We assessed the risk profile of young men who attended family planning clinics and tested positive for HIV. A retrospective chart review was conducted comparing risk-related behaviors of men who tested positive for HIV and men who tested negative for HIV. This included measures of sexual partnering, illicit drug use, history of incarceration, and history of forced sex. The study included 92 men ages 18–23 years. Findings suggest young minority men who have sex with men engage in multiple risk-related behaviors that increase the likelihood for HIV acquisition. As young men access family planning clinics, more effective interventions are needed in these settings to address their specific needs.

Keywords: HIV, men who have sex with men, risk-related behaviors

Integrating routine Human Immunodeficiency Virus (HIV) screening in medical settings is an important public health priority (Branson et al., 2006). Family planning clinics are important settings where HIV screening can be integrated (Criniti, Aaron, Hilley, & Wolf, 2011). Although most clients of publicly funded family planning agencies are women, an increasing number of males access these clinics (Finer, Darroch, & Frost, 2003). As the rate of HIV infections continues to rise, HIV screening is an increasingly important aspect of medical care. According to the Centers for Disease Control and Prevention, an estimated 1.1 million people in the United States are living with HIV and one in five of those people is unaware of their HIV-positive status (CDC, 2012a). Although men who have sex with men (MSM) comprise about four percent of the U.S. population, in 2010, they accounted for 78% of new HIV infections among males (CDC, 2012b). Minority MSM are especially at risk for HIV infection (CDC, 2012a).

Studies suggest disparity in HIV infections between MSM and other groups can be explained by multiple risk-related factors. One of these factors is unprotected anal intercourse (Houston & McKirnan, 2007). A longitudinal study found approximately half of men who...
tested positive for HIV had reported unprotected anal intercourse in the past year (Dodds, Mercey, Parry, & Johnson, 2004). The study found the proportion of men who reported engaging in unprotected anal intercourse increased from 30% in 1996 to 42% in 2000. The majority of MSM who have HIV protect their partners during sexual activity, but a sizeable percentage continues to engage in unprotected sex, placing others at risk for HIV infection and them at risk for other sexually transmitted infections (STIs) (Crepaz et al., 2009). Studies suggest that MSM engage in unprotected anal intercourse as a way to create a stable intimate relationship, reaffirm mutual trust with their male partner, overcome social isolation, and enhance sexual pleasure (Bauermeister, Carballo-Diéguez, Ventuneac, & Dolezal, 2009; Blais, 2006; Carballo-Diéguez & Bauermeister, 2004; Greene, Andrews, Kuper, & Mustanski, 2013; Kline & Kaplan, 2012).

Use of illicit drugs heightens the risk for HIV infection among MSM (Wong, Weiss, Ayala, & Kipke, 2010). MSM, aged 18-24 years, in comparison to heterosexual men of the same age group, are more likely to use illicit drugs because of the rejection, stigmatization, and social isolation they experience due to their sexual orientation. Studies suggest Black MSM, when compared to other ethnicities, are less likely to disclose their sexual orientation to others and more likely to report using drugs, such as crack cocaine, which increase HIV risk (Millett, Flores, Peterson, & Bakeman, 2007). The stigma of HIV and societal homophobia have a negative impact on the mental health of MSM, placing them at greater risk for illicit drug use and major depression (Rosser, 2008; Wong et al., 2010).

Childhood sexual abuse and intimate partner violence (IPV) among MSM are identified as risk factors for HIV acquisition. Another systematic literature review found an estimated 21.8% of MSM reported a history of sexual abuse (Lloyd & Operario, 2012). Men with a history of sexual abuse were more likely to report casual male partners, substance use, and sex while under the influence of alcohol or other drugs. A recent systematic review of the literature found all forms of IPV, including physical, sexual, and psychological, occur among MSM at rates similar to or higher than those documented among women (Finneran & Stephenson, 2013). Although studies have begun to look at IPV among MSM, research on male-male couples is lacking (Stephenson, Sato, & Finneran, 2013). Greenwood et al. (2002) found men who are involved in IPV experience low income, unemployment, history of familial violence, childhood sexual abuse, depression, and heavy substance use.

Although MSM as a group are at higher risk for HIV acquisition than other groups, studies suggest HIV rates among Black MSM are higher compared to White MSM. These disparities are attributed to high prevalence and incidence of HIV within sexual networks of Black men compared to other young MSM (Millett, Peterson, Wolitski, & Stall, 2006). Other factors increasing HIV risk among Black and Hispanic men include characteristics of social support networks that do not encourage condom use and safe sex practices (Feldman, 2010; Kapadia et al., 2013). Additionally, researchers have identified negative effects of masculinity expression. The failure of MSM to meet masculine ideals (i.e., a gender role strain [GRS]) can contribute to HIV risk behaviors (Fields et al., 2015).

As family planning clinics are increasingly providing access to sexual health services, including HIV testing and counseling, to men, it would be important to identify the needs of this group. Therefore, the purpose of the present study was to assess the profile of men who tested positive for HIV by identifying their specific risk-related behaviors. This can help develop better prevention education approaches to reduce HIV acquisition and address the needs of men who are diagnosed with HIV.
METHODS

Sample

The study included 92 young men attending family planning clinics in an urban city located in the Southwest United States. The system includes 10 clinics located in public hospitals, schools and community centers in a city with high rates of HIV, STIs and teen pregnancy. Study participants were between ages 18 and 28 years, with a mean age of 20.79 years (SD = 1.95). The majority, 70 (76.1%), was Black, 18 (19.6%) were Hispanic and 4 (4.3%) were White. This distribution reflects the racial/ethnic composition of men who receive clinical services at the study’s clinics. These clinics provide free to low cost family planning and reproductive health services including screening and treatment of STIs as well as opt-out HIV testing. About 18% of clients in these clinics are men.

Procedures

This was a retrospective chart review study. Men who tested positive for HIV between January 2008 and January 2012 and were 18 years or older at the time of the diagnosis were included in the study. They were matched with randomly selected men who had a negative HIV test result but were similar in ethnicity and age. The sample includes men from the various clinic sites. The selection of men to the study was not based on sexual orientation. As this was a retrospective chart review, the affiliated Institutional Review Board approved the study and waived consent. The study did not collect identifying information in order to ensure the confidentiality of study participants.

Measures

Individuals who access the clinics for services are routinely asked to complete an HIV Risk Assessment used for documenting their consent for HIV testing and for developing a risk reduction plan during counseling. In addition to age and ethnicity, the assessment includes the following.

Individual sexual risk behaviors. This includes questions about engaging in unprotected oral, anal, or vaginal sex in the past 12 months. The survey also queries on behaviors such as forced sex or being the victim of a sexual assault.

Sexual partnering. This includes questions about number of male and female sex partners in the past 12 months, lifetime sex partners, and current partner’s lifetime male and female sex partners. The survey also includes questions about engaging in sex with a partner who had been incarcerated or tested positive for HIV, or is an intravenous drug user.

Illicit drug use and incarceration. This includes questions about engagement in unprotected sex under the influence of drugs or alcohol, sharing a needle to inject recreational drugs, and a history of being in jail, prison, or a juvenile detention facility. Additionally, the survey includes a question about exchanging sex for drugs or money.

Statistical Analysis

All analyses were conducted using SPSS, version 20.0. Bivariate analyses (Student’s t-test or chi-square) were used to identify sexual risk behaviors, sexual partnering, partner history,
and illicit drug use associated with a positive HIV test result. Due to the sample size, no multivariate analyses were conducted.

**RESULTS**

**Individual Sexual Risk Behaviors**

Sexual risk-related behaviors were common for the sample. A total of 82 (89.10%) participants reported having unprotected sex within the past 12 months and 44 (53.70%) reported having anal sex. Of those who reported anal sex, 88.40% reported not using a condom. A total of 27 (29.70%) men reported knowingly having sex with someone infected with a STI, while 28 (30.80%) were unsure of their partner’s status. The majority, 58 (63.0%), of participants had been previously tested for HIV (Table 1).

Men who had positive HIV test results were more likely to report engaging in receptive anal sex than men who tested negative for HIV (86.40% vs. 15.80%, \(c^2 = 43.77\), df = 2, \(p = 0.000\), respectively). Men with a positive HIV test result were also more likely than men with a negative test result to report being forced to have sex or to be a victim of a sexual assault (15.20% vs. 0.00%, \(c^2 = 7.42\), df = 1, \(p = 0.06\), respectively). Lack of condom use and having oral or vaginal sex were not associated with a positive HIV test result (Table 2).

**Sexual Partnering**

Individuals who tested positive for HIV were more likely to report having sex with a partner infected with HIV than individuals who tested negative for HIV (16.30% vs. 2.30%, \(c^2 = 6.27\), df = 2, \(p = 0.04\), respectively). Having sex with a partner with a STI, an intravenous drug user or someone who had been incarcerated were not associated with a positive HIV test result (Table 3).

**Partner History**

Men who tested positive for HIV had a much higher mean lifetime number of male partners compared to men who tested negative for HIV (\(M = 14.44, SD = 17.02\) vs. \(M = 0.77, SD = \).
Men who tested positive for HIV had a higher number of male partners in the past 12 months compared to men with a negative HIV test result (M = 4.18, SD = 4.40 vs. M = 0.30, SD = 0.78, p = 0.00, respectively) (Table 4).

Table 2
Sexual Risk Behaviors Associated with HIV

<table>
<thead>
<tr>
<th></th>
<th>HIV+</th>
<th>HIV–</th>
<th>c^2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had sex without a condom</td>
<td>88.90%</td>
<td>88.90%</td>
<td>1.11</td>
<td>0.57</td>
</tr>
<tr>
<td>Had anal sex</td>
<td>86.40%</td>
<td>15.80%</td>
<td>43.77</td>
<td>0.00*</td>
</tr>
<tr>
<td>Had vaginal sex</td>
<td>44.70%</td>
<td>88.60%</td>
<td>18.47</td>
<td>0.00*</td>
</tr>
<tr>
<td>Been sexually assaulted</td>
<td>15.20%</td>
<td>0.00%</td>
<td>7.42</td>
<td>0.06</td>
</tr>
<tr>
<td>Had oral sex</td>
<td>84.40%</td>
<td>76.70%</td>
<td>0.84</td>
<td>0.36</td>
</tr>
</tbody>
</table>

* p < .05

Table 3
Sexual Partnering Associated with HIV

<table>
<thead>
<tr>
<th></th>
<th>HIV+</th>
<th>HIV–</th>
<th>c^2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner infected with a sexually transmitted infection</td>
<td>19.60%</td>
<td>40.00%</td>
<td>4.72</td>
<td>0.09</td>
</tr>
<tr>
<td>Partner infected with HIV</td>
<td>16.30%</td>
<td>2.30%</td>
<td>6.27</td>
<td>0.04*</td>
</tr>
<tr>
<td>Partner intravenous drug user</td>
<td>0.00%</td>
<td>2.20%</td>
<td>2.04</td>
<td>0.36</td>
</tr>
<tr>
<td>Partner previously incarcerated</td>
<td>13.30%</td>
<td>7.00%</td>
<td>1.21</td>
<td>0.55</td>
</tr>
</tbody>
</table>

* p < .05

Table 4
Partner History Associated with HIV

<table>
<thead>
<tr>
<th>Variable</th>
<th>HIV+</th>
<th>HIV–</th>
<th>t-test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of male sexual partners in lifetime positive</td>
<td>14.44</td>
<td>17.02</td>
<td>5.06</td>
<td>0.00*</td>
</tr>
<tr>
<td>negative</td>
<td>0.77</td>
<td>2.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of male sexual partners in last 12 months positive</td>
<td>4.18</td>
<td>4.4</td>
<td>5.39</td>
<td>0.00*</td>
</tr>
<tr>
<td>negative</td>
<td>0.3</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of female sexual partners in lifetime positive</td>
<td>4.35</td>
<td>6.54</td>
<td>-3.26</td>
<td>0.08</td>
</tr>
<tr>
<td>negative</td>
<td>11.76</td>
<td>12.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner’s number of male sexual partners in lifetime positive</td>
<td>24.8</td>
<td>51.56</td>
<td>1.48</td>
<td>0.01*</td>
</tr>
<tr>
<td>negative</td>
<td>5.06</td>
<td>4.45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
Illicit Drug Use and Incarceration

All men who reported sharing a needle for recreational drug use, or having sex for drugs or money tested positive for HIV. However, only receiving or giving sex for drugs or money was correlated with a positive HIV test result (10.9% HIV-positive vs. 0.00% HIV-negative, $c^2 = 5.18$, df = 1, $p = 0.02$). Previous incarceration and having sex under the influence of drugs or alcohol were not associated with a positive HIV test result (Table 5).

Table 5
Illicit Drug Use Associated with HIV

<table>
<thead>
<tr>
<th></th>
<th>HIV+</th>
<th>HIV−</th>
<th>$c^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unprotected sex under the influence of alcohol or drugs</td>
<td>39.10%</td>
<td>28.90%</td>
<td>1.06</td>
<td>0.30</td>
</tr>
<tr>
<td>Sharing a needle or syringe</td>
<td>6.70%</td>
<td>0.00%</td>
<td>3.1</td>
<td>0.08</td>
</tr>
<tr>
<td>Had sex for money or drugs</td>
<td>10.90%</td>
<td>0.00%</td>
<td>5.18</td>
<td>0.02*</td>
</tr>
</tbody>
</table>

* $p < .05$

DISCUSSION

The purpose of the present study was to assess the risk profile of young men in family planning clinics who tested positive for HIV as compared to those who had a negative HIV test result. The results suggested that young men who attend family planning clinics, especially young MSM, engage in behaviors that place them at risk for HIV infection. This includes engagement in unprotected anal sex, having a high number of recent and lifetime male sexual partners, having a partner who has been infected with HIV, being sexually assaulted, and exchanging sex for drugs or money.

The results of this study are consistent with previous studies suggesting unprotected anal sex increases HIV risk (Dodds et al., 2004). Additionally, in the present study, all reports of forced sex or a sexual assault occurred among men who tested positive for HIV. This result is consistent with recent studies documenting a history of sexual abuse and intimate partner abuse in same-sex male couples as factors increasing HIV acquisition (Greenwood et al., 2007; Jarlais & Semann, 2009; Lloyd & Operario, 2012). The literature is consistent in documenting factors such as stigma, sexual violence, mental illness, social marginalization and economic vulnerability as related to HIV acquisition (Townsend, 2010).

Although previous studies identified illicit drug use, specifically intravenous drug use, as risk-related factors in HIV acquisition (Stockman & Strathdee, 2010), the present study had mixed results. Overall, unprotected sex under the influence of drugs was higher among men with HIV but results were not statistically significant. In addition, individuals with HIV were the only ones to report sharing a needle or syringe. Despite these mixed results, overall, results demonstrated a trend where individuals with HIV were more likely than those who did not have HIV to report illicit drug use. Although sharing a needle or syringe is a well-known risk factor for HIV acquisition, this association is more complex. Research has documented elevated rates of childhood sexual abuse among injecting drug users who engage in HIV risk behaviors (Lee et al., 2014). This highlights the importance of addressing historical trauma among individuals who inject drugs.
Sexual partnering was a risk factor for HIV acquisition. Men who tested positive for HIV were more likely than men testing negative for HIV to report multiple lifetime and recent sex partners as well as knowingly having sex with an individual who has HIV. Sexual relationships with partners of unknown and positive HIV serostatus among MSM have been reported in other studies (Tieu, Murrill, Xu, & Koblin, 2009; Whittington et al., 2012).

The majority (87.0%) of men in the present study, regardless of HIV status, reported having sex without using a condom. This may suggest a low perception of personal HIV risk by this group. This result may reflect what the media has named “AIDS fatigue” (Kaiser Family Foundation, 2011). To combat risk for HIV infections, greater accessibility to educational and support resources have shown to increase condom use, HIV testing and disclosure of positive status to sexual partners, and to decrease rates of coercive sex and stigma associated with a positive HIV status (Shapiro & Ray, 2007).

The present study has several limitations that should be noted. First, it is a retrospective study, based on medical chart review. Additional data, such as specific definitions of sexual assault, could not be gathered. Another study limitation is the degree of generalization of the findings. The study population consists of a small sample of young MSM who have attended family planning clinics in the Southwestern United States. Results from this study may not be applicable to men in other settings. Additionally, the small sample size also limited the ability to conduct a multivariate analysis that could contribute to the findings.

Despite these limitations, the results suggest a priority for prevention efforts among young MSM who are affected by sexual experiences which heighten their HIV risk exposure. Stigmatization of HIV makes accessing testing, treatment, care and counseling difficult for MSM (Bell, Mthembu, & Sullivan, 2007). As young men access family planning clinics, these settings offer opportunities to provide MSM with comprehensive services that address their specific risk-related factors as well as their adverse sexual experiences, such as sexual abuse and IPV.

Study Implications

The findings of the study have several implications for professionals working with young minority MSM. First, programs serving MSM should be aware these individuals may be affected by sexual violence. The potential for this experience emphasizes the importance of obtaining a careful trauma history and assessing ongoing trauma and violence. Counseling these individuals using trauma-informed and culturally sensitive care is critically important because of increased risk of negative health outcomes related to these experiences. The Substance Abuse and Mental Health Services Administration (SAMHSA) has developed the Trauma Informed Care (TIP) protocol (SAMHSA, 2014). TIP provides evidence-based and best practice information for behavioral health service providers to effectively work with people who have been exposed to trauma. TIP can be adapted to various settings and address core elements related to staff and clients. This includes elements such as physical and psychological safety, trustworthiness and transparency, collaboration and mutuality, empowerment with a focus on strengths, resiliency and an individualized healing approach that is culturally competent. Secondly, men in this study reported higher levels of sexual risk behaviors. This includes sex with multiple partners and individuals with unknown and positive HIV serostatus. Therefore, they have to be counseled on HIV risk reduction strategies using evidence-based approaches. These interventions should empower individuals to initiate partner conversations regarding safe sexual partnering and condom use as well as making decisions on the basis of personal safety. In light of the emphasis on masculinity in the
Black MSM community and its impact on HIV risk behaviors, it would be important to integrate HIV risk reduction intervention issues specifically related to perceptions of masculinity (Fields, Bogart, Smith, Malebranche, Ellen, & Schuster, 2015). Lastly, as young MSM access family planning clinics, these settings should provide a safe and supportive environment where they can learn about their HIV status. These services can be promoted by conducting community outreach in public parks, college campuses, health fairs, and housing projects. Integrating HIV testing in sports events can also help to specifically target males. Conducting web-based outreach at sites where young MSM meet partners can promote HIV testing and linkage to HIV care for this high-risk group. Professionals can advocate for behavioral and biomedical interventions reducing HIV transmission as well as policies promoting social justice for this group.

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