

Men Who Have Sex With Men:
Innovations in HIV Prevention

Michael Kegerreis

Abstract

HIV treatment can be very expensive and prevention is the best way to decrease this cost. The Human Immunodeficiency Virus has a history associated with a lot of stigma towards gay men in particular that has created barriers to spreading prevention education outside of the gay community. The available resources within Philadelphia, the state of Pennsylvania, and the United States were evaluated and found to be lacking in evidence-based interventions. More interventions are needed not only within the gay community but also in the heterosexual community, especially to reach men who do not identify as gay but still have sex with other men. After a review of the literature, several recommendations were made for new evidence-based interventions that can reach both of these populations.

Introduction

Our understanding of the Human Immunodeficiency Virus (HIV) has increased greatly in the 30 years since the beginning of the HIV epidemic. Education about HIV and Acquired Immunodeficiency Syndrome (AIDS) is included in many school health curricula. An estimated one million people are living in the USA with an HIV infection and one in five have no knowledge of their status (Avert.org, 2010). In the 1980's, HIV was considered a much more fatal disease that usually resulted in death soon after the onset of AIDS. Current treatments can slow the progression of the disease, but HIV and AIDS diagnoses are often accompanied by increased hospitalizations resulting in increased health costs and loss of productivity. Additionally, the progression of the disease causes many patients to become unemployed and lose their health insurance. Patients without health insurance must then rely on the resources of the community and the government for their medical care. As a 2010 CBS article concluded, "the least expensive option would be to prevent the estimated 40,000 new HIV infections that occur each year in the U.S." Clearly, our current interventions are not doing enough to prevent these new infections. Nurses are at the forefront of HIV prevention because they have the knowledge of how to prevent and reduce transmission within the community and the skills to teach and communicate effectively with their patients. Many communities do not have resources regarding HIV at their disposal and they rely on community nurses and other health professionals that come into their community. Nurses that work at

local clinics or deliver home care are in excellent positions to teach the community about HIV prevention.

The populations at the highest risk for contracting HIV are men who have sex with men (MSM) and injecting drug users. Men who have sex with men represent over 47% of the cases of AIDS in America (Santis, 2006). With over one million individuals infected nationally, this means 500,000 of them are men who have sex with men. Additionally, a 2010 CBS article estimated the cost of living with HIV/AIDS to be around \$2100 per month. With current HIV therapy extending average life expectancy by about 24 years from the time of infection, this results in a lifetime cost of over \$600,000 per person (CBS Interactive Inc.). When applied to the half million men who contracted HIV from sex with other men, almost \$13 billion a year is spent on MSM for a preventable disease. As more people become infected, they miss more work, resulting in less income and less tax revenue for the government. Additionally as the epidemic grows, the government is forced to spend more money on research and health care for these people.

Historically, as more and more gay men started to die from this disease, HIV/AIDS became known as the "gay disease." HIV seemed to only be affecting gay men and became irrevocably linked to homosexual behavior. Many stereotypes and prejudices continued even after scientific research debunked most of them. Even though it is no longer considered a "gay disease", men who have sex with men still have the highest rates of infection for any group at risk for contracting HIV. The connection between homosexu-

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ality and HIV created a huge social stigma that still exists today, especially for those who were alive during the AIDS epidemic of the 80's. As public health services started to catch on, interventions targeting the gay community and aimed at prevention education became more common place. The problem, however, is that there are men who have sex with men but do not identify as gay and do not associate with the gay community. Besides placing HIV prevention education materials and interventions in locations that gay men frequent, interventions need to be targeted at the heterosexual community as well to reach those who do not identify as gay.

Current Resources for Prevention

As HIV has spread to the heterosexual population, most HIV prevention resources have shifted from being gay-specific to sexuality neutral, representing the cultural shift from HIV as a "gay disease" to something that can affect anyone, regardless of sexual behavior or orientation. This shift also makes it easier for men who have sex with men but do not identify as gay or bisexual to find resources they can use without being pressured to pick a label or identify themselves. While it is important to continue to target the gay community for interventions, the men who still consider themselves heterosexual should not be ignored just because they are more difficult to reach.

Philadelphia has the largest amount of HIV infected people in the state of Pennsylvania (PA.gov, 2010) and has many AIDS service organizations. Many HIV testing sites can be found through the Philadelphia FIGHT Program. Philadelphia FIGHT is a comprehensive AIDS service organization providing primary care, consumer education, advocacy and research on potential treatments and vaccines (Philadelphia FIGHT, 2010). It also has resources for HIV testing and risk reduction counseling. Philadelphia also has the AIDS Library, a library dedicated to information about HIV and AIDS. It is a free resource that anyone in the community can access. The Mazzoni Center provides STI and HIV prevention counseling to the LGBT population through its community clinics (Mazzoni Center, 2010). Also, the Pennsylvania Prevention Project, run through the University of Pittsburgh, is a website devoted to the dissemination of HIV prevention education to people in high risk groups (PA.gov). This is the only primary prevention program run by the state of Pennsylvania. On the national level, the CDC website provides a myriad

of resources specific to men who have sex with men including where to get tested, prevention measures, and treatment ideas (Centers for Disease Control and Prevention, 2010). While there are a lot of existing resources on HIV prevention, more evidence based interventions could decrease the number of new infections per year.

Analysis

In an article from LPR Publications, researchers found that cognitive-behavioral interventions to encourage men who have sex with men to reduce their sexual risk behavior was partially successful, but the control group that did not receive the intervention achieved similar rates of reduced risk behavior (2010). The study concluded that better interventions to change behavior are necessary. There is always room to incorporate new research, not only on the local level, but especially on the state and national level. Since there is currently no cure for HIV or AIDS, treatment can only extend people's lives and make HIV/AIDS a manageable chronic condition. The federal government already funds most treatment programs through the Ryan White Act and individual communities run screening programs through testing clinics. Unfortunately, this a lot of money put into dealing with a condition instead of trying to prevent it. While finding a cure or vaccine would be of great benefit, currently the only way to reduce the impact of HIV and AIDS is to prevent new infections. Therefore, more effort and money should be put into prevention measures.

Condoms are considered the best prevention measure for HIV, but there are many factors that influence the decision to use or not use condoms in men who have sex with men. A literature review by Neville and Adams identified six main themes that impact condom use decision making in men who have sex with men: availability of HIV treatment, physical issues, psychosocial issues, intentional practices, internet use, and substance use (2009). Highly active antiretroviral therapy (HAART) has changed HIV from being a life-threatening illness to a chronic condition and many gay men are no longer afraid of contracting HIV, resulting in an increase in unprotected anal intercourse (Neville & Adams). Some physical issues that the study noted were related to condom availability, durability, and comfort. However, most testing centers give out condoms for free and condoms have a very low breaking rate when the correct size condom is applied in the correct manner. Additionally,

some men cited erectile dysfunction related to using a condom (Neville & Adams). Erectile dysfunction may lead to negative attitudes and embarrassment that increases the occurrence of unsafe sexual practices. The psychosocial issue most associated with unprotected anal sex was depression (Neville & Adams). Another psychosocial issue that is pertinent to men that do not identify as gay was sexuality. Men that identify as heterosexual and have unprotected sex with woman were less likely to use condoms when having sex with men (Neville & Adams). They also found that the advent of the internet made it much easier for gay men to find partners for casual sex, increasing their exposure and chances of contracting HIV. Neville & Adams also investigated the effects of substance abuse on condom use. Research indicates that drug use is associated with an increase in unsafe sex, but the research on alcohol remains inconclusive (Neville & Adams).

Using condoms is an excellent prevention measure, but there are other factors that can affect a person's susceptibility to HIV. Stress can negatively impact the immune system, increasing susceptibility to disease and a recent study by Burchell et al. found that a greater number of stressful life events predicted a higher risk of contracting HIV in men who have sex with men (2010). Based on other data collected from the participants, stress increased the amount of risk taking behavior as well as susceptibility to HIV.

Many gay male couples make agreements about whether or not to permit sex with outside partners, yet little is known about these agreements, their impact on relationships, and whether they are an effective HIV prevention strategy. A recent study by Hoff and Beougher (2010) found that gay couples who make formalized agreements about other sexual partners report being happier with their relationship, having their sexual needs fulfilled, and feeling closer to their partner. Sexual agreements can vary from traditional monogamy, no sex with anyone else, to many forms of polygamy, sex with multiple other partners. While the study did not look at HIV transmission specifically, it was noted that discordant couples, two partners with differing HIV statuses, reported the most articulate and detailed agreements, often including specific sexual behaviors they could and could not engage in with outside partners (Hoff & Beougher). They also found that concordant HIV negative couples were more likely to include safe sex as a stipulation for sex with an outside partner and emphasize getting

tested together. Overall, couples who had an explicit agreement reported the highest satisfaction while couples that only had vague agreements were more likely to do something the other partner thought was agreed upon as being forbidden.

With the advent of internet dating also came the beginning of internet casual sex. The internet is a resource many men who have sex with men use to find casual sex partners and is especially helpful for closeted men or those who identify as heterosexual. Going to a bar or other local gay social spot might not be an option for them because of their fear of being identified. The internet allows men to find partners from the comfort and anonymity of their homes. A new intervention that incorporates technology could reach many gay men, including those that do not identify as gay. Moskowitz, Melton, & Owczarzak conducted a study on the usefulness of instant messaging in counseling men who have sex with men on a variety of topics relevant to them. After initiating an instant message counseling program on a local website that men who have sex with men frequent, the researchers found that most of the questions they received were about where to get testing and general HIV/STD information (2009). The program was a great success and many of the men who used it expressed their gratitude for the information provided by the online counselors. There were no reports of people taking advantage of the program or trying to make jokes out of the service. The counselors did not provide medical advice or tell users what to do, but simply gave them facts, pointed them to more resources, or advised them to get tested or see a doctor (Moskowitz, Melton, & Owczarzak). This instant messaging program provided HIV information to men who have sex with men in an anonymous and familiar format.

Recommendations

Local interventions can be carried out in the community HIV testing clinics that are already established. These clinics have the staff capable of implementing a few small interventions that will help to decrease transmission rates among men who have sex with men. In addition to testing sites, local primary care offices should be included in these interventions to reach out to men that do not identify as part of the gay community, but are still at high risk for HIV due to their sexual behavior. Nurses, testing clinic counselors, and other community health care workers can provide evidence-based prevention strategies, that are

specific to the patients they work with, which require very little extra training.

Local HIV testing sites should include a few questions about stress levels and management beyond the current drug and alcohol questions. Counselors can talk to patients about how they manage their stress and testing centers can provide information on less risky ways to handle stress. Some specific things that cause stress to men who have sex with men are sexuality issues, even if they are open about their sexuality, relationship problems with partners, and social stigma related to being gay. Most testing sites that cater to the gay community also have counseling resources for helping people who are struggling with their sexuality. Additionally, informational pamphlets about stress and the effects it has on susceptibility to disease can be given out in clinics, bars, and primary care offices. Information about stress can easily be provided by testing centers without increasing the work load of the staff. With an increased risk of transmission and an increase in unsafe behavior during high stress times, counseling about stress management would be a simple primary prevention strategy for preventing HIV in men who have sex with men.

A decrease in HIV transmission has not been directly linked to the formation of sex agreements, but based on the higher satisfaction couples report and the relationship between stress and transmission, having a formal sex agreement seems to reduce the emotional stress in a relationship and therefore impacts the transmission rate of HIV. As part of the HIV and STI test counseling, a brief section on sex agreements should be added for any person in a relationship. HIV questionnaires already ask such private information as how many sex partners you have had in the past year, so adding a section about current relationships would not be any more invasive. Once added to the form, the counselors could offer couples more information on the benefits of a sex agreement and how to form one. The most comprehensive and effective sex agreements take into account the sexual goals and desires of the participants and provide a formal outline of what is and what is not acceptable behavior within the relationship. Even for couples who plan to be completely monogamous, a sex agreement can help specify what sexual behaviors the participants condone with each other. Offering information on sex agreements would require very little change beyond adding a few lines to the testing questionnaire and a small amount of training for the counselors administering the tests.

The CDC could also develop its own instant message counseling program available to anyone online. Instant messaging services have been proven to be effective at providing the information people need and can target populations that have not been reached by traditional interventions in the gay community. Instant messaging programs could reach many of the closeted men that are not reached by interventions targeting the gay community. By collaborating with several websites that provide a forum for men who have sex with men to meet, the CDC can provide instant message counseling about HIV and STD prevention to the users of those websites. The instant message system should be run by the CDC so that it provides consistent information to anyone who accesses it.

Nursing Implications

While many HIV testing clinics do not employ nurses as counselors, nurses can still use the resources of these clinics for their patients. As new prevention strategies are introduced at a clinic, nurses will have more resources and knowledge to give to their patients. The clinics can be used as a learning resource, not only for patients, but also for nurses. Men who have sex with men and their nurses should be able to rely on testing clinics for up to date information about HIV prevention. As nurses learn about new prevention ideas from the clinic, they can pass the information on to other at-risk patients they encounter or refer them to a testing clinic for more information.

Cities and states that incorporate new research into their HIV prevention programs can expect a decrease in their HIV rates and should use nurses for training purposes. While it may not be financially possible to employ nurses at testing clinics to carry out these interventions, nurses can teach others how to use therapeutic communication and the knowledge necessary to implement these interventions and counsel men who have sex with men on HIV issues. Nurses have the skills necessary to talk about stress, sex agreements, and factors affecting condom use. Additionally, nurses would make great online counselors and teachers because of their skills in therapeutic communication.

Conclusion

The current resources for HIV prevention education are lacking some evidence-based interventions. These resources are also not reaching as many people as they should be. At the community level,

incorporating a few more questions and counseling in local testing clinics can help people to make decisions about how they chose to practice safe sex. However, the intervention with the most potential to reach the people is instant messaging. Online counseling could be a whole new field of medicine and it has the ability to reach men who have sex with men, especially those that wish to remain anonymous.

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