Transgender Healthcare



Background

Most people are assigned a gender — either male or female — at birth (or even before), based on the appearance of their external genitalia. This classification of gender, although conventional, is inconsistent with the lived reality of some people.

An unknown number of people experience conflict between their assigned gender and their experienced gender. The consequences of this conflict may result in specific healthcare needs of these individuals.

Prevalence

It is difficult to estimate the number of transgender people (whose gender identity or expression is different to the gender they were assigned at birth) in our communities because they likely underreport their gender disparity due to concerns about stigma and privacy, and data collection methods are often inadequate (e.g. sex categorised as either male, female or 'other').

Gender dysphoria

Not all people whose gender experience differs from their assigned gender experience gender dysphoria (a diagnostic term used in the DSM-5). Feelings ranging from discomfort to considerable distress are reasonable responses to the conflict between a person's assigned gender and their gender identity.

Gender dysphoria itself can be the cause of psychological problems. The discrimination and abuse faced by transgender people may contribute to the higher rates of mental illness in transgender than cisgender people¹.

Discrimination and abuse of transgender people

Transgender people experience social marginalisation and health inequities $\!\!\!^2$.

Discrimination against transgender people, in many forms, can occur when they access healthcare services³, and is a cause of delay or avoidance of them seeking care. Healthcare providers therefore need to ensure an environment and procedures that are inclusive of transgender people.

The health of transgender people

Transgender people have higher rates of risk-taking behaviours (e.g. substance use, unprotected sex) than cisgender individuals, with attendant higher rates of the negative health consequences⁴. Transgender people appear to have higher rates of a variety of chronic diseases than cisgender people⁵ but the cause for this is unknown.

Inclusion of transgender people

Transgender people may seek healthcare for various reasons, ranging from issues that are unrelated to their gender identity, through to a desire to access gender affirming healthcare.

Fear of discrimination is a barrier to transgender people seeking medical care. Healthcare facilities that are welcoming, inclusive and safe for transgender individuals are essential to facilitate their presentation for care and return for follow-up. There are various practice design elements and procedures^{6,78} that contribute to establishing a practice that is inclusive of transgender people.

Aboriginal and Torres Strait Islander Gender Diversity

Sistergirl is a term used by Aboriginal and Torres Strait Islander people who have a female spirit and take on female roles within the community, including looking after children and family. Many Sistergirls live a traditional lifestyle and have strong cultural backgrounds.

Brotherboy is a term used by Aboriginal and Torres Strait Islander people to describe gender diverse people who have male spirit and take on male roles within the community. Brotherboys have a strong sense of their cultural identity.

The terms Sistergirl and Brotherboy can differ between locations, countries and nations. The terms may not specifically define who someone is, but instead identify a fluid affiliation that complements their identity.

In Aboriginal and Torres Strait Islander communities the term Sistagirl and Brothaboy are used as terms of endearment, for women and men respectively, with no reference to gender identity.

The healthcare needs of transgender people

Most healthcare required by transgender people, including most gender affirming treatments, does not require specialist medical knowledge. In some cases, the complex healthcare needs of transgender people require multidisciplinary care from general practitioners, mental health professionals, endocrinologists, sexual health physicians, surgeons, speech pathologists and social services, depending on individual circumstances. General practitioners are well placed to manage the healthcare needs of transgender people⁹.

Initiation of gender affirming treatment for patients of inexperienced general practitioners is usually performed by, or in close collaboration with, endocrinologists and mental health professionals.

Affirmation of gender identity

Healthcare providers should not make assumptions about someone's gender identity. Patient information paperwork should include an option for patients to mark their gender as something other than just male or female¹⁰. Simply asking a person's preferred name, pronoun (e.g. he/she/they) and gender identity (on a form or in conversation) is better than guessing.

An important aspect of gender affirmation for some people is consistency with official documents. In Australia, reissue of official federal documents (such as passports) with a person's affirmed gender is possible with the support of a medical practitioner. Different Australian states have their own requirements and procedures for changing the gender on birth certificates and other documents issued under their jurisdiction.

During the initial consultation, it is important to take a complete history, assess risks and identify available social support, and perform any necessary examinations.

Gender incongruence and gender dysphoria are not pathological conditions, but they may be accompanied by mental health issues that require attention. Screening by a psychologist or psychiatrist may be necessary to rule out gender dysphoria as a manifestation of mental health issues (e.g. body dysmorphic disorder) or other conditions (e.g. Asperger syndrome) to ensure appropriate care.

Transgender people have higher rates of suicidal ideation and self-harm than cisgender people¹¹, so appropriate screening, surveillance and referral (if necessary) are important elements of their ongoing healthcare.

Not all transgender people will seek gender affirming medical or surgical intervention but may socially affirm their gender by using behavioural changes such as altering their speech and clothing. Chest binding or genital tucking to hide secondary sexual characteristics¹² can result in bruising, skin irritation and pain, particularly if not performed correctly¹³.

Gender affirmation treatments

Many transgender people seek medical intervention to achieve physical affirmation of their gender identity¹⁴, the most common form being hormonal treatment.

Children

Children who experience gender conflict may benefit from psychological support (for the child and their family), particularly if their family, school or social environments are not supportive. Generally, the mental health of children who socially transition does not seem to be adversely affected¹⁵. For children with complicated circumstances, help from an experienced expert in child cognitive and emotional development will likely be necessary.

Medical treatment for gender affirmation is not recommended until the onset of puberty $^{\rm 15}\!.$

Adolescents

Most adolescents with gender dysphoria are likely to need psychological support¹¹. For some people, the development of secondary sexual characteristics during puberty can cause considerable distress¹⁶, and many of these individuals desire interventions to affirm their gender identity¹⁷.

Puberty suppression

In general, gender-affirming hormonal treatments are not used until after 16 years of age.

Gonadotrophin-releasing hormone (GnRH) agonists can suppress androgen and oestrogen levels, hence slowing or preventing the development of secondary sexual characteristics. Such treatment may have some irreversible effects (e.g. consequences for testis development and pubertal increases in bone mineral density are not well understood¹⁸) but can relieve distress and prevent the permanent development of secondary sex characteristics of the natal sex¹⁹. Thus, pubertal suppression is considered an ethically responsible option for transgender adolescents²⁰.

The effects of GnRH agonists for puberty suppression on testis development and function are not known but use of these drugs has irreversible effects in older men. Puberty suppression may result in reduced bone mineralisation, so monitoring of bone mineral density is recommended¹⁵. Otherwise, growth (in terms of height and weight) continues whilst the person decides whether to use hormone therapy and/or surgery for permanent gender affirmation.

The Australian Pharmaceutical Benefits Scheme does not subsidise the use of gonadotrophin-releasing hormone agonists for puberty suppression.

Reproductive counselling

The fertility consequences of gender affirming hormone treatments are not thoroughly understood. Anecdotally, some people cease gender affirming treatments and have no trouble conceiving but others appear infertile. Some gender affirming surgical procedures may result in sterilisation (although these are among the least common interventions accessed by transgender people).

Discussion of fertility with transgender people prior to commencing gender affirming treatment is important for informed care. Information about options for fertility preservation, such as sperm and egg collection and cryopreservation, and assistance with accessing these services is desired by most transgender people seeking gender affirming hormone treatment²¹. However, starting a family after genderaffirming medical and surgical treatments is possible without this. Discussions and procedures relating to fertility preservation may exacerbate gender dysphoria, so these are best undertaken with sensitivity, ideally in a healthcare service with experience in this area²¹.

Hormone treatment for gender affirmation

Many transgender people want hormone treatment to affirm their gender identity²³. Testosterone and oestradiol to achieve masculinisation or feminisation of a person's appearance, respectively, are generally safe, effective and accepted by transgender people.

Pharmaceutical Benefit Scheme subsidy for testosterone requires treatment by, or in consultation with, a specialist in endocrinology, urology or sexual health. This influences the cost, and therefore availability, of testosterone to transgender people.

Testosterone for transgender males is generally administered according to protocols used for hormone replacement therapy in cisgender people. Oestradiol for transgender females is generally used in higher doses than for menopausal hormone therapy. Anti-androgen treatment to suppress testosterone is commonly used for transgender women and progestins might be required for cessation of menses in transgender males. Other medications may be necessary to augment or counteract side-effects of gender affirming hormone therapy (e.g. to treat acne arising from testosterone treatment).

Hormonal treatment for gender affirmation is best initiated in close consultation with an experienced endocrinologist or sexual health specialist, for general practitioners with limited experience.

Guidelines for prescribing hormones for gender affirmation, based on those of the Endocrine Society¹⁰, have been adapted for an Australian context¹³ (see Table 1).

Masculinising hormone therapy

Testosterone therapy for gender affirmation may be supported by the Pharmaceutical Benefits Scheme (PBS) for patients treated by, or in consultation with, a paediatrician, endocrinologist, urologist or sexual health specialist.

Testosterone formulations available under the PBS, and appropriate doses, are:

- Testosterone undecanoate 1000 mg, intramuscularly administered 12-weekly (the first two doses 6 weeks apart)
- Testosterone 1% (50 mg/5 g) gel sachets, applied transdermally, one sachet daily
- Testosterone 1% (12.5 mg/actuation) gel in pump pack, applied transdermally, four actuations daily
- Testosterone 5% (50 mg/mL) cream 2 mL, applied transdermally, daily.

Other testosterone preparations (testosterone enanthate, mixed testosterone esters) are available on private, non-PBS prescription.

Feminising hormone therapy

Oestradiol and anti-androgen medications are supported by the PBS. A gradual increase in oestradiol, to mimic puberty onset in adolescents, is possible by beginning with low doses that increase every 2-3 months over 2 years.

Recommended preparations, and full doses, are:

- oestradiol or oestradiol valerate 2-6 mg, orally, daily
- oestradiol patches 100-150 mg/24 h, transdermally, changed twice weekly
- spironolactone 100-200 mg, orally, daily
- cyproterone acetate 12.5-50 mg, orally, daily.

The feminising and masculinising effects of hormone treatment for gender affirmation are summarised in Table 2. Detailed information about necessary pre-treatment investigations, side effects, the medical risks, and monitoring of people using gender affirming hormone treatment is available^{13, 22}.

Table 2

The timing of masculinising and feminising effects of hormone therapy^{16, 25}

Testosterone therapy

Physical effect	Onset	Maximum effect	Reversibility	
Skin oiliness; acne	1-6 months	1-2 years	reversible	
Cessation of menses	2-6 months		reversible	
Vaginal atrophy	3-6 months	1-2 years	reversible	
Clitoral enlargement	3-6 months	1-2 years	irreversible	
Body fat redistribution	3-6 months	2 years and onwards	variable reversibility	
Facial and bodily hair growth	3-6 months	3 years and onwards	irreversible	
Deepened voice	3-12 months	1-2 years	irreversible	
Increased muscle mass	6-12 months	2 years and onwards	reversible	
Male pattern baldness	variable	variable	irreversible	
Infertility	variable	variable	variable	

Estrogen and anti-androgen therapy

Physical effect	Onset	Maximum effect	Reversibility
Decreased spontaneous erections	1-3 months	3-6 months	variable
Decreased libido	1-3 months	1-2 years	variable
Cessation of male pattern baldness	1-3 months	1-2 years	reversible
Decreased muscle mass	3-6 months	1-2 years	reversible
Skin softness; decreased oiliness	3-6 months		reversible
Decreased testicular size	3-6 months	2-3 years	variable
Breast growth	3-6 months	2-3 years	irreversible
Body fat redistribution	3-6 months	2 years and onwards	variable reversibility
Reduced facial and bodily hair growth	6-12 months	3 years and onwards	reversible
Decreased sperm production	variable		variable
Erectile dysfunction	variable		variable

Surgical procedures for gender affirmation

About 25% of transgender people in the United States undergo some form of gender affirming surgery, which is more common in transgender males than transgender females²³. Chest surgery is more common than genital surgery for gender affirmation.

At present, there is no public funding for gender affirming surgery in Australia, so the cost is prohibitive for many people.

Gender affirming surgical procedures for transgender males includes chest reconstruction, hysterectomy, salpingooophorectomy, vaginectomy, metoidioplasty, phalloplasty, urethoplasty, scrotoplasty, and testicular and erectile prostheses.

Gender affirming surgical procedures for transgender women include breast augmentation, facial feminisation, tracheal chondroplasty, penectomy, orchidectomy, vaginoplasty, labiaplasty and cliteroplasty. Laryngeal surgery for voice alteration may also be performed.

Ongoing healthcare for transgender people

Preventive health approaches for transgender people need to consider their sex characteristics, conventional disease risk factors and gender identity.

Tailoring of disease screening and preventive measures is necessary for transgender patients (Table 3).

Table 3

Alterations to screening guidelines for transgender people

Screening program	Alteration for transgender men	Alteration for transgender women	
Cardiovascular disease	Initiate screening every 5 years from the beginning of hormone treatment		
Osteoporosis	Follow guidelines for birth sex	Use fracture risk assessment to identify age to begin screening	
Breast cancer	Follow guidelines for birth sex	Over 50 years and after 5 years of hormone treatment, screen every 2 years	
Cervical cancer	Follow guidelines for birth sex	Individualised, based on gender affirming surgical history	
Prostate cancer		Follow guidelines for birth sex	
Bowel cancer	Initiate screening at 50 years of age		
Gonorrhoea and chlamydia	Follow guidelines for birth sex	Follow guidelines for females if the person has vaginoplasty	

Some transgender people may experience distress during discussions about their anatomy. Physical examinations and screening procedures should be performed by healthcare provides who are aware and considerate of each individual's gender identity. Often, writing to other healthcare providers can alleviate patients' concerns and help them to receive appropriate care.

Healthcare providers must bear in mind that, regardless of surgery, a transgender person's individual sex characteristics will dictate some aspects of health and risk of disease, while gender characteristics may influence others²⁴.

Resources

TransHub has a variety of useful resources including a language guide (transhub.org.au/language) and information for clinicians (transhub.org.au/clinicians).

The Australian Professional Association for Trans Health lists healthcare providers who care for transgender, gender-diverse and non-binary people (auspath.org/providers/).

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