# Chapter 61
# What is the role of the andrologist with respect to the LGBTQQIA2S+ community?

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The term andrologist is derived from the Greek words "Andros" (the genitive of aner, meaning "man") and "logy" (a derivative of the term meaning "word", typically attached to root words to convey the study of a given subject). Andrology is hence the "study of men" and in common medical parlance hence refers to evaluation and management of issues affecting men's health, most commonly disruption of reproductive and sexual function.

Andrology has focused on people who have the biological features commonly associated with masculinity (e.g., Y chromosome, prostate gland, penis, testes) as well as secondary sex characteristics related to effects of androgens (e.g., hirsutism, increased muscle mass, enlarged larynx). While these structures may be conceived of as andrological and are typically considered indicative of male sex, individuals who have them may not necessarily conceive of themselves as male or masculine. Other individuals may identify as masculine or having masculine traits but have been born with a chromosomal complement of 46XX and/or ovaries, a uterus, and a vagina.

These examples illustrate the important distinction between sex (i.e., the physical structures and organs one is born with) and gender (i.e., the concept of self as a being with traits and characteristics associated with a particular gender identity). These concepts are also distinct from sexual orientation (i.e., what physical or behavioral features an individual is attracted to in sexual or romantic partners). Stated another way in colloquial English, gender identity is "how you identify yourself", sexual orientation is "with whom do you have sexual or romantic relationships", and sex is "genital structures and chromosomal content that can (typically) be determined at birth."

The past several decades have seen an explosion of advocacy and increasing visibility for people who endorse sexual interest in same-gender partners (i.e., lesbian women, gay men, and bisexual

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persons of any gender, oftentimes grouped together as a group referred to as "LGB"). Issues of gender identity have been more prominently recognized over the past decade. A growing number of individuals endorse gender identities that are not congruent with the traditional gender identity associated with their natal anatomy. Some persons may identify with the "opposite" gender, i.e., a person with natal male sexual organs identifying as female or vice versa. Such persons may identify as transgender, a more appropriate term than the outmoded and pejorative term transsexual. A "T" to represent "transgender" was added to the term "LGB" to create the familiar "LGBT" acronym.

A growing number of persons reject the entire concept of a gender binary and endorse identities outside of the classic male-female dichotomy. Examples include "genderfluid", "gender non-binary", "gender-queer", "agender", "two spirit", or any one of a number of other monikers outside the classic dyad of male and female. The traditional continuum of sexual attraction promoted by the sex researcher Alfred Kinsey, ranging from strictly heterosexual to strictly homosexual with variable degrees of mixed attraction between these extremes, has also been challenged. A small but increasingly visible group of individuals exist who report no or low sexual attraction to partners of any gender. These persons may be further subdivided into "asexuals" ("aces", i.e., not interested in sexual relations but interested in romantic companionship) and "aromantics" ("aros", i.e., not interested in sexual or romantic relationships).

It is increasingly clear that the concerns and needs of these various groups of diverse sexual orientation and gender identity cannot accurately be described as simply "LGBT". As such, the acronym has now been expanded to include Questioning, Queer, Intersex, Asexual, and Two Spirit persons (LGBTQQIA2+). This expanding acronym is more precise in the sense that it better characterizes constituent groups. However, expansion of the group risks conflating unique groups of persons that may not have much in common aside from identifying with a gender different from what their natal sex would predict, having a non-heterosexual orientation, and/or having experienced societal recrimination for these reasons.

Concepts of sexual orientation and gender identity are controversial and emotionally charged. Increasing prominence of LGBTQQIA2+ persons in public life has led to a legal and political backlash from persons and groups with more conservative and traditional views on sexuality and gender. As researchers and

clinicians interested in reproductive and hormonal biology we are beholden to concepts of fact and beneficence in the work we do on behalf of our patients and society as a whole. We must always strive to put scientific integrity and the well-being of our patients (for those of us who are clinicians) at the forefront of what we do. This is not to say that an orthodoxy of thought regarding sexual orientation, gender, and their expression is required of andrologists, nor that any side in the fierce and emotional debates about these topics has a monopoly on the more nebulous and philosophical concept of truth.

Persons who identify with one or more of the constituent groups of the LGBTQQIA2+ community have often experienced discrimination, sometimes from healthcare providers. These groups often also have been poorly represented in clinical research and as researchers beyond risk management strategies for prevention of sexually transmitted infections including HIV. What, then, are our obligations as clinical and research andrologists to the various persons belonging to LGBTQQIA2+ communities?

## Gay and Bisexual Cis-gender Men

The role of andrology researchers and clinicians is most easily understood in terms of how we may serve the needs of gay and bisexual men (GBM) who are cis-gender. These groups identify as men and have male sexual/reproductive organs. As basic biological processes do not differ between heterosexual and non-heterosexual men, andrology practitioners can meet the needs of GBM by addressing common andrological concerns such as hypogonadism, isolated low serum testosterone, prostate cancer, erectile dysfunction, decreased libido, Peyronie's Disease, and other issues common to people of male sex. While the andrological problems may not differ, cultural and behavioral practices in GBM may portend health risk factors that differ from heterosexual cisgender men. For instance, HIV infection is more common in GBM, and HIV infection is in turn associated with higher risk of the andrological syndrome of hypogonadism.

From the clinical perspective, it is of primary importance not to assume heterosexuality in men presenting for healthcare. Tactful and sensitive inquiry into sexual orientation and sexual/reproductive health concerns is a requisite for optimal clinical care. Clinicians should avoid making assumptions about the gender of a patient's sexual partner(s) or their marital status. Patients who are able to disclose their sexual orientation and practices to their

healthcare provider are more likely to receive appropriate care so this element of clinical disclosure is essential.

Clinical interventions that work for heterosexual men will generally be efficacious for their GBM peers and should be offered as clinically appropriate. The risks of therapies are also likely to be similar; however, the impact of these adverse outcomes may differ. Sexual practices are variable in GBM so clinicians should make efforts to explain how specific therapies may have greater impact in this population. For instance, although receptive anal sex is not ubiquitous in GBM but does occur more frequently than in heterosexual populations. For this reason, the effects of surgical or radiation-based treatment on prostate and/or rectal sensation should be considered when counseling GBM with prostate cancer who engage in receptive anal sex.

Liberalizing of laws and social norms has seen a marked growth in the number of GBM pursuing paternity, including fathering biological children. Clinicians caring for GBM should inquire about any desire or plans for biological paternity. Biological paternity requires fertilization of an ovum with the man's sperm and support of the developing fetus in a gestational carrier (e.g., a paid surrogate, family member, or other individual with a uterus who may also be interested in a future parenting role). Flexibility and a desire to accommodate what may be a non-traditional conception, pregnancy, and future family structure is essential to the clinician providing care for these men.

From the research perspective, explicit inclusion of GBM in research should be a priority. While we do not have evidence that basic biological processes substantially differ in GBM versus their heterosexual peers, the sociocultural milieu of GBM may alter the efficacy of therapy. A more complex and potentially dangerous line of research would be to understand the biological underpinnings of same sex attraction. While such information might be of genuine scientific interest, legitimate concerns exist about how such knowledge may be abused to try and "cure" GBM of same sex attraction or legitimize prejudice.

## Transgender Women and other non-male Assigned Male at Birth Persons

To reiterate, a transgender woman is an individual with natal male anatomy (i.e., born with a penis and testes) who identifies as a

woman. Some persons with natal male anatomy may not identify with either male or female.

Transgender women are at risk for common "male" conditions such as testicular cancer, benign prostate hyperplasia, and prostate cancer. Appropriate screening and treatment of these conditions should be offered. Transgender women may feel distress at having problems with "male" organs and as such may not feel comfortable seeking out appropriate screening and testing. It is essential that andrologists show support. An important element of this can be utilizing the patient's preferred terms for parts of their anatomy; this is often (but not always) the anatomical word such as "phallus" or "penis" but may be an alternative such as "clitoris" or a non-anatomical term.

Some transgender women may desire fertility preservation. Depending on their puberty status, it may be possible to bank semen for future use in assisted reproduction. Transgender women on gender affirming therapy often have suppression of sperm parameters so, when possible, banking should be initiated prior to gender affirming hormone therapy. If sperm cannot be procured from ejaculated semen, sperm aspiration or a harvesting procedure may be utilized.

Sexual expression in transgender women may or may not involve use of their penis; transgender women who engage in insertive sex or other forms of penile stimulation may develop issues of erectile dysfunction (ED) that impair their capacity for sexual satisfaction. Standard therapies for ED (e.g., phosphodiesterase type 5 inhibitors, intracavernous injections of vasodilator medications) may be offered to these patients.

Transgender women may have gone through puberty and experienced development of male secondary sex characteristics. These traits may be very distressing to transgender women; this has led to a push from many corners to promote the use of puberty blocking drugs for pre- or early-pubescent children who identify as transgender. These treatments may be of psychological benefit in many cases, but the data on safety and long-term repercussions remain incomplete. Further research will help better define the optimal criteria and type of puberty blockade. The expertise of andrologists in understanding issues of testosterone biology may be of great service in these research efforts to optimize the care of transgender persons.

## Natal female individuals

The role of the andrologist in the care of the transgender man (i.e., natal female but identifying as male) is at this time poorly defined. Andrologists are clearly in the best position to understand the role of androgens in the human body. From a research perspective, andrologists should study the long-term effects of high dose testosterone supplementation in the natal female body. Clinical andrologists are well-qualified to offer transgender men gender-affirming hormone replacement therapy with testosterone supplementation by any one of a number of evidence-based modalities.

The role of the andrologist is not well defined in the care of cis-gender women, regardless of sexual orientation. There may be some interactions if a cis-gender woman is involved with a GBM planning paternity as a gestational carrier

## Conclusions

Andrologists are by definition knowledgeable and interested in issues of sexuality and hormones. This interest is well suited to the research and care of individuals who exist outside the classic binary of “male” and “female”. Our knowledge and skills can also be used to serve other groups (e.g., GBM) who have been historically marginalized by the medical and research establishments due to their sexual orientation.

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