



Dr Fiona Bisshop  
Holdsworth House, Brisbane

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#### DISCLOSURES

I have in the past received honoraria and educational grants from:

ViiV  
Janssen  
Gilead  
MSD

.....but NOT for transgender health!





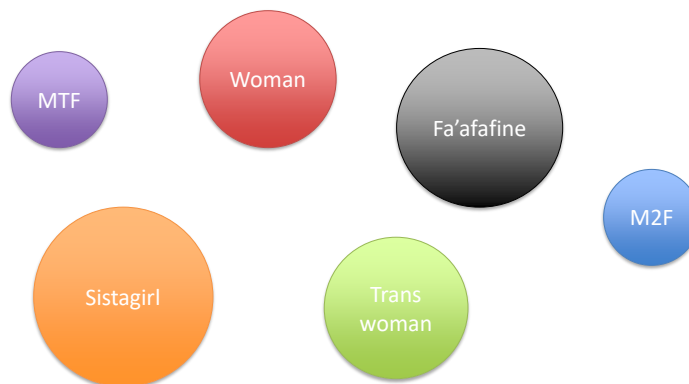
## Definitions

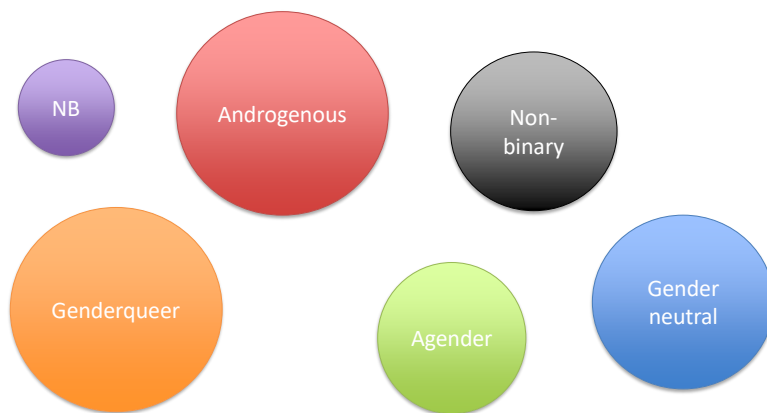
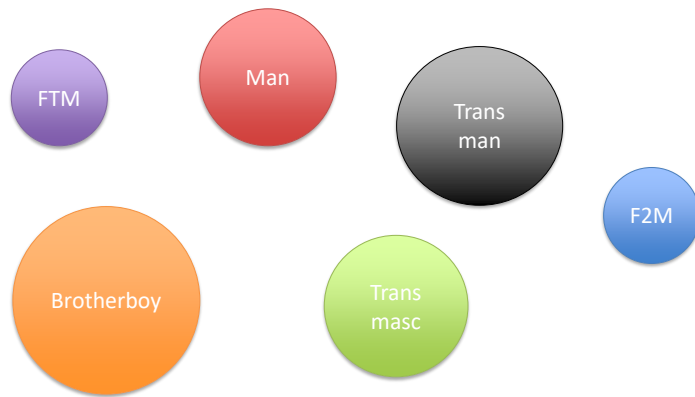
**Transgender (TG) or trans and gender diverse (TGD)** is an umbrella term for all people whose internal sense of their gender (their gender identity) is different from the sex they were assigned at birth.

**AFAB** assigned female at birth

**AMAB** assigned male at birth

**Hormone therapy** (cross-gender hormone therapy or HRT) is a health intervention used by most transgender people to help express themselves and be recognized as their affirmed gender.







## TRANSGENDER WOMEN

Have a lifetime rate of suicide attempt of 41%

Often suffer discrimination and economic vulnerability

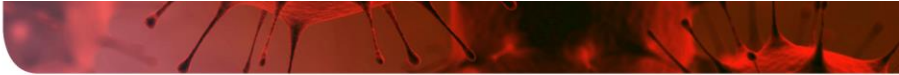
Often suffer rejection from their family and friends

Are more likely to experience violence, including sexual violence

Are less likely to be able to negotiate safe sex due to disempowerment

Have higher rates of transactional sex

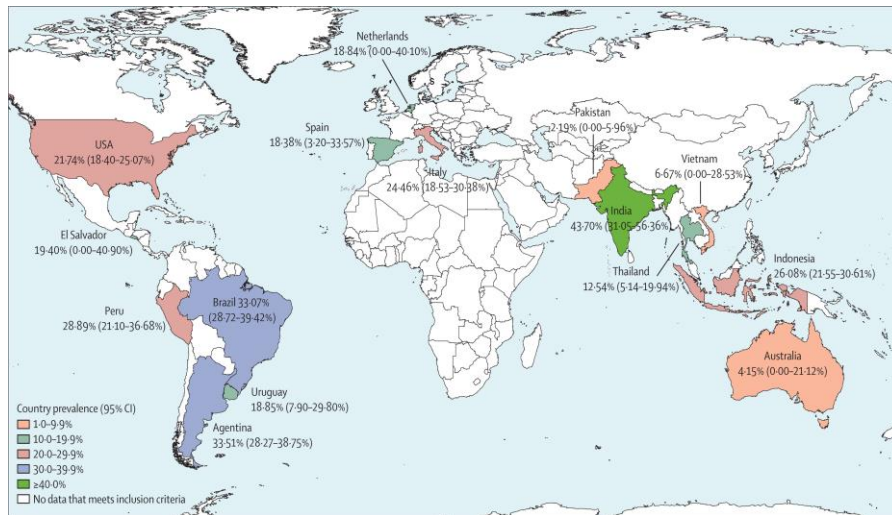
Are less likely to access health services



**Global estimates ~ 19% of TG women are HIV+**



## Global Prevalence of HIV in TG Population



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## USA INCIDENCE

- Phylogenetic study of HIV in LA (presented at CROI 2018) showed that TG women were more likely than any other group to be in a genetically connected cluster of HIV cases, but were less likely to be diagnosed
- HIV prevalence in LA TGW~ 25% (1750 people)

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## AUSTRALIAN PREVALENCE

- Limited data for HIV+ TGD population in Australia
- Sydney Sexual Health – 2007 retrospective case note review showed HIV prevalence of **7.5%** amongst 40 TG patients (43% history of sex work) (Hounsfield, Sex Health 2007 4:189)
- Taylor Square – 2011 database audit showed 133 MTF patients with HIV prevalence of **4.5%** (Pell, J Sex Med 2011 8:179)
- Kirby Institute – 2017 study showed prevalence of **5.2%** in transgender patients – incidence in TGW was comparable to cisgender MSM, but incidence in TGM was 3X cisgender women



## DEFINING THE HIV+ TG POPULATION IN AUSTRALIA

- Overwhelmingly TGW >> TGM
- Many are overseas-born, asylum seekers and Medicare ineligible
- Hep B co-infection
- Transactional sex is common
- Lower levels of engagement with medical profession, often obtaining hormones online, from friends or simply doing without
- Unknown number of undiagnosed, although likely to be low
- Emerging numbers of gender diverse, polyamorous and pansexual youth who are at risk
- Some have transitioned from being MSM



## WA transgender sex worker jailed over HIV

Angie Raphael and Tim Clarke | PerthNow  
February 16, 2018 6:40PM

A TRANSGENDER sex worker who passed on HIV when she had unprotected sex with a man in Perth has been jailed for six years.

Clayton James Palmer, who identifies as a woman and is known as CJ, wept as she was sentenced in the WA District Court on Friday for causing grievous bodily harm, and will serve that time in a male prison.

Ms Palmer, who supplied sex services via online ads under the pseudonym of Sienna Fox, was found guilty by a jury last month.

Judge Christopher Stevenson described Palmer's conduct as "very serious" and said she had shown a callous disregard for her victim.

"As a sex worker you were plainly aware of the seriousness of sexually transmitted diseases," he said.

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**Indonesian police in Aceh province cut hair of transgender women**

The incident happened amid a crackdown on the LGBT community in the Muslim nation



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## Citing Sharia law, Malaysian authorities jail, shave heads of 16 trans women

BY LEXIE CANNES on JUNE 11, 2014 • ( 1 )



LEXIE CANNES STATE OF TRANS — Earlier this week, religious police from the Negeri Sembilan Islamic Department in Malaysia, crashed a wedding and arrested 17 trans women for violating a Sharia law which bans cross dressing.

While one minor was released, the other 16 ended up having their heads shaved — a requirement for the male detention center — and were jailed. Early release attempts by trans organizations failed because a judge would only allow parents to post bail.

On Tuesday, the women were given a sentence of 7 days in prison and were each fined \$300 USD — a payment need to be made immediately or the jail term would be extended 6 months.



## Barriers to Testing

Lower levels of knowledge of sexual health and HIV prevention

Variable perception of risk (both Dr and patient)

Lack of resources specifically targeting TG people

Trans people have historically been included in MSM funding

May not identify with "gay" clinics

Shame and stigma around sex and STIs





## Management Issues for TG HIV+

- Stigma and discrimination
- Lack of support – family, friendship network
- Unstable housing
- Financial pressures, unemployment
- Access to ARVs – Medicare ineligible?
- Hep B co-infection
- Mental health
- Issues related to transitioning – access to hormones
- DDIs – both patient and doctor
- Retention in care



### Characterizing the HIV Continuum of Care for Transgender Women

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#### Introduction

- ❖ An estimated one in five transgender women (TW) are living with HIV in the U.S. Most are Black and/or Latina.
- ❖ Prior cross-sectional studies suggest TW have lower viral suppression but similar retention in clinical care compared with cisgender (non-transgender) women and cisgender men living with HIV.
- ❖ Longitudinal data on TW's engagement in care are scant.
- ❖ We characterized the HIV Continuum of Care over time, disaggregated by gender identity in the NA-ACCORD.

#### Methods

- ❖ 9 cohorts provided data on transgender participants.
- ❖ Retention was defined as ≥2 visits >90 days apart in a calendar year
- ❖ Viral suppression was defined as HIV RNA <200 copies/mL at final measurement in the year.
- ❖ We analyzed outcomes annually among adults using longitudinal data from the NA-ACCORD, 2001-2015 (Figure).
- ❖ Log-binomial regression models were used to estimate adjusted prevalence ratios (aPR) and 95% confidence intervals for retention, antiretroviral prescription, and viral suppression by gender status in recent years (2013-14), adjusted for age, race, a history of injection drug use, and cohort (Table).

#### Results

Figure. HIV Continuum of Care over Gender in NA-ACCORD, 2001-2015

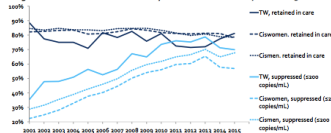


Table. Sample Characteristics and HIV Continuum of Care by Gender in NA-ACCORD

Sample Characteristics	Transgender Women (n=209)	Cisgender Women (n=6,876)	Cisgender Men (n=27,677)
Median Age, years (IQR)*	35 (26, 44)	39 (34, 45)	40 (34, 47)
18-29	60%	55%	48%
≥40	34%	45%	52%
Race/Ethnicity*			
Black	45%	62%	28%
White	30%	26%	57%
Hispanic	8%	5%	5%
Continuum of Care (2013-14) aPR (95%CI)			
Retained in Care	0.87 (0.75-1.01)	1.00 (1.00-1.00)	Reference
Antiretroviral Prescription	0.94 (0.84-1.05)	0.98 (0.94-1.02)	Reference
Viral Suppression	0.54 (0.39-0.74)	0.93 (0.89-0.97)	Reference

\*Values are based on self-reported data and may differ from administrative data.

- ❖ Retention changed little over time for each group
  - ❖ Greater variability seen among TW
- ❖ All groups showed improvement in viral suppression
  - ❖ TW showed highest proportion suppressed
  - ❖ Cisgender men and women had similar proportions
- ❖ In cross-sectional analysis, TW showed trend toward lower proportion retained in care compared with cisgender men.

#### Conclusions

- ❖ TW identified in the NA-ACCORD demonstrate similar care engagement as cisgender participants, over time.
- ❖ Sites able to contribute transgender-specific data may also have gender-affirming practices that facilitate engagement.
- ❖ Cross-sectional data suggest gendered disparities.
- ❖ The study is limited by small sample sizes of TW and the use of a one-step method to identify transgender participants.
- ❖ Research on long-term outcomes in TW with HIV are needed.

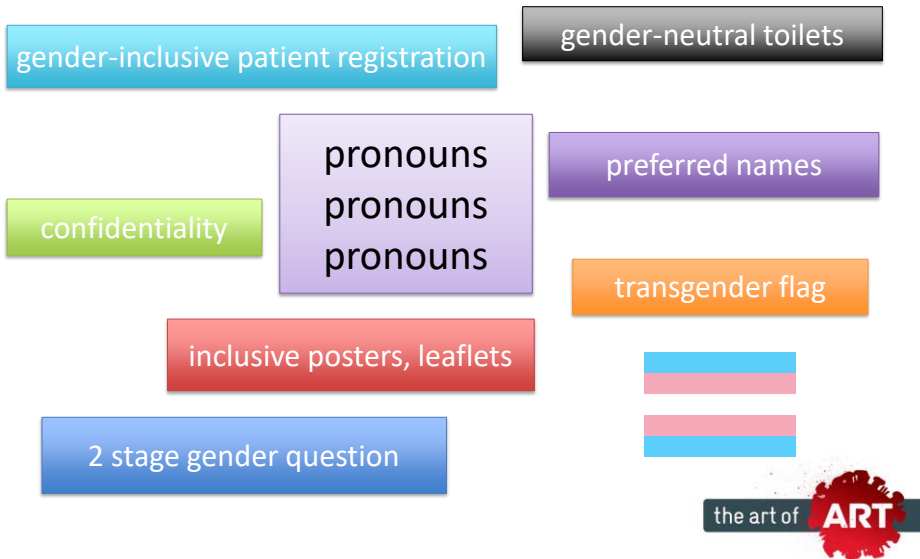
#### Acknowledgements

NA-ACCORD is a multi-site, multi-cohort study of HIV and related conditions. The study is funded by the National Institutes of Health (NIH) through the National Association of Academies of Clinical Research (NAACORD) and the International Epidemiology Databases to Evaluate AIDS (IeDEA). The study is a collaborative effort between the National Association of Academies of Clinical Research (NAACORD) and the International Epidemiology Databases to Evaluate AIDS (IeDEA). The study is a collaborative effort between the National Association of Academies of Clinical Research (NAACORD) and the International Epidemiology Databases to Evaluate AIDS (IeDEA).





## Making Clinics TGD-Inclusive



## 2 STAGE GENDER QUESTION

1. How do you see your gender?
  - male
  - female
  - non-binary
  - intersex
2. Is this the same as the sex you were assigned at birth?



## DDIs – ART and HRT

Patients fear decreased effectiveness of hormones

When in doubt, go to Liverpool!



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www.hiv-druginteractions.org

**HRT Treatment Selector**

Charts revised November 2017. Full information available at [www.hiv-druginteractions.org](http://www.hiv-druginteractions.org)

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	ATV/r	DRV/r	LPV/r	EFV	ETV	NVP	RPV	MVC	DTG	RAL	ABC	FTC	3TC	TDF	ZDV	E/C/F/TAF	E/C/F/TDF
<b>Estradiol</b>	↓ <sup>a</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑	↑
<b>Drospirenone</b>	↑ <sup>b</sup>	↑ <sup>b</sup>	↑ <sup>b</sup>	↑ <sup>b</sup>	↑ <sup>b</sup>	↑ <sup>b</sup>	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ <sup>b</sup>	↑ <sup>b</sup>
<b>Reproductive (HRT)</b>																	
<b>Dydrogesterone</b>	↑ <sup>b</sup>	↑ <sup>b</sup>	↑ <sup>b</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ <sup>b</sup>	↑ <sup>b</sup>
<b>Levonorgestrel</b>	↑ <sup>b</sup>	↑ <sup>b</sup>	↑ <sup>b</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ <sup>b</sup>	↑ <sup>b</sup>
<b>Medroxy-progesterone (oral)</b>	↑ <sup>b</sup>	↑ <sup>b</sup>	↑ <sup>b</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ <sup>b</sup>	↑ <sup>b</sup>
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**Colour Legend**

- No clinically significant interaction expected.
- These drugs should not be coadministered.
- Potential interaction which may require a dosage adjustment or close monitoring.
- Potential interaction predicted to be of weak intensity. No *a priori* dosage adjustment is recommended.

**Text Legend**

- ↑ Potential increased exposure of the hormone
- ↓ Potential decreased exposure of the hormone
- ↔ No significant effect

<sup>a</sup> Monitor for signs of estrogen deficiency.

<sup>b</sup> The clinical significance of increased progestin exposure in terms of overall risk of deep vein thrombosis, pulmonary embolism, stroke and myocardial infarction in postmenopausal women receiving substitution hormones is unknown.

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## Possible Interactions

- Cobicistat – may increase E ,P, EE and cyproterone by inhibiting CYP3A4
- Efavirenz – may decrease E ,P and cyproterone by inducing CYP3A4
- PIs and ritonavir – may decrease E by inducing CYP1A2 (definite decrease in EE in OCP)
- Darunavir may increase cyproterone by inhibiting CYP3A4
- Bictegravir/FTC/TAF – no interactions
- ABC/3TC/DTG – no interactions

→ pay attention to hormone levels after starting ART  
 → avoid ethinyl oestradiol which cannot be measured



## What About Trans Men???

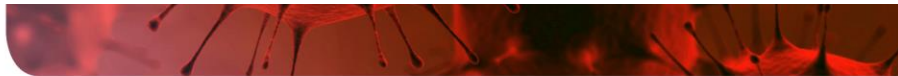
- Virtually absent from collected data
- Considered a very low risk group

However.....

- Some trans men are MSM
- Unlikely to be offered testing
- Testosterone changes vaginal mucosa



## PrEP for Transgender People



## PrEP Issues for TGD People

- PBS access - definition is “moderate to high risk of HIV infection”
- Assessment of risk is based on sexual history
- Don't forget trans men!
  - Pregnancy/contraception
  - STI screening should include Trichomonas
  - Cervical screening
- Address concerns over hormone interactions

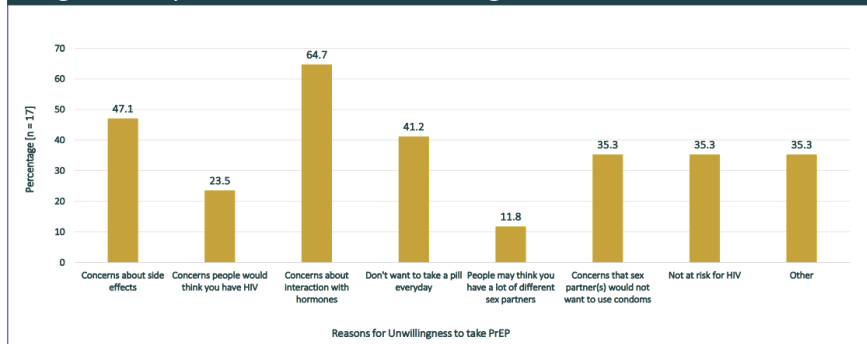


## Predictors of Willingness to Take PrEP Among Black and Latina Transgender Women

Tonia Poteat<sup>1</sup>, Erin Cooney<sup>1</sup>, Mannat Malik<sup>1</sup>, Thespina Yamanis<sup>2</sup>, Maren Lujan<sup>2</sup>, Andrea L. Wirtz<sup>3</sup>, David Hardy<sup>3</sup>, and Ruby Corado<sup>4</sup>

<sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Department of Epidemiology; <sup>2</sup>American University, School of International Service; <sup>3</sup>Whitman Walker Health, Washington, DC; <sup>4</sup>Casa Ruby, Washington, DC

**Figure 2. Reported Reasons for Unwillingness to take PrEP**



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Hydrogesterone	↑ <sup>b</sup>	↑ <sup>b</sup>	↑ <sup>b</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↓ <sup>a</sup>	↔	↔	↔	↔	↔	↔	↔	↔	↔	↑ <sup>b</sup>	↑ <sup>b</sup>
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## Candidates for PrEP?

### Trans woman

- Thai national, frequent visits back home
- planning breast augmentation Bangkok
- not had GRS
- had Chlamydia urethritis last visit



## Candidates for PrEP?

### Trans man

- has started hooking up with MSM
- recent presentation with PV d/c -> gonorrhoea
- asking about contraception





## Candidates for PrEP?

Non-binary genderqueer pansexual  
AMAB

- has 3 partners including trans woman and bisexual cis man
- open relationship



## Take-Home Messages

Prevalence of HIV in Australian TGD population is low compared with global prevalence

We have the tools to minimize transmission – PrEP and TasP

PrEP is safe and effective for TGD people, but they might not ask for it

ART and HRT can interact but there are plenty of good options

We need to work harder on engaging TGD people in care

We need to get better at identifying TGD people in data collection

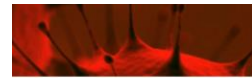






## ARE YOU A TRANS AND GENDER DIVERSE (TGD) PERSON LIVING WITH HIV OR KNOW SOMEONE WHO IS?

Did you know that up to 4% of HIV cases reported may be  
TGD, but we know nothing of their experiences?



We would love to hear your story!

If you are interested, Charles Darwin University is conducting research on  
the lived experiences of TGD people, diagnosed with HIV.

Please contact Dr Belinda Chaplin

08 8946 6528 or [Belinda.chaplin@cdu.edu.au](mailto:Belinda.chaplin@cdu.edu.au)



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