
- the best predictor of positive psychological outcomes is parental support[2]
- transgender children that undergo a social transition have rates of depression comparable to non-transgender children[3]

[1]Reisner, S.L., et al 2015; [2]Budge, S.L. et al 2013; [3]Olson, K.R., et al 2016

Suicide

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- 61% of high-school age transgender/GNC youth report suicidal ideation[1]
  - (20% of cisgender youth)
- 31% have attempted suicide[1]
  - (7% of cisgender youth)

- 45% of trans 16-25 year olds who don't have support attempt suicide[2]

- "The minute these kids even know they're [getting treated], their suicidal thoughts melt away."[2]

[1]Eisenberg J Adolesc Health 2018 [2] Spack Boston Children's hospital

Poor health and increased high risk behaviors

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- 2x as many trans and GNC youth report poor heath as cisgender peers

- Trans and GNC youth have higher rates of:
  - Binge drinking, substance use, high-risk sexual behaviors and being victims of bullying

Rider et al. Pediatrics 2018

Teens who have gone public

- Above is Corey Maison (14 yo)
- Right is Jazz Jennings (15 yo)

So how do we treat trans* children & youth?

Not- "reparative or conversion" therapy

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- Therapy with the goal to change a person's gender identity to become more congruent with sex assigned at birth
  - has been attempted in the past without success[1], particularly in the long term[2].
  - Such treatment is not ethical and amounts to torture
  - the American Psychological Association, the American Psychiatric Association and the American Academy of Pediatrics all reject this form of therapy

[1]Gelder & Marks, 1969; Greenson, 1964; [2]Cohen-Kettenis & Kuiper, 1984; Pauly, 1965;

First- diagnosis of gender dysphoria

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- To be made by a mental health professional
- For peds- that person should be pediatric/adolescent trained
  - Establish that GID/transgender is the diagnosis
  - rule out body dysmorphic disorder
  - diagnose and treat any other psychiatric disorders
    - Other psychiatric disorders, including schizophrenia do not preclude transition, but they need to be managed

2nd - Pubertal suppression-- “blockers”

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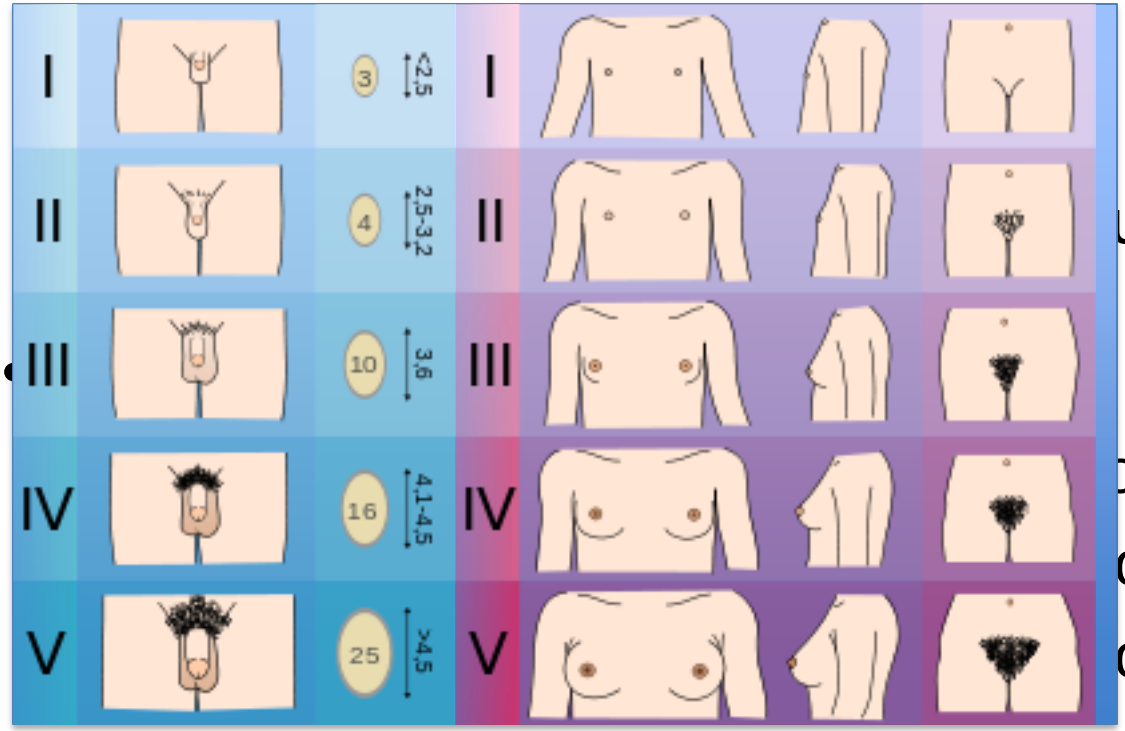
- Pubertal suppression with GnRH analogs is the preferred method
  - starting at tanner 2



ult medicine

oxyprogesterone)

olactone)

o suppress menses.

3rd- Cross-sex steroids

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- Recommended regimen is different than for adults!
  - We are essentially inducing puberty much as we would in any hypogonadal child
- Start at 15-16 years*
- IM/sub q T or oral/patch estradiol
- Dose escalation every 4-6 months starting at low doses
  - Starting low & titrating gives better physical outcomes (breast/voice/bone structure)
- GnRH treatment is (ideally) continued until gonadectomy or doses are high enough to suppress HPH axis
  - If can't get GnRH, can use depo provera, spironolactone, bicalutamide depending

4th -surgery

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- Mastectomy can be done before age 18
  - Eligible at 16 years
- Other procedures need to 18 or older
- Note:
  - Vaginoplasty is harder if they transitioned younger as it typically utilizes penis skin
- You will get an update on surgical procedures tomorrow, so stay tuned!

What if we just wait?

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- withholding puberty suppression and subsequent feminizing or masculinizing hormone therapy is not a neutral option for adolescents
  - functioning in later life can be compromised by
    - development of irreversible secondary sex characteristics
    - years spent experiencing intense gender dysphoria.
  - contributes to an appearance that can provoke abuse and stigmatization
    - the level of gender-related abuse is strongly associated with the degree of psychiatric distress during adolescence[1]

[1]Nuttbrock et al., 2010

Differences between children and adolescents

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- Gender dysphoria occurring prior to puberty does not inevitably continue into adulthood.
  - Gender dysphoria persists in 6-23% of AMAB children[1] and 12- 27% of AFAB children[2]

- In contrast, the persistence of gender dysphoria into adulthood is higher for adolescents with essentially all continuing [4]

[1]Green, 1987; Money & Russo, 1979; [2]Drummond, Bradley, Peterson-Badali, & Zucker, 2008; Wallien & Cohen-Kettenis, 2008 [3]Zucker & Bradley, 1995; Zuger, 1984; [4] de Vries, Steensma, Doreleijers, & Cohen-Kettenis, 2010; [5]Zucker, 2004; [6]Cohen-Kettenis & Pfäf in, 2003

So what do we do with pre-pubertal children?

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- Recommended:
- Social transition
  - Dress in preferred clothes
  - Preferred hairstyle
  - Preferred toys
  - Preferred name
- Support for affirming activities
  - Girl/boy scouts, dance, sports, etc

- How can you tell who will **persist**?
  - We don't have great ways yet, but there are clues:
- Repudiation of genitalia
- Statements of identity "I *am* a girl" or "I am a girl in a boy's body" rather than "I *want* to be a girl" or "I *wish* I was a girl"

Outcomes

Does it work? Does it help?

What are the risks?

Risks

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- therapy is overall safe
- cancer risk is <u>not</u> higher than expected
- thromboembolic risk
  - significant with ethinyl estradiol preparations
  - Lower with the current oral and patch 17-beta estradiol
  - There is increased risk for thromboembolic complications compared to cis women[1]
- testosterone may worsen the cardiovascular profile of transmen, but only in comparison with cisgender women, not cisgender men[1]
- the risk of puberty suppression and cross-sex hormones is low in contrast with the **<u>high rate of suicide in untreated transgender individuals (~40%)</u>**

[1]Nota et al. Circulation 2019

Outcomes of gender transition

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- in adults
  - hormone replacement therapy and gender affirming surgery
    - improve gender dysphoria
    - Improve quality of life
    - Reduce suicide
  - However:
    - persistence of psychiatric comorbidity
    - Still some death from suicide

Outcomes are improved when transition starts in adolescence

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- Those who are treated in childhood have much lower rates of suicide and psychopathology than trans patients who present as adults[1]
- long term study of 55 transgender adolescents who underwent puberty suppression and cross-sex hormones followed by gender affirming surgery in early adulthood[2]
  - complete resolution of gender dysphoria
  - psychological outcomes that were **similar or better than non-transgender, age-matched young adults**
  - none of these patients regretted their decision to transition
- better cosmetic outcomes
  - If treated starting at tanner 2
    - Height appropriate to affirmed gender
    - Bone structure of affirmed gender
  - Very different physical appearance than transition as an adult, especially for transfemales

[1]de Vries, A.L.et al. 2011, [2]Cohen-Kettenis et al., 2011; Delemarre-van de Waal & Cohen-Kettenis, 2006

Fertility

- GnRH agonists – if started in early puberty (Tanner stage II-III), lack of development
- Testosterone induces amenorrhea in postmenarchal transmales;
  - number of cases of unplanned pregnancy while on treatment
  - planned pregnancy and uneventful child birth
- Estrogen treatment may lead to sterility

Summary

- **Ask** preferred name and pronouns
- **Use** preferred name and pronouns

- Medical transition **can** (& I think should!) start once there is clear evidence of puberty
  - Tanner 2!

Resources

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- LGBTQ clinic
  - Dr. Nicole Nisly
  - Dr. Katie Imborek

- University of Iowa Adolescent Medicine
  - Dr. Michael Colburn
- Elizabeth Graf PA-C Ob/Gyn; reproductive endocrinology

Thank you!

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- Questions?