Transgender People Need Cancer Screening and Timely Care

Screening should be done based on which organs a person has, not their gender identity.

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Many transgender, gender-nonconforming and nonbinary people may be missing out on appropriate care to prevent and treat cancer, according to a small but growing body of research. Gender-affirming therapy does not necessarily eliminate—and in some cases may increase—cancer risk. Some trans men remain at risk for breast, cervical, endometrial, uterine and ovarian cancers, while most trans women are still susceptible to prostate cancer. There is a still a dearth of research on the effects of gender-affirming hormone therapy on cancer risk and disease progression.

Trans people often face barriers to care, including lack of awareness, discrimination and less access to medical care. Lack of health insurance or inadequate coverage are also concerns. For example, a trans woman who is identified as female by her insurance company but still has a prostate might not be covered for prostate cancer screening, notes the National LGBT Cancer Network.

As described in the Journal of Clinical Oncology-Oncology Practice, Chandler Cortina, MD, of the Medical College of Wisconsin, and colleagues surveyed 86 transgender and nonbinary people seen at an LGBTQ-focused clinic during 2021 and 2022. A majority were unaware of breast cancer (77%) or cervical cancer (60%) screening recommendations for their assigned sex at birth or their current gender. Although a third said they were concerned about breast cancer, only half of those ages 40 or older had received a screening mammogram. Among participants with an intact cervix, 47% had received a Pap smear within the past five years—substantially lower than the screening rate for cisgender (non-transgender) women.

Some research suggests that trans people have more cancer risk factors than cisgender individuals, such as a higher rates of smoking and alcohol consumption. Transgender and gender-diverse people are also more likely to be diagnosed with cancers associated with HIV and human papillomavirus (HPV). One study found that trans men were twice as likely to be diagnosed with cancer compared with cisgender men, though trans women and gender-nonconforming people did not have a higher cancer prevalence.

What's more transgender people may be diagnosed at later stages with more advanced cancer,

may be less likely to receive treatment and appear to have worse survival for some cancer types, according to an analysis of nearly 600 transgender cancer patients described in the Journal of the National Cancer Institute. The study authors concluded that, "There is a need for transgender-focused cancer research as the population ages and grows."

"A lack of knowledge about gender minorities' health needs among health care practitioners was evidenced, and it represented a major hurdle to cancer prevention, care, and survivorship for transgender and gender-diverse individuals," wrote the authors of a recent review in JAMA Oncology. "Discrimination, discomfort caused by gender-labeled oncological services, stigma and lack of cultural sensitivity of health care practitioners were other barriers met by transgender and gender-diverse persons in the oncology setting."

Bobbie Rimel, MD, of Cedars-Sinai Medical Center, advises providers to not only consider patients' current gender but to ask about their medical history, including what surgeries they have undergone and which organs they still have.

The American Cancer Society (ACS) recommends using inclusive intake forms that allow people to self-report information about their gender and and using an "organ inventory" to determine which screenings someone might need. ACS also suggests that providers not refer to organs as "male" or "female" and to ask people what terms they prefer for their own anatomy.

This video from the American Association of Clinical Oncology (ASCO) offers more information about cancer risk among transgender and nonbinary people:

Breast, Cervical, Ovarian and Prostate Cancer

Male and female hormones can spur the development, growth and spread of certain cancers. Estrogen stimulates the growth of hormone receptor-positive breast tumors, while testosterone can trigger prostate cancer growth. Hormone (endocrine) therapy for cancer blocks the action of these hormones to slow cancer growth. Gender-affirming hormone therapy can have the opposite effect, increasing cancer risk.

Transgender women who take estrogen have a somewhat higher risk for breast cancer than cisgender men but a lower risk than cisgender women. One study found that the risk for trans women increased during a short duration of gender-affirming hormone therapy and "the characteristics of the cancer resembled a more female pattern." Many providers advise trans women to follow the same breast cancer screening recommendations as cisgender women.

This presents a potential trade-off. In Cortina's study, most participants were taking gender-affirming hormones, and 35% said they would not consider stopping if they were diagnosed with hormone receptor-positive breast cancer. "[T]he role of endocrine therapy and gender-affirming hormone therapy for patients with hormone-receptor positive breast cancer is a data-free zone and requires a thoughtful and supportive discussion with patients about optimizing oncologic and gender-affirming care," Cortina told MedPage Today.

Trans men who undergo mastectomy dramatically reduce their risk for breast cancer, but the risk does not fall to zero, especially if they carry BRCA mutations. A recent study in Cell Genomics suggests that removing breast tissue is not the only thing that reduces trans men's risk. Taking testosterone and other androgens appears to modify remaining breast tissue in a way that protects against cancer, including altering gene expression and the numbers and types of immune cells in the tissue. These findings may offer clues about preventing and treating breast cancer in cisgender women.

"This [study] lays the groundwork for discoveries into how androgen and estrogen interact with each other that may contribute to new cancer therapies," Dan Theodorescu, MD, PhD, of Cedars-Sinai, said in a press release. "Our cancer center is focused on patients and populations such as LGBTQ+ who have historically not been a focus of specific cancer studies. We are trying to change that and to add to the national diversity in cancer research."

Trans men and nonbinary people who still have breasts should receive regular screening mammograms, and this is especially important for those with BRCA mutations or a family history of breast cancer. For those diagnosed, receiving care for breast cancer can be a fraught experience for trans men and nonbinary people—as well as cisgender men—because most breast cancer centers, services and support groups are heavily geared toward women.

Many trans people do not opt for bottom surgery, or genital reconstruction and removal of internal reproductive organs. Trans men who still have a uterus and ovaries can develop cancer in these organs. Cervical cancer, usually caused by HPV, is not triggered by hormones. Guidelines recommend that trans men and nonbinary people with a cervix should receive the same screening as cisgender women. Some trans men may find it difficult to get Pap smears; HPV self-testing at home could offer an alternative.

Trans men who still have ovaries and take testosterone might be at higher risk for ovarian cancer, but this link is not yet well understood. There is currently no routine screening test for ovarian cancer.

Cortina recommends that people seeking gender-affirming surgery should be tested for BRCA mutations and other genetic variants that raise the risk for breast and ovarian cancer, as this could influence the types of surgery they choose to undergo. For example, those at increased risk for breast cancer should be offered risk-reducing mastectomy (the procedure used for high-risk cisgender women) as part of their chest masculinization operation, she wrote in a JAMA Surgery viewpoint.

For trans women, the prostate gland is usually not removed during bottom surgery, so they remain at risk for prostate cancer. This cancer can be detected by a blood test that measures a protein known as prostate-specific antigen (PSA), but routine PSA screening is controversial. An elevated PSA level can lead to invasive testing and treatment for people whose cancer never would have progressed. For cisgender men, the U.S. Preventive Services Task Force recommends that prostate cancer screening should be an individual decision based on risk factors and personal preferences.

A recent study described 155 transgender women with prostate cancer in the Veterans Affairs Health System. The annual rate of 14 cases per 10,000 was lower than the expected rate for cisgender men, which could be due to less PSA screening, uncertainty about how to interpret PSA values in trans women or suppressive effects of estrogen on prostate cancer development. However, most of these patients had not had their testicles removed, and a majority had never taken estrogen. In fact, trans women taking estrogen had more aggressive cancer. This may suggest delayed diagnosis or selection of cancer cells resistant to androgen deprivation, which tend to be more aggressive, according to the researchers.

“We still have a lot of work to do to determine optimal prostate cancer screening for transgender women on estrogen and related treatments,” said study author Matthew Cooperberg, MD, MPH, of the University of California San Francisco. “This study should be a reminder to clinicians and patients alike that, regardless of gender, people with prostates are at risk for prostate cancer.”

Advocates say it’s important to educate trans people about their risk for cancer and what screenings and care they should receive. Educational materials for the general public could benefit from inclusive language. Training providers to offer well-informed and sensitive care for this population is also an urgent need. A study presented at last year’s ASCO Quality Care Symposium found that doctors lack knowledge and confidence about breast cancer screening for transgender people, but most said they are eager to learn.

“The fields of cancer research and clinical oncology need to evolve beyond binaries and build up more robust research so that evidence-based care can truly be provided for all,” said Mya Roberson, MD, coauthor of a commentary on trans-inclusive and trans-specific cancer care recently published in Nature Reviews-Clinical Oncology.

“All health care providers involved in the cancer care continuum from screening to treatment to survivorship have an important role in providing inclusive cancer care,” she added. “Envisioning a future of optimal cancer care for transgender patients requires acknowledging the current policies preventing transgender youth and adults from obtaining care and criminalizing its provision.”

Resources

American Cancer Society: Cancer Care for Transgender and Gender Nonconforming People
Trans People and Cancer
ASCO: Resources for LGBTQ+ People with Cancer

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