Clinical Nursing Care for Transgender Patients With Cancer

Nathan Levitt, RN, BSN, MA

Although transgender people, like others, require sensitive and informed health care, fear, discriminatory treatment, and other barriers often stand in their way of receiving it. Nurses are an integral part of creating a transgender-sensitive healthcare environment, but only limited information is available about this patient population. Enhancing oncology nurses’ clinical skills when working within the transgender community will help to address health disparities and create welcoming environments.

Background

Several initiatives have recognized that health disparities exist for lesbian, gay, bisexual, and transgender patients (Institute of Medicine, 2011; U.S. Department of Health and Human Services, 2012, 2015). In addition, transgender individuals often face the most severe health disparities and forms of discrimination (Lambda Legal, 2010). According to the National Transgender Discrimination Survey, of which the final study sample was about 6,500 transgender and gender-nonconforming people, 50% of respondents said they had had to teach their healthcare providers about transgender care (Grant et al., 2011). The survey also revealed that respondents were often denied equal treatment in doctors’ offices and hospitals (24%), in emergency rooms (13%), in mental health clinics (11%), by emergency medical technicians (5%), and in drug treatment programs (3%); in addition, 24% of transgender women and 20% of transgender men reported being refused treatment altogether (Grant et al., 2011). Fear of stigmatization or previous negative experiences within the healthcare system resulted in 28% of transgender respondents postponing or foregoing medical care when they were sick or injured (Grant et al., 2011) (see Figure 1).

Finding a healthcare provider who is knowledgeable about the needs of the transgender community is a common barrier to care (Grant et al., 2011; Lombardi, 2010; Sanchez, Sanchez, & Danoff, 2009). This population experiences high rates of physical violence (26%), sexual assault (10%–14%), attempted suicide (30%–64%), substance use (26%–53%), depression (40%–50%), and anxiety (40%–47%) (Clements-Nolle, Marx, & Katz, 2006; Grant et al., 2011; Hotton, Garofalo, Kuhns, & Johnson, 2013; Nemoto, Bodeker, & Iwamoto, 2011). Transgender people of color reported experiencing higher levels of discrimination than white transgender people (Grant et al., 2011).

Patients may feel uncomfortable disclosing their gender identity, which can result in delayed treatment, lack of preventive care, and less care for chronic conditions (Dean et al., 2000). Understanding how patients identify is vital to improving access to care and building trust; it also affects retention in care. Figure 2 provides a glossary of transgender terms and definitions.

Health care for the transgender population may include medical transition care. Although not all transgender people are interested in using hormones (e.g., estrogen, testosterone), feminizing or masculinizing regimens can help to create a better balance between gender identity and appearance. Therefore, healthcare providers must understand the effects, administration, and monitoring of these regimens, and they should also consult...
hormone protocols regarding administration, monitoring, follow-up, and management of comorbidities (see Table 1).

Transgender people may be interested in gender-affirming surgeries, which requires providers to sensitively inquire about surgeries and provide informed pre- and postsurgical care. Female-to-male (FtM) surgery options can include breast or chest surgery (e.g., chest contouring, subcutaneous mastectomy), hysterectomy, salpingo-oophorectomy, and genital surgery (e.g., metoidioplasty or phalloplasty) with or without penile or scrotal prostheses, scrotoplasty, vaginectomy) (Unger, 2014). Male-to-female (MtF) surgery options can include breast or chest surgery (e.g., augmentation mammoplasty with implants and lipofilling), feminizing procedures (e.g., facial feminization surgery, thyroid cartilage reduction or tracheal shaving, voice surgery), and genital surgery (e.g., clitoroplasty, orchiectomy, penectomy, vaginoplasty, vulvoplasty) (Unger, 2014).

Cancer Care

Cancer incidence rates in the transgender community are largely unknown, but some research does exist. Cancer screening for transgender people can require a modified approach to current guidelines (see Figure 3); most screening recommendations do not include information specific or relevant to the transgender population. Transgender people are less likely to have routine cancer screenings and may not undergo testing if symptoms develop (Vogel, 2014). In addition, patients may also face discomfort with healthcare providers’ use of gendered language and documentation, providers’ lack of knowledge about surgery and hormones, gender-segregated systems, discrimination and ignorance within the healthcare system, and insensitive care (Vogel, 2014). In addition, some health insurance plans do not include coverage for gender transition; coverage for gender-specific care (e.g., for gendered cancers) may also be denied (Unger, 2014).

Research on Cancer in the Transgender Population

Much of the research that exists on cancer regarding this population focuses on hormone therapy. In a long-term mortality study of transgender patients taking hormones, Asscheman et al. (2011) reported no significant difference in mortality of FtM patients compared to the general population. However, in the group of hormone-treated MtF patients, mortality was 51% higher than the general population, mainly because of nonhormone-related causes (e.g., suicide, drug abuse). Elevated lung cancer mortality rates were attributed to higher rates of tobacco use in the transgender population (Asscheman et al., 2011).

Peitzmeier, Reisner, Harigopal, and Potter (2014) studied Papanicolaou (Pap) test results from 233 FtM and 3,625 female (cisgender) patients, reporting that FtM patients were 8.3 times more likely to have inadequate Pap samples when compared to female (cisgender) patients. The study asserted an association between testosterone and Pap inadequacy. FtM patients were more likely to have multiple inadequate tests and longer delays in follow-up testing because of possible changes caused by testosterone and provider or patient discomfort with the examination (Peitzmeier et al., 2014). Unger (2015) reported that, in a survey of 141 obstetrics and gynecology providers, only 35% (n = 49 of 139) preferred to care for transgender patients, reporting that

![FIGURE 1. Discrimination and Substandard Care Demonstrated by Healthcare Professionals and Experienced by Transgender and Gender-Nonconforming People Versus Gay, Lesbian, and Bisexual People](image)

were comfortable with caring for MtF patients, and 29% (n = 41 of 141) were comfortable with caring for FtM patients. About 59% (n = 82 of 138) did not know the recommendations regarding breast cancer screening for this population (Unger, 2015).

Perrone et al. (2009) studied the effects of long-term testosterone on the endometrium of FtM patients and reported no evidence that testosterone increased or reduced the risk of cancer. However, atrophic effects of androgen on the endometrium and a possible risk of polycystic ovarian syndrome can occur (Perrone et al., 2009). Healthcare providers for patients with estrogen receptor-positive cancers may need to discuss contraindications for testosterone therapy because a portion of administered testosterone can be aromatized to estradiol. Providers must approach this topic in a sensitive manner, understanding that such discussion may be difficult for the patient.

Urban, Teng, and Kapp (2011) reported a case of uterine cancer in one FtM patient and a case of cervical cancer in another FtM patient; both patients were on testosterone, and their malignancies were detected during gender reassignment surgery. Malignancies may go undetected when patients do not have regular, appropriate gynecologic care. Patients may also be uncomfortable continuing with oncology care associated with their birth gender (Urban et al., 2011). Hage, Dekker, Karim, Verheijen, and Bloemena (2000) reported two cases of ovarian cancer in FtM patients taking androgens, and they recommended simultaneous salpingo-oophorectomy in transgender men undergoing hysterectomy during gender-affirming therapy.

### TABLE 1. Effects of Hormones in FtM and MtF Transsexual People

<table>
<thead>
<tr>
<th>Effect</th>
<th>Onset (months)</th>
<th>Maximum (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Masculinizing Effects in FtM Transsexual People Receiving Testosterone</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Androgenic hair loss (scalp)</td>
<td>6–12</td>
<td>–</td>
</tr>
<tr>
<td>Cessation of menses</td>
<td>2–6</td>
<td>–</td>
</tr>
<tr>
<td>Clitoral enlargement</td>
<td>3–6</td>
<td>1–2</td>
</tr>
<tr>
<td>Deepening of voice</td>
<td>6–12</td>
<td>1–2</td>
</tr>
<tr>
<td>Facial hair</td>
<td>6–12</td>
<td>4–5</td>
</tr>
<tr>
<td>Fat redistribution</td>
<td>1–6</td>
<td>2–5</td>
</tr>
<tr>
<td>Increased muscle mass</td>
<td>6–12</td>
<td>2–5</td>
</tr>
<tr>
<td>Skin oiliness and acne</td>
<td>1–6</td>
<td>1–2</td>
</tr>
<tr>
<td>Vaginal atrophy</td>
<td>3–6</td>
<td>1–2</td>
</tr>
<tr>
<td><strong>Feminizing Effects in MtF Transsexual People Receiving Estrogen and Anti-Androgen</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast growth</td>
<td>3–6</td>
<td>2–3</td>
</tr>
<tr>
<td>Decreased erections</td>
<td>1–3</td>
<td>3–6</td>
</tr>
<tr>
<td>Decreased muscle mass and strength</td>
<td>3–6</td>
<td>1–2</td>
</tr>
<tr>
<td>Decreased sperm production</td>
<td>–</td>
<td>&gt; 3</td>
</tr>
<tr>
<td>Decreased testicular volume</td>
<td>3–6</td>
<td>2–3</td>
</tr>
<tr>
<td>Softening of skin</td>
<td>3–6</td>
<td>–</td>
</tr>
<tr>
<td>Voice changes</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

FtM—female-to-male; MtF—male-to-female

In a review of the literature, Mueller and Gooren (2008) found that in a study following 2,200 MtF patients for more than 30 years, no breast cancer cases were reported. Estrogen alone appears to pose no increased risk of breast carcinomas and may be safer than estrogen plus progesterone therapy (Mueller & Gooren, 2008). In addition, one case of breast cancer was diagnosed in an FtM patient on testosterone therapy; the cancer was detected after chest surgery (Burcombe, Makris, Pittam, & Finer, 2003). Contradicting views exist of androgens as a risk factor or as protection against cancer development. Mueller and Gooren (2008) also observed that three cases of prostate cancer were diagnosed in MtF patients aged younger than 50 years taking estrogen; however, whether the cancer was estrogen sensitive or whether the malignancy was present prior to estrogen administration is unclear.

Although the prostate becomes atrophic with androgen suppression, a cancer risk still exists. Unger (2014) recommended that MtF patients who have not had a vaginoplasty be evaluated by annual rectal examination after age 50 years. However, patients with a created neovagina may require transvaginal palpation for adequate assessment (Unger, 2014). With prolonged estrogen exposure, prostate-specific antigen levels may be falsely low (Epstein, 1993).

Brown and Jones (2015) examined the incidence of breast cancer among 5,135 transgender veterans on hormones. Ten cases of breast cancer were confirmed, including seven in FtM patients and two in MtF patients. The authors concluded that enough evidence did not exist to support a connection between crossgender hormones and breast cancer. However, Brown and Jones (2015) recommended that healthcare providers demonstrate more sensitivity and increase their knowledge about transgender care. For example, this population has many risk factors for breast cancer, including a transwoman’s long-term exposure to estrogen, testosterone converting to estradiol, and remaining breast tissue after a transman’s chest surgery (Unger, 2014).

Evidence from long-term studies has concluded that malignancies related to hormone therapy are rare. Transition-related care is important to the health of many in the transgender population. Cancer rates related to decreased rates of screening in this population may be the result of discrimination; understanding the impact of fear on screening rates is an important research priority.

Discussing reproductive health concerns should be a part of transgender health care, particularly when it relates to oncology care. Transgender populations have fertility concerns that are often unaddressed by providers. Transgender men may need to discuss cessation of testosterone if interested in becoming pregnant. Transgender women may need to use sperm banking services because of estrogen’s possible effect on sperm production (Wallace, Blough, & Kondapalli, 2014).

**Implications for Practice and Conclusions**

Nurses play an important role in transgender health promotion and cancer screening. For example, nurses should ask patients how they identify their gender, name, and pronoun. Transgender affirmative language can help to increase screenings, particularly those that are related to gendered cancers. Assessment skills should include knowing how and when to evaluate the prostate in all transwomen (grade C).

---

**Screen transgender or transsexual people who have not used cross-sex hormones or had gender-affirming surgery using the same criteria and risk parameters as for people of their natal sex.**

**Transmen (Past or Current Hormone Use)**
- **Breast cancer**: Perform an annual chest wall and axillary examination. Breast cancer screening using mammography should also take place as for natal females; it is not needed following chest reconstruction but should be considered if only a reduction was performed.
- **Cervical cancer**: After total hysterectomy, if the individual has a prior history of high-grade cervical dysplasia or cervical cancer, do annual Papanicolaou (Pap) smear of vaginal cuff until three normal tests are documented, then continue to perform Pap smear every two to three years.
- **Cervical cancer if ovaries were removed, but uterus and cervix remain intact**: Follow Pap smear guidelines for natal females, but deferring is an option if individual has no history of genital sexual activity. Inform pathologist of current or prior testosterone use; cervical atrophy can mimic dysplasia.
- **No hysterectomy**: Follow published recommended guidelines for natal females (grade C).
- **Uterine cancer**: Evaluate spontaneous vaginal bleeding in the absence of a mitigating factor (e.g., missed testosterone doses, excessive testosterone dosing leading to increased estrogen levels, weight changes, thyroid disorders) as for postmenopausal natal females. Consider hysterectomy if fertility is not an issue, patient is aged 40 years or older, and health will not be adversely affected by surgery.
- **Follow standard screening recommendations for other cancers.**

**Transwomen (Past or Current Hormone Use)**
- **Breast cancer**: Perform breast cancer screening using mammography in patients aged 50 years or older with additional risk factors (e.g., estrogen and progesterin use of more than five years, positive family history, body mass index of 35 or greater).
- **Prostate cancer**: Prostate-specific antigen (PSA) is falsely low in an androgen-deficient setting, even in the presence of cancer; only consider PSA screening in high-risk patients. Use a digital rectal examination to evaluate the prostate in all transwomen (grade C).
- **Pap smears in neovaginas are not indicated; the neovagina is lined with keratinized epithelium and cannot be evaluated with a Pap smear. Perform periodic visual inspection with a speculum, looking for genital warts, erosions, and other lesions. If a sexually transmitted infection is suspected, do a culture swab, not polymerase chain reaction. Neovaginal walls are usually skin, not mucosa; when it is mucosa, it is urethral or colon mucosa.**
- **Follow standard screening recommendations for other cancers.**

---

**FIGURE 3. Cancer Screening Guidelines for Transgender or Transsexual People**

*N. From “Primary Care Protocol for Transgender Patient Care,” by the Center of Excellence for Transgender Health, 2011. Retrieved from http://transhealth.ucsf.edu/trans?page=protocol-00-00. Copyright 2011 by the Center of Excellence for Transgender Health. Adapted with permission.*
why to ask about patients’ history of feminizing and masculinizing interventions. The language used during physical examinations should not be based on the gender patients were assigned at birth, but instead on how patients identify their body and gender. Assessment should be sensitive to degendering the treatment, appropriate clinical screening, and the language of cancer (e.g., avoiding terms like “women’s cancer” and “men’s cancer”). Body parts of all genders may be different because of cancer-related surgeries and treatment. A number of resources regarding the care of transgender people are available (see Figure 4).

The oncology healthcare team, with oncology nurses as essential team members, can greatly improve the clinical care of members of the transgender population. Challenges for the transgender population include establishing care with supportive and sensitive providers, as well as gaining effective access to transgender-sensitive cancer support groups, survivorship resources, end-of-life care, and referrals. Education is an essential foundation for nurses, particularly within the field of oncology, and it promotes the delivery of excellent transgender affirmative care.

References


FIGURE 4. Transgender Care Resources for Healthcare Providers


Do You Have an Interesting Topic to Share?

Oncology Essentials provides readers with a brief summary of oncology nursing basics. Length should be no more than 1,000–1,500 words, exclusive of tables, figures, insets, and references. If interested, contact Associate Editor Erin Hartnett, DNP, APRN-BC, CPNP, at hartne01@nyu.edu.