# Ophthalmic Disparities in Transgender Patients

Hollar MW, Zhang MM, Mawn LA, et al. Semin Ophthalmol. 2016;31:426-431. doi: 10.3109/08820538.2016.1154167

Transgender individuals experience unique challenges with regards to discrimination and access to healthcare. Further, their unique healthcare needs and challenges lead to greater rates of morbidity. Reviews of the unique biology of transgender patients and the effects of cross-sex hormone therapy on ophthalmic and non-ophthalmic pathology were undertaken, with attention given to topics in neuro-ophthalmology, oculoplastics, and retinal disease.



There has been increased recognition of the unique health needs in transgender individuals

The prevalence of transsexualism has been estimated at 100,000

There is an even higher incidence of gender dysphoria of up to 100,000

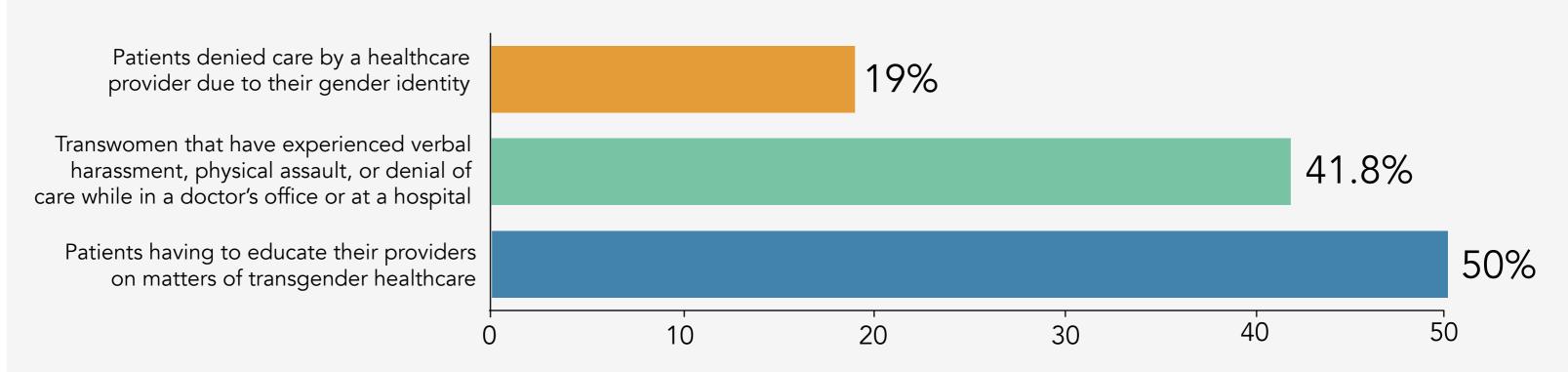


Though this rate is thought to have increased over the last 50 years, individual medical practitioners are unlikely to have treated a transgender patient, highlighting the need for education among providers.



### Transgender patients are an underserved population

In the report, "Addressing healthcare disparities in the lesbian, gay, bisexual, and transgender population: A review of best practices (2014)", it was found that transgender patients are less likely than cisgender patients to have health insurance, and are overall less likely to seek care.





#### There are unique health challenges for transgender patients

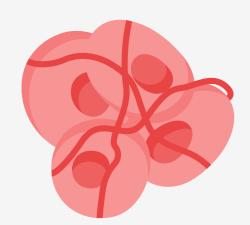
The odds of HIV infection among transgender women is

49 times that of other groups. These individuals are also underserved with respect to HIV care, in part due to concerns about stigmatization by healthcare providers and fears of potential interactions between hormone therapy and antiretroviral medication.

Transgender individuals are more frequently affected by mental health issues and suicide, and are treated by providers with little experience in the care of Lesbian, Gay, Bisexual, and Trans (LGBT) patients.



# Hormonal therapy is linked to an increased risk of vascular disease



The administration of estrogens and anti-androgens in male-to-female patients carries a known risk of thromboembolism with most events occurring during the first year of hormone administration. Use of ethinyl estradiol, one of the most commonly used medications in combined oral contraceptive pills, by transitioning patients without medical supervision further raises the risk of thromboembolism.

Hormonal therapy and estrogens have also been linked to the development of inflammation and autoimmunity. Hormone therapy in transsexual patients may also be responsible for triggering autoimmune disease.



## Transgender patients are at risk for developing retinal disease

Given the apparent link between cross-sex hormone therapy and inflammation, transsexual women may also be at risk for ophthalmic conditions mediated by increased risk for inflammation, type 2 diabetes, and thromboembolic events, and particularly given that LGBT American adults smoke at a rate approximately 50% higher than their heterosexual, cisgender peers. A 2000 case report of bilateral central retinal vein occlusions in a 45-year-old male-to-female transsexual patient undergoing therapy with levonorgestrol and ethinyl estradiol demonstrates this possibility.



### Associated at-risk ophthalmic conditions

- CMV retinitis
- Diabetic retinopathy HIV retinopathy
- Opportunistic retinal infections
- Optic neuritis
- Retinal vascular occlusions
- Sarcoidosis
- Uveitis



#### Conclusions

Transgender patients demonstrate unique needs with respect to ophthalmic and non-ophthalmic care. There is a need to be aware of, and monitor for unique challenges with transgender patients to breakdown barriers and gaps in care, which may have implications in trust, communication, and ophthalmologic health risk. Until that time, healthcare providers would be well served to approach the care of a transgender patient with patience, compassion, and an open mind.