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Anal cancer, HIV, and gay/bisexual men

By Liz Margolies, LCSW, and Bill Goeren, LCSW

In the general population, anal cancer is a rare disease. Few people knew about it before Farrah Fawcett made public her struggle with the illness. Among men who have sex with men (MSM), and especially HIV-positive MSM, the incidence of anal cancer is significantly more prevalent and increasing annually.[1] However, the majority of gay and bisexual men know little about the disease, have never been tested for it, nor know that screening tests exit. Health care professionals, too, remain divided on how and whether to screen for it. In fact, a standardized screening protocol for anal cancer does not yet exist.

Each year anal cancer is diagnosed in about two people out of every 100,000 people in the general population. HIV negative MSM are 20 times more likely to be diagnosed with anal cancer. Their rate is about 40 cases per 100,000. HIV-positive MSM are up to 40 times more likely to be diagnosed with the disease, resulting in a rate of 80 anal cancer cases per 100,000 people.

Anal cancer is caused by the same strains of Human Papilloma Virus (HPV) that cause cervical cancer in women. HPV is the most common sexually transmitted infection.[2] There are over 100 different types of HPV, although only several strains are believed to increase the risk of cancer. Approximately 75% of all sexually active adults acquire HPV, often within the course of early adulthood and without any symptoms.[3] Among MSM, it is transmitted through both protected and unprotected anal intercourse, and through skin-to-skin contact. Among heterosexual women, the vast majority of infections are cleared naturally by the body within a few years, usually by age 30. This appears to be less true for MSM, where the infections are often still present in later adulthood.[2]

Anal HPV is present in approximately 65% of HIV negative MSM and 95% of MSM who are HIV positive. Although HAART (highly active antiretroviral therapy) has decreased overall mortality from HIV, it has not reduced the incidence of anal squamous cell carcinoma (SCC).[4] And, since it is spread through sexual skin-to-skin contact, condom use only partially reduces the risk of transmission. Other factors that increase the risk of anal cancer include a high number of sex partners, and use of alcohol, drugs and tobacco. Although many men have no obvious symptoms, one of the most common manifestations of HPV infection is genital warts which can affect the anus, the penis and/or the peritoneum, a large membrane in the abdominal cavity that connects and supports internal organs. Other possible symptoms are abnormal discharge from the anus, bleeding from the rectum and anus, anal itching, pain or pressure around the anus, and anal sores that do not heal.[5]

HIV-positive MSM are 40 times more likely to be diagnosed with anal cancer.

Cancer of the anus, like that of the cervix, develops slowly, beginning with minor cell changes. For women, a simple pap smear is used to detect these cell changes in the cervix in their early stages. With regular screening and proper treatment, cervical cancer can be prevented. In fact, since cervical pap smears have become a routine part of women's health care, cervical cancer rates have dropped dramatically, from rates that once resembled HIV-positive MSM anal cancer rates (80 per 100,000) to the current rate of approximately two per 100,000.

The anus and the cervix are biologically similar and both are target chambers for HPV infection.[1,2] The same screening methodology (pap smear) can be used to test the anus for cancer and pre-cancerous cell changes. A growing number of gay physicians and health activists now believe that routine screening, using an anal pap smear, could reduce the incidence of anal cancer as dramatically as it

has cervical cancer in women. They recommend that all MSM, especially those who are HIV-positive, be tested every one to three years, depending on their immunological well-being and CD4 count. For an HIV-positive gay man with a CD4 of over 500, it is recommended to repeat the test every 2 years. For an HIV-positive individual with a CD4 of fewer than 500, the recommendation is to repeat the test once a year. They suggest that HIV-negative individuals be tested every three years. Still, there are some clinicians who are not convinced that routine screening of all MSM is warranted. They cite the small number of positive cases, the shortage of facilities for follow-up procedures, and the fear, cost and pain involved in pursuing small cell changes, called dysplasias. In addition, most health insurance policies do not cover anal pap smears.

Recently, the relationship between HPV, anal cancer and HIV has received more research and media attention. The direct link between cervical cancer and HPV has been known for some time, and gynecologists typically perform a simple HPV test along with the cervical pap smear. That test is not able to categorize the exact strain of HPV that women carry. The FDA recently approved

HPV enhances susceptibility to HIV infection.

a new DNA test that identifies the two HPV strains (types 16, 18) responsible for most cervical cancers. At the moment, the new DNA test, called Cervista HPV 16/18, is not available in doctors' offices, but should start arriving within the next few months. In MSM, a clear relationship has not yet been determined between a high DNA HPV load and the cell changes that lead to anal cancer, but if confirmed, this test will become more widely used in the future. Then, only those with dangerous strains of HPV would require regular follow up screening with an anal pap smear.

Current research from the Fred Hutchison Cancer Research Center in Seattle, WA has found that, not only does HIV infection increase the risk of HPV infection, but that the converse is also true: HPV enhances susceptibility to HIV infection.[6] This occurs because anal HPV lesions make the surface tissue of the anus thinner and more vulnerable to entry of the HIV virus. In addition, the immune cells activated by HPV infection are precisely the ones more vulnerable to HIV infection. These data underscore the value of HPV screening for all MSM.

The best form of prevention for anal cancer may be a vaccination against HPV infection. Currently, Gardasil by Merck has been approved as a prophylaxis against HPV and cervical cancer for girls between the ages of nine and 26. The Food and Drug Administration (FDA) is considering its use in boys, ages nine to 26 also, based on preliminary research showing that it was effective for them as well. The large study included 500 self-identified gay men. While that will prevent boys from developing anal cancer later in their lives, it is unclear how Gardasil may help adult MSM over 26 years old, HIV-positive men and those already infected with HPV. Gardasil and its competitor, Cervarix, by GlaxoSmithKline, are both expensive, between $360 and $500 for the three injections required. It is unclear if they will be covered by health insurance for adults who choose to be vaccinated.

There are some practitioners advocating Gardasil for use in MSM who have already been infected with HIV and/or HPV. This would be considered an "off label" use. The National Institutes of Health is conducting a clinical trial to see what benefits Gardasil might have for HIV-positive people. A number of men, both HIV-positive and negative, have opted to get vaccinated despite the fact Gardasil is not yet FDA-approved for use in men. This is considered an "off-label use" of the vaccine.[7]

Anal cancer is an increasing health threat to MSM, especially those who are HIV-positive, and there is no professional consensus about whether to vaccinate against it, screen for cell changes, or how to treat positive results on an anal pap smear. More research is needed and both the consumer and provider communities need to be educated.

It is critical that MSM talk to their medical providers about their sexual orientation, HIV status and sexual practices. The New York City Department of Health and Mental Hygiene found that nearly 40% of MSM do not come out to their provider.[8] Those who are open about their sexual orientation often do not know enough about anal cancer to request a screening. The gay community must be educated, both HIV negative and HIV positive MSM, about HPV, anal cancer risk factors and the options available for screening and treatment. Then individuals can make informed decisions about whether to be screened and seek out a provider who is familiar with the options.

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State of the HIV epidemic among MSM in Los Angeles

By Trista Bingham, MPH, PhD

Men who have sex with men (MSM) continue to bear the greatest burden of the HIV epidemic in the United States.[1] According to recent Centers for Disease Control and Prevention (CDC) reports, MSM between 13 and 29

years old account for 38% of new HIV infections. Overall, MSM of all ages are 57% of new infections. Young black and Latino are disproportionately affected.[2] MSM are the only group for whom HIV infection continues to increase.

The vast majority of HIV prevention interventions approved by the CDC are developed for heterosexual and injection-drug using (IDU) populations. In fact, only two of the CDC's evidence-based interventions (EBIs) are specific to African-American or Latino MSM. It is not surprising that the rate of new HIV infection is increasing in these risk groups.

Access to appropriate medical care and behavioral interventions to reduce transmission are critical for HIV-positive MSM. The CDC carried out a recent investigation that did not find racial or ethnic differences in access to HIV prevention services among young MSM.[3] However, less is known about access to medical care following an HIV diagnosis. Previous CDC research also shows that unknown HIV infection is higher among African-American and Latino MSM compared to their white peers.[4] Higher levels of unknown infection may result in fewer chances to access life saving medication. Another result of unknown HIV infection is the greater chance of transmitting HIV to others.[5] The data presented below were collected in Los Angeles County in 2008. They highlight differences in HIV risk behaviors, as well as access to HIV prevention and care, among young versus older MSM, and among young African-American and Latino MSM versus young white MSM.

The CDC started the National HIV Behavioral Surveillance (NHBS) system in 2003.[6] This system keeps an eye on behaviors known to spread HIV, surveying MSM, IDU, and heterosexuals living in areas with a high rate of AIDS. NHBS data collected during the recent 2008 MSM cycle known locally as the "LA Men's Survey," in Los Angeles County are presented here.[7]

The LA Men's Survey enrolled 538 MSM residents of Los Angeles County. All participants were offered an HIV test regardless of their current HIV status to obtain an unbiased estimate of HIV prevalence.

Participants ranged in age from 18 to 82 years old (average age 34.9). Participants were 35% Latino, 32% white, 18% African-American, 7% Asian or Pacific Islander, 3% multiple races, and 4% other. The study population reported a high level of education. Almost half were college educated (45%), 30% had attended some college, 20% had completed high school or a GED, and 5% had less than a high school diploma. Most (63%) were employed full time and another 13% were employed part time. Most (64%) earned over $30,000 annually and 66% reported having some form of health insurance. Almost all (91%) of the MSM (487 participants) consented to HIV testing during the interview. Almost one fifth, or 19% (93 participants), tested HIV positive.

Almost two-fifths (37%) of the study population were young MSM between 18 and 29. Social characteristics of young versus older MSM (30+) were similar with the exception of education level and health insurance coverage. Older MSM were more college educated than young MSM (50% versus 35%) and had more health insurance coverage (69% versus 61%). Differences across age groups were observed mainly in risky behaviors.

Young MSM were more likely to engage in binge drinking (5+ drinks in one sitting over the past 30 days) and use non-injection drugs including cocaine and ecstasy than older MSM. Older MSM were more likely to have ever engaged in injection drug use and to have used GHB.

HIV prevalence was calculated for the 91% of MSM who accepted an HIV test. HIV test results showed 10.6% of young MSM were HIV-positive compared to 24.5% of older MSM. Sixty percent of the HIV-positive young MSM (12 of 20) were not aware of their HIV status while 29% of HIV-positive older MSM (21 of 73) did not know their status.

White MSM reported higher rates of unprotected anal sex than black and Latino MSM.

Of the 68 MSM who knew they were HIV-positive before the survey, eight were young MSM. Of these eight young MSM, 88% had seen an HIV doctor in the past 12 months and 38% were currently on HIV medications. Of the 60 older MSM with an HIV diagnosis, 95% had seen an HIV doctor in the past 12 months and 73% were currently on HIV medications.

A number of social characteristics distinguish our sample of 18- to 29-year-old participants. Most were Latino (81 participants), followed by white (50 participants), and then African-American (41 participants). In general, African-American and Latino young MSM experience more money problems compared to white MSM. African-Americans and Latinos report having less education and greater poverty compared to whites, even though full-time employment was similar across all three groups. African-American and white MSM have greater health insurance coverage compared to Latino MSM. Incarceration is much higher among African-American MSM compared to other groups.

White MSM reported higher rates of unprotected anal sex than black and Latino MSM.

The study looked at some sexual risk behaviors reported in the past 12 months by race/ethnicity for young MSM. Young African-American MSM report more sex

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with females compared to the other groups. Compared to African-Americans and Latinos, white MSM reported greater rates of unprotected anal sex with male partners, but a lower rate of being high on drugs or alcohol during sex with their last male partner. African-American and Latino MSM reported having more anal sex with older partners compared to whites.

Only 6% of young MSM decided not to participate in the HIV-testing component of NHBS compared with the 12% of older MSM who refused. HIV prevalence was highest among African-Americans (21.1%), followed by Latinos (11.5%) and whites (4.2%). Unknown HIV infection was more common among African-Americans (6 of 8 were unaware) and Latinos (5 of 9 were unaware) compared to whites (2 of 2 knew they were HIV infected).

Other differences across race/ethnicity were observed in the young MSM's degree of gay identity and openness to others about their relationships with other men. In the sample young white MSM were most likely to identify as gay, be out to their families and health care providers, and feel more connected to the gay community followed by Latino and then African-American MSM. Young African-American MSM were more likely to identify as bisexual, followed by Latino and white MSM respectively.

Self-reported drug and alcohol use during the past 12 months was similar across race/ethnicity for young MSM. We did, however, see some drug preferences by racial/ethnic groups. For example, crystal methamphetamine was used more frequently by Latinos, cocaine was more common among whites, and ecstasy was more common among African-Americans and whites.

There were some differences in young MSM's access to group-level interventions in LA County. One third of young African-American MSM (32%) had taken part in a group session to discuss HIV prevention, compared to 15% of Latinos and 4% of whites. Similar percentages of young MSM received free condoms in the past 12 months across race/ethnicity: 68% of African-Americans, 67% of Latinos, and 82% of whites. Exposure to one-on-one conversations with outreach workers—not HIV counselors—was reported by 20% of African-Americans, 10% of Latinos, and 16% of whites.

Twenty young MSM in our sample (ages 18–29 years) tested HIV positive. African-Americans are excessively represented among those with HIV. African-Americans make up only 18% of the study population of young MSM to the 35% Latino and 32% white. However, they represent 40% of HIV-positive young MSM, compared to whites (10%), Latinos (45%), and multi-racial men (5%). The following risk factors are indicative of HIV transmission among MSM in this sample: African-American race/ethnicity, earning less than $20,000/year, reporting a weak connection to the gay community, reporting anal sex with mostly African-American partners, ecstasy use in the past 12 months, and being arrested in the past 12 months.

HIV prevalence data presented here, especially among young African-American and Latino MSM, continues at levels seen in LA County since the mid 1990s. While African-American and Latino MSM do not report riskier sexual or drug-use behaviors than whites or other racial/ethnic groups, higher rates of HIV remain.

Within the population of 18- to 29-year-old MSM in LA, risk factors for HIV infection reflect characteristics of social and sexual networks rather than individual risk behaviors that are traditionally addressed in HIV prevention interventions. While anal sex without condoms and the use of drugs that correlate with unsafe decisions directly influence HIV risk, it is likely that other environmental and structural factors—such as poverty, homophobia, and HIV stigma—are the real drivers of the HIV epidemic among MSM in the United States.

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