

Assessing the Impact of Demographic, Experiential, and Attitudinal Factors on Support
for the Criminalization of HIV Transmission

By

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Abstract

Over the years criminal prosecutions regarding HIV transmission have increased in Canada. There is ongoing debate within the academic and legal community regarding whether reactive, criminal justice measures or preventative, harm reduction measures are best suited to address HIV transmission. Using an on-line survey and multiple logistical regression analyses on six vignettes on 316 undergraduate students from mostly 18-26 years of age, this research assessed student attitudes towards the criminal law as a response to HIV transmission against demographic, experiential and attitudinal predictors. The findings indicated that the majority of participants were in favour of the criminalization of HIV transmission. The policy implications that come from this study imply that there is a need to educate young people about HIV related issues and the harm criminal justice responses cause to HIV prevention efforts.

Key words: criminal law, HIV/AIDS, sexual regulation, perceptions

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Chapter One: Statement of the Problem

The realities of living with HIV (human immunodeficiency virus) are complex and difficult. For example, HIV positive people experience stress during diagnosis, treatment, physical symptoms, disclosure of their serostatus, and witnessing HIV-related deaths (Theuninck, Lake, & Gibson, 2010). These events would be difficult on anybody. However, in addition to their infection and associated health problems, there are additional issues such as stigmatization. Stigmatization of those living with HIV takes many forms, such as discrimination, violence, and rejection. HIV is used as a tool to stigmatize groups associated with the disease, especially men who have sex with men (MSM) and intravenous drug users (Herek, 1999). People living with HIV are discriminated against in many spheres of their lives such as employment, housing, health care, immigration or entry to foreign countries (Merminod, 2009). This stigma has limited society's response to the epidemic and may also influence decisions to disclose one's HIV status to potential sexual partners (Herek, 1999). Increasingly, not only do HIV positive people have to deal with these life altering events, they also face the possibility of criminal prosecution based on their serostatus. Now, with the move toward criminalizing HIV exposure/disclosure, HIV positive people may find themselves living in complete fear of having sex altogether or risk living in prison.

The criminalization of HIV transmission is controversial. Proponents of criminalization believe it is necessary in order to incapacitate, deter, rehabilitate, and enforce social norms on those who may transmit HIV (Klein, 2009). Critics of criminalization point to potential misuse of coercive measures; harm to people with HIV/AIDS and vulnerable communities; and negative effects on HIV prevention efforts and access to care, treatment, and support for people with HIV/AIDS (Elliott, 2000). The main issue here is the harm criminalization imposes on

prevention efforts. The most important aspect of the fight against HIV is to prevent transmission to begin with. The criminalization of HIV transmission may cause people to engage in more anonymous sex and avoid STI/HIV testing altogether (Elliott, 2000).

There is a paucity of research on the attitudes of the general populace toward the novel and increasing practice of criminalizing HIV transmission. This study aims to explore university students' perceptions of the appropriateness of criminalization of HIV transmission in Canadian society. This information is useful to people who want to educate this population about the negative impacts of the criminalization of HIV transmission. As such, this exploratory quantitative study aims to gauge student's perceptions of the appropriateness of criminalization of HIV transmission under a variety of circumstances. Specifically, participants in this study read a series of vignettes involving HIV transmission and were asked, in their opinion, whether or not a criminal act had occurred in each vignette. Multiple logistic regression analysis was conducted to assess what variables affect how people feel about HIV transmission and whether or not criminal sanctions are an appropriate response to HIV transmission in Canadian society.

Demographic, experiential, and attitudinal variables were used in this study to assess their impact on whether or not participants were in favour of the criminalization of HIV transmission. Demographic variables included gender, age, relationship status, and ethnicity. Experiential variables included participants' history of sexual behaviours, practices in intimate relationships, and sexual health knowledge. Attitudinal variables included participants stated views about the criminalization of HIV transmission, prior to reading the scenarios. Each of these variables was assessed to explore whether or not it is related to the probability of the respondent supporting the criminalization of HIV transmission.

It is important to note that due to the limited amount of research available on this subject in Canada, research from other parts of the world, such as Africa, have been included in this thesis. There are differences between Canada and other countries, such as differences in culture, infrastructure, technology, and access to resources. However, we live in a global village which creates similarities across all cultures and the research highlighted in this thesis from other parts of the world still holds value in the context of this research.

Demographic Variables

Demographic indicators, such as gender, age, relationship status, and ethnicity have been shown to affect one's awareness of HIV and how it is transmitted. Ranotsi and Worku (2006), for instance, found that a lack of awareness concerning HIV and how it is transmitted is common among people under 25 years of age who have more than two sexual partners. Older adults tend to be more aware of HIV related issues when compared to younger adults (Wright et al., as cited in Sankar et al., 2011). Furthermore, research in Zimbabwe has shown that age plays a role in risk of contracting HIV. Garnett et al. (2007) state that people who engage in sexual relations at a younger age are more likely to contract HIV when compared to people who began having sexual relations at a later age. Age, therefore, would appear to play an important role in individuals' awareness about HIV; younger people appear to have less awareness about HIV than older people, and this would likely impact their perceptions regarding the criminalization of HIV transmission. By utilizing a sample of university students, this study will attempt to explore the relationship between age and attitudes regarding the criminalization of HIV transmission. Presumably, university students, who are younger, would be less aware of HIV related issues and therefore be supportive of the criminalization of HIV transmission.

Gender directly impacts the reality of people living with HIV. HIV positive women experience more stigmatization when compared to HIV positive men, in addition to having less financial and emotional support (Shamos, Hartwig, & Zindela, 2009). Siegel and Schrimshaw (2005) found that women hold other women to higher standards of behaviour, and therefore judge HIV positive women more harshly than HIV positive men. This illustrates that men and women live different realities in the same world. Given the sexual imbalance between men and women, and women's vulnerability to HIV transmission, and given the fact that women with HIV are treated more harshly, women may view the criminalization of HIV transmission as a legal tool which could be utilized to protect them. They may be more sympathetic to the victims, or at least identify with them. Within a university sample of men and women, it is feasible that women will be more supportive of the criminalization of HIV transmission than their male peers.

Relationship status is another important variable to explore in attempting to understand people's attitudes toward the criminalization of HIV transmission. For example, single people may not be as aware as people in relationships of the nuances associated with sex and sexual consent. Additionally, single people may have misgivings or be too embarrassed to talk about STI/HIV status with new, potential sexual partners. People in relationships may be more willing to engage in a conversation regarding their serostatus. Relationship status must be explored in relation to the criminalization of HIV transmission to determine if single people, when compared to people in relationships, think differently in terms of being in favor of the criminalization of HIV transmission. Given the probability that single people rarely talk about STI/HIV status, it is likely that single university students would have a more punitive attitude toward HIV transmission. They may tend to distance themselves from the issue and do not see themselves at

risk. Therefore, single university students may be more likely to support the criminalization of HIV transmission.

Ethnicity is one of the factors that determine one's risk of contracting HIV. In the USA, African American MSM are twice more likely than Caucasian MSM to be infected with HIV (CDC, 2009). In Canada, Aboriginal people make up approximately 25% of people living with HIV in Canada, even though they represent approximately 4% of the Canadian population (Public Health Agency of Canada, 2010). Furthermore, very little research has been conducted to assess ethnic differences in HIV disclosure and sexual risk taking behaviours. However, some research has been done to explore these issues in relation to African American and Caucasian MSM. Results indicate that African American MSM disclose their HIV status less frequently than Caucasian MSM (Bird, Fingerhut, & McKirnan, 2010). Consequently, due to differing infection rates among different ethnic populations, in tandem with the possibility that ethnicity is a factor in HIV disclosure, it is important to determine if ethnicity is a factor in people being in favour of the criminalization of HIV transmission. Ethnic groups who are disproportionately affected by HIV transmission, but are also less likely to disclose their serostatus might be less likely to favour the criminalization of HIV transmission as they might be legally over-policed. Therefore a sample of university students which includes a sufficient sample of ethnic minorities will likely find differences between groups in terms of attitudes regarding the criminalization of HIV transmission – with ethnic groups being less supportive and white participants being more supportive.

Experiential Variables

Sexual behaviour characteristics, namely sexual activity, safer sex practices, expectation of partner honesty and number of sex partners may also factor into whether or not one is in favor

of the criminalization of HIV transmission. Engaging in sexual activity can have positive and negative outcomes for anyone. Negative outcomes of sexual activity include unwanted pregnancy and the contraction of STIs (Mathers et al., 2008). People are not aware of the nuances associated with engaging in sex until one engages in sex. As such, whether or not one is sexually active may impact whether or not one is in favor of the criminalization of HIV transmission. This relationship must be explored.

As stated previously, unprotected sexual intercourse can result in unwanted pregnancy and/or the contraction of one or multiple STIs. Poudel et al., (2011) found that HIV positive people who are aware of the risks associated in having unprotected sex with other HIV positive people were more likely to practice safer sex in relationships than those who were less aware of the risks. Additionally, Omorodion, Gbadebo, and Ishak (2007) found in their study of African youth in Windsor, Canada, that women felt discouraged by their culture to negotiate safer sex practices. Little research has been conducted to see how one's own safer sex practices may impact one's position of being in favour of the criminalization of HIV transmission.

One's expectation of partner honesty in regards to their HIV status is also explored in this study. Omorodion, Gbadebo, and Ishak (2007) found that African youth in Windsor, Canada, were not discussing their HIV status with one another. Participants in that study stated that asking questions about their partners HIV status implied that there was no trust between the participants. Instead, participants opted to assume their partners would be honest about their HIV status. This study aims to determine if there is a relationship between one's expectation of partner honesty and being in favour of the criminalization of HIV transmission. Furthermore, this study aims to explore the relationship between believing that people should have an explicit and

detailed discussion regarding their HIV status with their partners and being in favour of the criminalization of HIV transmission.

An increase in the number of sexual partners one has is positively correlated to an increased risk for disease transmission (Ericksen & Trocki, 1992). Additionally, research also shows that people who have a higher number of sexual partners also use alcohol before or during sexual relations more frequently than those with less sexual partners. This increases the probability of risky behaviours occurring (Cooper, 2002). Additionally, African youth in Omorodion, Gbadebo, and Ishak's (2007) study indicated that heterosexual African men usually have multiple sexual partners, which increases women's vulnerability to HIV. Little research exists on the relationship between the number of sexual partners one has and being in favour of the criminalization of HIV transmission. This study will explore the number of sexual partners in a sample of university students. The literature suggests that those participants who have had more sexual partners would be less supportive of the criminalization of HIV transmission. Conversely, students with little or no sexual history will be supportive of the criminalization of HIV transmission.

Attitudinal Variables

The study examined the impact of attitudinal variables of two types: participants' attitudes toward sexual health practices and toward the criminalization of HIV transmission generally. Sexual health attitudes the study explored include (1) whether one believes in having an explicit conversation with a health provider about STI/HIV related issues before engaging in sexual relations for the first time and (2) whether or not one believes physical copies of the most current STI tests should be provided to each partner prior to engaging in sexual relations. An individual's sexual health attitudes may be an indicator of how proactive they are in their sexual

health. Presumably, individuals who are very proactive (have conversations about STIs/HIV with medical health professionals, and demand physical copies of their sexual partners STI results) would believe that being proactive is the most efficient way to protect their sexual health. However, participants could also be judgemental about others who are not as proactive as themselves. It is unlikely therefore they would support a reactive based approach such as the criminalization of HIV transmission and be more in favour of a preventative, harm reduction approach. This study will explore the relationship between sexual health attitudes of university students and their attitudes towards HIV. Students who have a more proactive attitude towards their sexual health will likely not support the criminalization of HIV transmission.

The study also measured attitudes toward the criminalization of HIV transmission in general via a number of variables, asking participants whether or not the respondent believes that:

- specific criminal sanctions should be created to address HIV transmission
- criminal prosecution should take place when HIV transmission has not occurred
- failure to disclose one's HIV status is sufficient for criminal prosecution
- people who do not know their HIV status should be liable for transmitting HIV to another person
- the criminal justice system is a cost effective way to address HIV transmission
- HIV positive people should serve their sentences in prison
- the transmission of curable STIs warrants criminal prosecution
- the transmission of non-curable STIs warrants criminal prosecution
- HIV positive sex workers should be punished harshly for crimes related to sex work

Horvath, Weinmeyer, and Rosser (2010) found that of 1725 MSM in the USA, 65% of participants believed it should be illegal for an HIV positive person to have unprotected sex with someone without disclosing their serostatus. Those who believed that it should not be illegal tended to be HIV positive and have a higher education when compared to those who felt it should be illegal. However, little research has been conducted on the general population to assess their beliefs regarding the criminalization of HIV transmission in connection with whether or not they believe legislators should create specific criminal sanctions to address HIV transmission. Further research needs to be conducted to explore the relationship between people who are in favour of the criminalization of HIV transmission and whether they still believe criminal prosecutions should take place when HIV transmission has not occurred. This study attempts to explore this relationship in more detail.

Odunsi (2007) states that there are consequences when medical health professionals are compelled to disclose the serostatus of their patients to their patients' sexual partners. Consequences include that people may resist testing when they become aware that their HIV status may be revealed to their partners, in addition to driving HIV positive people underground where they do not seek out treatment. Additional research is needed to explore when people feel criminal sanctions are appropriate to address HIV transmission. Specifically, whether participants feel criminal sanctions are appropriate only when HIV transmission has occurred or if the risk of contracting HIV is sufficient for criminal sanctions to be warranted. This study attempts to explore this relationship by exploring the attitudes of university students regarding this issue.

There are many reasons why people may not want to know their HIV status. Jürgensen et al. (2012) found that people in Zambia face many barriers to HIV testing. Participants feared

knowing their HIV status altogether, due to internalized fear regarding life as an HIV positive person. Participants felt that if they knew their positive HIV status, they would die more quickly. However, little research has been done to explore the relationship between one feeling that people who do not know they are HIV positive are not liable to giving another person HIV and being in favour of the criminalization of HIV transmission.

Beck et al. (2011) found that people living with HIV who use HIV services before their viral load becomes higher require less expensive medication, so early HIV testing is overall more cost effective than attempting to reduce viral loads after it has accumulated over a period of time. This highlights the need for HIV positive people to seek out treatment as soon as possible. As the literature indicates, criminal justice responses are not a cost effective way to address HIV transmission. The belief that the criminal justice system is a cost effective way to address HIV transmission may be a barrier to people questioning the value of the criminalization of HIV transmission. This study aims to explore the relationship between one's belief that the criminal justice system is a cost effective way to address HIV transmission and being in favour of the criminalization of HIV transmission.

HIV positive people in prison face additional challenges compared to HIV positive people living outside of prison. Research in India shows that the prevalence of HIV is higher in prison than in the general population (Dolan & Larney, 2009). Furthermore, condoms are not provided in Indian prisons as it is illegal. In a Canadian context, sharing injection and tattoo equipment is the primary cause of HIV infection within prison (Bonnycastle & Villebrun, 2011). Given the additional challenges someone would face being an HIV positive inmate and the health risk they might pose to fellow inmates; it is not entirely clear where proponents of criminalization would want those found guilty of crimes relating to HIV transmission to serve

their sentence. This study seeks to clarify this issue. Those who support the criminalization of HIV transmission may want offenders punished but may not feel prison is the appropriate venue in which to serve their punishment. Additionally, in an effort to see how punitive those who support the criminalization of HIV transmission are, this study also asks participants whether those found guilty of HIV transmission should be registered as sex offenders.

A Warner et al. (2004) study found that consistent condom use greatly reduced instances of curable STIs such as gonorrhea and chlamydia. The same study also found that as the number of unprotected sexual encounters increased, so did the rate of STI infection. It is not clear if those members of the public that support the criminalization of HIV transmission would also support the criminalization of the transmission of other STIs, including curable and non-curable STIs. It is likely that those who support the criminalization of HIV transmission would also support the criminalization of other non-curable and curable STIs. This study attempts to explore whether there is a relationship between these views.

A Hemalatha et al. (2010) study found that of 3200 female sex workers in India, 70% of them were illiterate and believed that HIV transmission could not be avoided. Furthermore, consistent condom use was not followed due to uncooperative clients. Most of the public recognizes that sex work carries an increased risk of HIV transmission to both client and sex worker. Consequently, they may feel that HIV transmission between client and sex worker is a victimless crime. The public's attitude regarding the criminalization of HIV transmission may vary depending on whom the sexual partners are and the commercial or non-commercial context of their sexual liaison. In order to explore people's attitudes regarding the criminalization of HIV transmission and whether their attitudes varied by the individuals involved in the

transmission, this study included vignettes with different partners and contexts including that of a sex worker and their client.

The overall research question of this thesis is do the predictor variables (demographic, experiential, and attitudinal) relate to the probability of occurrence of people being in favour of criminal sanctions in response to HIV transmission.

Chapter Two: HIV as a Social Problem

The Public Health Agency of Canada (2008) defines Human Immunodeficiency Virus (HIV) as a virus that attacks the immune system. Once inside the body, the HIV virus attacks T cells in one's bloodstream. T cells are responsible for fighting infections and as the virus progresses increasing numbers of T cells are killed (CATIE, 2002). Consequently, the immune system is weakened which increases the probability of contracting infections and cancers. HIV becomes Acquired Immunodeficiency Syndrome (AIDS) at the point when the body can no longer fight infection. The process of an HIV infection becoming AIDS takes approximately 10 years (Public Health Agency of Canada, 2008).

There are a number of ways in which HIV can be transmitted from one person to another. The methods include, but are not limited to: (1) unprotected sexual intercourse (vaginal, anal or oral); (2) shared needles or equipment for injecting drugs; (3) unsterilized needles for tattooing, skin piercing or acupuncture; (4) pregnancy, delivery and breast feeding (i.e., from an HIV-infected mother to her infant) and; (5) occupational exposure in health care settings (Public Health Agency of Canada, 2008).

Worldwide, 30 million people have died of AIDS, and 34 million more have been infected with HIV. 7,400 people are infected daily and 1.8 million died in 2010 alone. Women and girls make up half of the global population of people living with HIV (Global Commission on HIV and the Law, 2012). In Canada, as of December 2009 there were approximately 65,000 people living with HIV, an increase of more than 14% since 2005. Of those 65,000 people, about 26% are unaware they are infected with HIV (Public Health Agency of Canada, 2010).

While any sexually active person is at risk of contracting an STI or HIV, vulnerable populations have been identified as having an increased risk for HIV infection. The groups

include, but are not limited to, the urban poor, prostitutes, intravenous drug users, gay/bisexual men and other men who have sex with men (MSM) (Eatona, Kalichmana, O'Connell, & Karchnerb, 2009), Aboriginal people, prisoners, and women (Dej & Kilty, 2012). Additionally, street youth are also at a greater risk of contracting HIV. A Marshall et al. (2009) study found that of 529 Vancouver, Canada street youth, 78% were sexually active, with 61% having multiple partners, and 69% reporting inconsistent condom use, all of which point to greater risk of contracting HIV.

There are numerous reasons as to why certain populations are more vulnerable to HIV infection than others. The determinants of health, namely one's socio-economic status, level of education, income, and daily living situation, influence how vulnerable one is to contracting HIV. The lower one's determinants of health, the greater the chance of contracting HIV. Other determinants include one's personal experiences and presence of a support network. Additionally, self-esteem and coping skills also play a role in how we behave, especially in terms of risk taking sexual behaviour and self-protective behaviours (CPHA, n.d.).

Currently, heterosexual women are contracting HIV at the fastest rate, mainly through intravenous drug use and sexual relations with infected men. In 2009, heterosexual sexual contact accounted for 31% of new HIV infections (Public Health Agency of Canada, 2010). However, gay men and MSM remain the single most affected population in Canada, making up almost 42% of all persons living with HIV (Dej & Kilty, 2012). Aboriginal people make up approximately 25% of people living with HIV in Canada, even though they represent approximately 4% of the Canadian population (Public Health Agency of Canada, 2010). Social, economic, and behavioural factors such as poverty, substance use, including intravenous drug use, and limited access to health care services, have increased Aboriginal's vulnerability to the

HIV pandemic (Health Canada, 2010). These estimates are generated by the number of positive HIV test reports sent to the Public Health Agency of Canada since 1985. It is important to note that these numbers may be underestimated due to underreporting.

As previously mentioned, 26% of those who are HIV positive are unaware of their serostatus. These people are likely to be involved in more than 70% of new HIV infection cases (Public Health Agency of Canada, 2009). This underscores the importance of encouraging and enabling everyone to get tested for HIV and other STIs (sexually transmitted infections) on a regular basis. However, in addition to their infection and associated health problems, there are additional issues such as stigmatization. Stigmatization of those living with HIV takes many forms, such as discrimination, violence, and rejection. HIV is used as a tool to stigmatize groups associated with the disease, especially MSM (men who have sex with men) and intravenous drug users (Herek, 1999). People living with HIV are discriminated against in many spheres of their lives such as employment, housing, health care, immigration or entry to foreign countries (Merminod, 2009). This stigma has limited society's response to the epidemic and may also influence decisions to disclose one's HIV status to potential sexual partners (Herek, 1999). This stigma, in tandem with the common perception that HIV was a gay disease, greatly hindered the response to HIV transmission in society, resulting in greater numbers of people being infected with HIV.

When HIV was first discovered, it was widely considered by many to be a "gay disease" (Montagnier, 2002). From the beginning of the discovery of HIV in the early 1980s, the response to AIDS has been complicated by its connection with homosexuality (Altman, 1998). This is because gay men were highly stigmatized by society to begin with and the addition of HIV further stigmatized the gay population. Gay men are still fighting for equality worldwide, as

engaging in homosexual sexual activities can result in imprisonment and/or death in some parts of the world (Finerty, 2012). Marginalization, in tandem with physiology, circumstance and sexual behaviour, puts gay men and MSM at significantly higher risks of contracting HIV. While this paper's main focus is on perceptions of HIV in Canada, it is important to note that gay men and MSM are the most hidden and stigmatised of all HIV risk groups in places like the Middle East and North Africa (Global Commission on HIV and the Law, 2012).

Sex workers have long been forced to carry out their work underground, where it is harder to negotiate safer sex conditions and consistent condom use. As a result of the criminalization of sex work, sex workers cannot rely on society to protect them, making them vulnerable to attacks and other forms of abuse from their clients. Furthermore, pimps and clients use the threat of criminal sanctions to control them. These factors make it extremely hard for sex workers to come forward to the police if they have been raped. Furthermore, working underground serves as a barrier to access to education and housing; this also increases one's vulnerability to HIV infection (Global Commission on HIV and the Law, 2012).

The current legal environment criminalizing the use of recreational drugs has also enabled the spread of HIV. Specifically, intravenous drug users are particularly vulnerable to HIV infection. There are approximately 16 million people worldwide who inject drugs. About 3 million are reported to already be infected with HIV, and about one in ten new HIV infections are related to injection drug use. Sharing infected needles and syringes is the most widespread route of HIV transmission amongst drug users (Mathers et al., 2008).

Female intravenous drug users tend to be at an increased risk of contracting HIV when compared to male intravenous drug users. Reasons for the increased risk include unprotected sex and unsafe injections (El-Bassel, Terlikbaeva, & Pinkham, 2010). Unsafe injections are

encouraged by a practice shared by intravenous drug users called frontloading. Frontloading is defined as a broad pattern of the sharing of resources among addicts, such as needles (Grund et al., 1991). Women are at an even greater risk of contracting HIV through needles as they are often “second on the needle” as their sexual partners usually procure the drugs (El-Bassel, Terlikbaeva, & Pinkham, 2010).

The criminalization of drug use undermines human rights–based HIV education, prevention and treatment, including harm reduction programmes aimed at intravenous drug users (Global Commission on HIV and the Law, 2012). Due to the legal consequences associated with drug use, people use drugs underground, away from society and the protection that it offers. Clean injection needles cannot be purchased at a local store. Consequently, there is widespread use of unsterilized injecting equipment, which increases one’s risk of contracting HIV, among other communicable infections/diseases. As a result of the war on drugs, more people who are at a high risk for HIV infection end up in prison, which again increases the risk of HIV transmission. 10 million people are incarcerated in prisons throughout the world (Global Commission on HIV and the Law, 2012). Very risky activities occur in prison including sharing drug-injection equipment, tattooing with unsterilized and shared needles, and having unprotected sexual relations (Dej & Kilty, 2012). Consequently, people in prison are estimated to be twice to 50 times more likely to contract HIV than the general adult population (Global Commission on HIV and the Law, 2012). Harm reduction practices are almost non-existent in prison. In 2006, Correctional Services Canada abandoned a pilot project to provide safe tattoo parlours in prison (Dej & Kilty, 2012). According to then Public Safety Minister Stockwell Day, the program was not effective (Kondro, 2012), despite a program evaluation by Corrections Canada recommending the program stay in place (Corrections Canada, 2009).

Chapter Three: The Criminalization of HIV Transmission: What does it mean?

In Canada, there is no specific law against HIV exposure/transmission (Dej & Kilty, 2012). HIV non-disclosure cases are typically treated by the criminal justice system as sexual assaults (Mykhalovskiy & Betteridge, 2012). The rationale for charging a defendant with sexual assault is that the complainant consented to having sexual relations with the accused under fraudulent circumstances. This rationale assumes that the complainant would not have consented to sexual relations with the accused had the complainant known the accused's positive serostatus. Currently, the charge most commonly laid is aggravated sexual assault (Dej & Kilty, 2012).

For the purposes of this thesis, the “*criminalization of HIV transmission*” refers to laws, policies, and practices that result in a criminal conviction that is the result of transmitting or the possibility of transmitting the HIV virus from one person to another. Another term that is used to describe this issue is HIV exposure/disclosure. For example, someone who is convicted of sexual assault because they failed to disclose their HIV status (also known as serostatus) before engaging in sexual contact is referred to in this paper as the criminalization of HIV transmission.

In over 60 countries it is a crime to expose another person to HIV or to transmit it, especially through sex. Approximately 600 people living with HIV in 24 countries have been convicted under HIV specific or general criminal laws. Critics of these laws argue that they do not encourage safer sex practices. Instead, they discourage people from getting tested or treated, in fear of being prosecuted for passing HIV to sexual partners or offspring (Global Commission on HIV and the Law, 2012).

As medical technology has changed, the courts have struggled to interpret how medical technology could mitigate the risks of contracting HIV from someone to the point where

disclosure is not required. The courts have also struggled with the concept of “what is significant risk?” in terms of contracting HIV from someone.

The leading case on the legality of criminalizing HIV transmission in Canada is the Supreme Court of Canada’s 1998 decision in R. v. Cuerrier. Henry Cuerrier had unprotected sex with two women, on separate occasions, without disclosing that he was HIV positive and while knowing the risks of unprotected sex. Both women asked Cuerrier about his HIV status, and he lied, claiming to have a negative serostatus. Neither woman contracted HIV. The Court upheld Cuerrier’s conviction for sexual assault on the grounds that the women could not have freely consented because their consent was based on fraudulent information. However, the ruling also stated that condom use may negate the risk of harm to the point that said harm is not considered significant, and hence would not justify criminalization (Dej & Kilty, 2012). Also, the relevance of viral load to this assessment of whether a significant risk of transmission existed remained an open question to be worked out in later cases.

Subsequent to the Cuerrier decision, lower courts ruled that HIV transmission-related offences limited the duty to disclose one’s HIV positive status to situations where condoms were not used or where the defendant had a detectable viral load. In a subsequent case, a man named Clato Lual Mabior faced 17 charges, including 12 charges of aggravated sexual assault. At trial, Mabior was convicted on charges involving instances when he had a detectable viral load but used a condom. In addition, he was charged in relation to instances when he did not use a condom but had an undetectable viral load. He was acquitted only in those instances when he used a condom and had an undetectable viral load (Dej & Kilty, 2012). The Manitoba Court of Appeal reversed the trial decision, stating that “significant risk means something other than an ordinary risk. It means an important, serious, substantial risk” (R v. Mabior, para 127). The

Quebec Court of Appeal agreed in R v DC, where a woman's conviction for aggravated assault and sexual assault were overturned when the Court concluded that her viral load was low enough to characterize the risk of transmission as minimal. Both the Mabior case and the DC case went to the Supreme Court on appeal.

On October 5, 2012, the Supreme Court of Canada released its decision in R v Mabior and R v DC, ruling that disclosure of one's HIV positive status to a sexual partner is required when the defendant has a detectable viral load and a condom is used, as well as where the defendant has a low viral load and a condom is not used. However, disclosure of one's HIV status to a partner is not required when one has a low viral load and a condom is used. The Supreme Court thereby clarified the meaning of "significant risk of serious bodily harm". The court further stated that advances in medical technology may decrease the risk of contracting HIV from someone who is HIV positive to the point where disclosure would not be required. We have, however, not reached that point.

Overall, the number of people being charged for transmitting HIV has increased. Additionally, the offences with which defendants are charged are becoming increasingly harsh. In the 1990s, those accused of transmitting HIV were charged with causing a nuisance or transmitting a noxious thing. Today, there are charges of assault, aggravated assault, aggravated sexual assault, and murder (Dej & Kilty, 2012).

Chapter Four: Theoretical Framework

The theoretical frameworks that guide this research are criminal law theory and harm reduction theory. These two theories were selected because a dichotomy exists in the literature. Criminal law theory is based on punitive, reaction based legal approach to address HIV transmission whereas harm reduction theory focuses on a preventative, medical based harm reduction approach. Both theories are discussed more thoroughly in the subsequent section. Arguments to support a harm reduction approach to HIV transmission over criminal law theory approach are explored.

Criminal Law Theory

The criminalization of HIV exposure/disclosure/transmission is a regularly used tool that attempts to influence the behaviours of people who have HIV/AIDS (Lazzarini, Bray, & Burris, 2002). Criminal law theory offers five primary justifications for the criminalization of HIV exposure, namely: incapacitation, deterrence, rehabilitation, retribution and the reinforcement of social norms (Klein, 2009). This thesis will provide arguments to illustrate weaknesses in each of these justifications.

Regarding incapacitation, a justification for criminalizing HIV transmission would be that putting people who transmit HIV in prison will incapacitate them from doing further harm to the public. Unfortunately, there is a significant amount of risky behaviour in prison (Klein, 2009). Consequently, HIV infection rates are ten to twenty times higher in prison than in the general population (Rizsa, 2011). These higher infection rates are due to the widespread use of unsterilized needles for tattooing and drug use. The government briefly supported clean needles programs for tattooing within prison (Doering, 2011). However, due to the present government's stance that inmates do not deserve harm prevention, clean needle programs were abandoned. As

a result, inmates are using dirty needles to tattoo themselves and each other, resulting in widespread HIV infection. Clearly, incarcerating HIV positive people does not reduce HIV transmission but in fact increases the probability of HIV transmission.

Second, the criminalization of HIV transmission is often justified by claims that it will serve to deter people from engaging in sexual activities without disclosing their serostatus. In other words, knowing that there are legal repercussions for failing to disclose one's serostatus will deter people. However, the effectiveness of deterrence is questionable (Merminod, 2009). Very little research has been conducted in relation to deterrence and HIV transmission. One study found no correlation between HIV transmission and modification of one's sexual practices (Burriss et al., as cited in, Klein, 2009). In fact, most people living with HIV who have unsafe sex without disclosing their HIV status fail to disclose for complex psychosocial reasons (Klein, 2009). Other factors, such as fear of infection, are likely to be of greater effect in influencing sexual practices. Additionally, deterrence becomes even more complicated when context is introduced. Intersectionalities of class, race, gender, and the status of one's relationships are all going to influence the effectiveness of deterrence. Mental health is also a concern in deterrence. One needs to be of rational mind for deterrence to work. HIV infection can trigger post-traumatic stress disorder (PTSD) (Theuninck, Lake, & Gibson, 2010). Consequently, some people may not be mentally stable when engaging in risky sexual behaviour, reducing the deterrence effect of criminalization.

Third, the criminalization of HIV transmission is sometimes justified as aiding in the rehabilitation of offenders. However, given the nature of sexual activities and drug use, this argument is also questionable (Elliott, 2000). Sexual attitudes are not changed in prison. People are sent to prison for punishment and that punishment is expected to rehabilitate offenders. At

the very most, the rehabilitative value of prison depends on the individual. Other interventions, such as counselling and support, which address underlying causes of risky behaviour, would be more effective at addressing the issue of HIV transmission (Elliott, 2000).

The criminalization of HIV transmission has been justified as appropriate retribution because HIV transmission is morally blameworthy. Clearly, an argument can be made that some circumstances under which the transmission of HIV occurs are morally blameworthy, particularly in cases such as Cuerrier and Mabior. However, human relationships and sexual interactions are highly nuanced and often difficult to police. The focus perhaps in terms of HIV transmission should be on prevention and educating people about shared responsibility.

Fifth, criminal law sanctions are used to establish acceptable social behaviours. Criminal law is unique from other ways of influencing the adoption of social norms because the law can punish those who do not comply. By punishing those who offend, it reaffirms to others what not to do in society (Galletly & Pinkerton, 2006). In this case, the criminal justice system is reaffirming society's disapproval of exposing someone to the significant risk of contracting HIV. There are however, other ways of shaping people's understanding of right and wrong and influencing their behaviours. Public education, for example, has been a powerful tool in many health related crises. This tends to be more proactive and preventative than criminal law sanctions.

Criminal law theory provides justification for the criminalization of HIV transmission. It provides a framework for understanding one way of addressing HIV transmission. This thesis has attempted to suggest that there are weaknesses in this particular approach. It will now provide an argument for a preventative, harm reduction approach to address HIV transmission.

Harm Reduction Theory

In contrast to the punitive, reaction based “criminalize and incarcerate” approach, the public health approach favours prevention and harm reduction. A number of factors suggest that harm reduction theory, implemented by public health authorities are better suited to reduce the incidence of HIV by addressing root causes of HIV transmission and so reducing (if not eliminating) the harm (Friedman et al., 2007).

Harm reduction theory refers to policies, programmes and practices aimed at reducing the harms associated with any risky activity, whether it is intravenous drug use or unprotected sex. Harm reduction focuses on people who, for whatever reason, continue to engage in risky behaviours, helping them protect their health and that of their companions, sex partners or children. Where sex education, harm reduction and comprehensive reproductive and HIV services are accessible to youth, young people’s rates of HIV and other STIs decrease (Global Commission on HIV and the Law, 2012).

Harm reduction theory stresses the following elements: flexibility, addressing underlying causes of risky behaviour and prevention (Elliott, 2000; Jürgens et al., 2009; Klein, 2009). First, public health authorities have the ability to be more flexible when addressing the risk of someone exposing others to HIV. Interventions by support workers can be customized to someone’s individual needs and situation in life. For example, support workers can address drug use that may result in sharing unsterilized injection equipment. In contrast, the legal system is very rigid, and is not designed to efficiently address context within cases (Klein, 2009).

Second, public health and support workers can take proactive measures to address underlying causes of risky behaviours. Risky behaviours include, but are not limited to, drug use, especially with unsterilized equipment, unprotected intercourse, and receiving a tattoo in prison.

Proactive measures are designed with the goal of preventing conduct that risks transmission in the first place. In contrast, criminal prosecutions are reactive measures that occur after exposure takes place (Elliott, 2000).

Third, public health workers have the ability to address HIV transmission with their clients more discretely than the criminal justice system. However, public health authorities have the legal authority to use coercive measures against people who demonstrate behaviours that place public health at risk (Klein, 2009). For example, public health authorities have the power to make people attend counselling sessions, quarantine people, and they also have the ability to report to the criminal justice system that someone is likely to transmit HIV to others. Still, this is far less public than a criminal prosecution. Widespread publicity about one's sexual behaviour is going to lead to further stigmatization, and so the harm reduction approach stresses avenues that avoid stigmatization (Jürgens et al., 2009).

Fourth, public health authorities achieve the more important objective of prevention rather than deterrence. Public health initiatives endorse educational and awareness campaigns, which encourage people to get tested. Furthermore, public health initiatives highlight the importance of assuming everyone is HIV positive when engaging in sexual relations or other risky behaviours and the importance of taking necessary precautions. Public health interventions are better suited in addressing underlying causes of one's risky behaviour and inspiring individuals to change them (Elliott, 2000).

Chapter Five: Significance of the Study

Although the emergence of HIV came to the forefront of social recognition decades ago, debates about appropriate responses to the pandemic continue. As recently as October 2012, the Supreme Court of Canada continues to rule on issues surrounding HIV disclosure. Some evidence suggests that the criminalization of HIV transmission could make the HIV epidemic worse (Elliott, 2000). This thesis suggests that a harm reduction approach is preferable to a criminal law approach to dealing with HIV transmission, and so seeks to explore the factors that contribute to whether a person supports criminalizing HIV transmission. Our society needs to focus on methods of addressing HIV transmission that prevent harm from happening in the first place. Therefore, understanding why the public may or may not support the criminalization of HIV is an important first step in understanding what type of education must take place in order for a harm reduction approach to be more persuasive and supported. As such, this thesis aims to explore how much support there is for the criminalization of HIV transmission among young people and the factors that influence whether they support the criminalization of HIV transmission and under what circumstances.

Chapter Six: Methodology

Research Design

The research design used for this study was solely based on a quantitative research design. The survey data was collected and administered through an on-line survey tool, Survey Monkey via their website at the University of Ontario Institute of Technology (UOIT). The advantage of engaging in online data collection, according to Evans and Mathur (2005), include speed and timeliness; convenience; ease of data entry; in addition to control of answer order. The limitations of on-line survey data collection are few, but worth mentioning. First, there may be issues of participants not having access to a computer or even internet access; also there may be technical problems such as internet disconnectivity that may hinder the on-line process. For these reasons, participation rates may be lower when compared to traditional paper-pencil survey research (Lefever, Dal, & Matthíasdóttir, 2007). To combat these drawbacks, participants were recruited from a laptop university, UOIT, that uses the internet to distribute course materials, and issues laptops to each full time undergraduate student. This maximized participants who can access the internet.

Survey Monkey was chosen due to ease of use, accessibility, and compatibility with the Statistical Package for the Social Sciences (SPSS) program. The secure website provided real time response rate updates, and is compliant to United States' disability and accessibility laws. Furthermore, as Survey Monkey is frequently used by educational institutions and organizations, participants are likely to be familiar with the interface of Survey Monkey.

On-line Survey Instrument

All participants completed an on-line survey comprised of 123 survey questions (see Appendix A). Demographic (i.e.: age, gender, relationship status, ethnicity), experiential (i.e.:

sexually active, safer sex in relationship, expect partner honesty) and attitudinal (i.e.: legislators create criminal sanctions, failure disclose criminal, HIV status not known not liable, HIV people in prison) variables were all components that the survey covered. Additionally, participants were exposed to a total of six vignettes, functioning as case studies designed to further assess issues of sexual consent in relation to HIV transmission and whether a criminal act has occurred.

Participants read each vignette and answered questions about their perceptions and opinions about that specific vignette. These vignettes were designed to create different contexts of HIV transmission and gauge participant's reactions to the probability for risk of transmission in those contexts.

It is important to note that not all questions in the survey were used in this analysis at this point in time. Because this was an exploratory study examining demographic, experiential and attitudinal predictor variables they were the focus of this analysis. Other variables not used in this analysis will be utilized for future research studies.

Sample and Recruitment

The sample for this research was based on a non-probabilistic convenience sample of undergraduate students at the University of Ontario Institute of Technology (UOIT) located in the City of Oshawa's downtown campus during the Winter 2011 semester. Random sampling was not done due to time and cost constraints. Professors from various first, second, third and fourth year classes from the Faculty of Social Science and Humanities were approached to get permission to do a mini presentation regarding the purpose, expectations, and details of the study. Participation in the study was completely voluntary. As a participation incentive, all participants upon completion of the on-line survey had a chance to win a \$100 VISA gift card or

one of five \$10 Tim Horton’s gift cards. All participants were informed about their rights and ensured that all answers were confidential. It was also emphasized that they may withdraw from the study at any point in time without any penalty of any kind. A total of 316 undergraduate students at UOIT were recruited, however only 280 completed the entire survey. Therefore, the overall response rate was 88.61%.

Operationalization of Measures Used in the Survey and Analysis

To maintain a degree of standardization across participants with respect to understanding the meaning of various terms relevant to the research, definitions of all variables and/or measures were clearly operationalized and included in the on-line survey (see Table 1).

Table 1: Operationalization of Measures Used in the Survey and Analysis

Measures	Operationalization
Sex, sexual activity, and sexually active	Engaging in: mouth to penis oral sex, mouth to vagina oral sex, penis to vagina intercourse, and/or penis to anus intercourse
Sexually transmitted infections (STIs)	Chancroid, Chlamydia, Granuloma inguinale, Gonorrhoea, Syphilis, Viral hepatitis, Genital herpes, HIV (Human Immunodeficiency Virus), HPV (Human Papillomavirus), Molluscum contagiosum, and Crab louse. STIs were previously known as sexually transmitted diseases (STDs). Non curable STIs include: Herpes, HIV, and HPV. Curable STIs include: Chlamydia, Gonorrhoea, and Syphilis.
Monogamy	The practice or state of having a sexual relationship with only one partner at a time.
Safer sex practices	Barrier protection precautions taken during sexual activity to protect against sexually transmitted infections. These precautions are defined as: condoms, female condoms, dental dams, and/or medical gloves.
Pregnancy options	Three options a woman has available when she discovers she is pregnant. Those options are keeping and raising the offspring, aborting the offspring, or putting the offspring up for adoption, be it either a closed or open adoption.

Healthy relationships	Relationships that are good for you. Elements within a healthy relationship include: honesty, respect, trust, commitment, assertiveness, positive self-esteem, mutual/separate goals and interests, communication, and equality.
Serious relationships	An established relationship between two people lasting longer than three months.
Sexual safety	The ability to assert safer sex practices are followed during sexual activity.
Unprotected sex	Engaging in sexual activities without the use of barrier protections such as condoms, dental dams, and female condoms
health care professional	An individual or an institution that provides preventive, curative, promotional or rehabilitative health care. Health care practitioners include, but are not limited to: physicians, dentists, nurses, therapists, and psychologists
Significant bodily harm	Any hurt or injury to a person that interferes with the health or comfort of the person and that the harm is more than merely transient in nature
Legal sanctions	Penalties or other means of enforcement used to provide incentives for obedience with the law, or with rules and regulations. Criminal sanctions can take the form of serious punishment, such as incarceration. Other forms of punishment include community service and fines.
Stigmatization	Severe social disapproval of personal characteristics or beliefs
HIV prevention initiatives	Programs, policies, and practices done by health care professionals, outreach groups, and community groups to prevent HIV transmission. Initiatives include education campaigns, and harm reduction programs such as clean needles programs and providing condoms to those who are at risk of contracting HIV
Criminal justice responses	Legal sanctions, such as fines, community

	service and incarceration.
Socioeconomic status (SES)	Economic and sociological combined total measure of a person's work experience, wealth, and social position in relation to others. It is based on income, education, and occupation.
Morality	The differentiation among intentions, decisions, and actions between those that are good (or right) and bad (or wrong).

Statistical Analysis Plan

This quantitative analysis included univariate descriptive statistics and multiple logistic regression runs. The descriptive statistics were run to assess the trends and patterns of each distribution of the predictor variables, as well as the dependent variables, to examine the variation in responses across all variables and get a sense of the distributions for each variable. Multiple logistic regression analysis was conducted to test the research hypotheses. All assumptions pertaining to logistic regression were met, as well as data and level of measurement specifics. Specific data modifications, like recoding and dummy coding, were done to ensure that all logistic regression test requirements have been met.

Table 2: Predictor and Dependent Variables Used in the Analysis

	Survey Question
Predictor Variables	
Age	How old are you?
Gender	What is your gender? [1] Male [2] Female
Relationship Status	What is your current relationship status? [1] Single [2] In a relationship
Sexually Active	Currently, are you sexually active (oral, vaginal, or anal)? [1] No [2] Yes

Safer Sex in Relationship	When in a relationship, do you practice safer sex? [1] No [2] Yes
Expect Partner Honesty	Do you expect your partners to be honest about their HIV status? [1] No [2] Yes
Ethnicity	[0] Black, African Canadian, African American [1] Middle Eastern, Arabic [2] South Asian (i.e., Indian, Pakistan) [3] East Asian (i.e., China, Japan) [4] Southeast Asian (i.e., Thailand, Philippines, Malaysia) [5] Hispanic [6] White, Caucasian [7] Native [8] Other
HIV Discussion Before Sex	Prior to engaging in sexual activities, people should have an explicit and detailed discussion regarding their HIV status with their partners. [1] Strongly Disagree [2] Disagree [3] Agree [4] Strongly Agree
Number Sex Partners	How many sexual partners, to date, have you had? [1] 0-3 [2] 4-6 [3] 7-9 [4] 10+
Legislators Create Criminal Sanctions	Legislators should create laws that specifically create criminal sanctions for the transmission of HIV. [1] Strongly Disagree [2] Disagree [3] Agree [4] Strongly Agree
Doctor STI Discuss	Prior to engaging in sexual activities, people should attend an appointment with a health care professional discussing STI and/or HIV related issues. [1] Strongly Disagree [2] Disagree [3] Agree [4] Strongly Agree
Curable STI Transmission Criminal	The transmission of a curable STI warrants criminal sanctions. [1] Strongly Disagree [2] Disagree [3] Agree

	[4] Strongly Agree
Non Curable STI Transmission Criminal	The transmission of a non-curable STI warrants criminal sanctions. [1] Strongly Disagree [2] Disagree [3] Agree [4] Strongly Agree
Failure Disclose Criminal	Failure to disclose one's HIV status before engaging in sexual intercourse is sufficient for criminal prosecution. [1] No [2] Yes
HIV Status Not Known Not Liable	People who do not know they are HIV positive are not liable for giving another person HIV. [1] Strongly Disagree [2] Disagree [3] Agree [4] Strongly Agree
Criminal Justice System Cost Effective	Criminal justice responses are a cost effect way to reduce HIV transmission. [1] No [2] Yes
HIV People In Prison	People who are convicted of crimes related to transmitting HIV should serve their sentence in prison. [1] No [2] Yes
HIV Transmit Registered Sex Offender	People who are convicted of crimes related to transmitting HIV should be registered as sex offenders. [1] No [2] Yes
Prosecution No Transmission	Criminal prosecutions should take place even when HIV transmission has not occurred. [1] No [2] Yes
HIV Sex Workers Punish Harshly	Should HIV positive people receive harsher sentences for crimes related to sex work or prostitution? [1] No [2] Yes
Test Provided Before Sex	Physical copies of the most current STI and HIV tests should be provided to sexual partners prior to engaging in unprotected sex. [1] Strongly Disagree [2] Disagree [3] Agree [4] Strongly Agree
Dependant Variables	
Jason Vignette	In your opinion, did Jason commit a criminal act? [1] No

	[2] Yes
Neil Vignette	In your opinion, did Neil commit a criminal act? [1] No [2] Yes
Sharon Vignette	In your opinion, did Sharon commit a criminal act? [1] No [2] Yes
Zach Vignette	In your opinion, did Zach commit a criminal act? [1] No [2] Yes
Beverly Vignette	In your opinion, did Beverly commit a criminal act? [1] No [2] Yes
Andrew Vignette	In your opinion, did Andrew commit a criminal act? [1] No [2] Yes

Chapter Seven: Results

The following section describes the overall sample profile of participants in this study.

The predictor and outcome variables used in the logistic regression analysis are explored below.

Sample Profile Using Descriptive Statistics

Table 3: Sample Profile of Participants with Respect to Predictor and Outcome Variables

<u>Variable</u>	<u>Percent</u>	
<i>Age</i>		
18	19.4%	
19	31.0%	
20	19.0%	
21	11.9%	
22	4.8%	
23	3.2%	
24-55	10.7%	
<i>Gender</i>		
Male	36.7%	
Female	61.7%	
	Single	In a relationship
<i>Relationship Status</i>	56.3%	43.7%
	No	Yes
<i>Sexually Active</i>	41.7%	58.3%
<i>Safer Sex in Relationship</i>	30.7%	69.3%
<i>Expectation of Partner Honestly</i>	3.3%	96.7%
<i>Ethnicity</i>		
Black, African Canadian, African American	8.7%	
Middle Eastern, Arabic	3.2%	
South Asian (i.e., Indian, Pakistan)	15.5%	
East Asian (i.e., China, Japan)	3.6%	
Southeast Asian (i.e., Thailand, Philippines,	3.2%	

Malaysia		
Hispanic	1.9%	
White, Caucasian	56.6%	
Native	0.6%	
	Disagree	Agree
<i>HIV Discussion</i>	6%	94.1%
<i>Number of Sex Partners</i>		
0-3	71.7%	
4-6	13.5%	
7-9	5.4%	
10+	9.4%	
	Disagree	Agree
<i>Legislation</i>	20.9%	79%
<i>Doctor STI Discuss</i>	26.2%	73.8%
<i>Curable STI Criminal</i>	53.1%	47%
<i>Non-Curable STI Criminal</i>	20.6%	79.5%
	No	Yes
<i>Failure to Disclose</i>	16.1%	83.9%
<i>Criminal Justice System Cost Effective</i>	44%	56%
<i>HIV People in Prison</i>	55.2%	44.8%
<i>Transmit HIV Sex Offender</i>	55.9%	44.1%
<i>Criminal Prosecution No Transmission</i>	56%	39.6%
<i>HIV Sex Workers Punished</i>	56.5%	43.5%

<i>Harshly</i>		
	Disagree	Agree
<i>HIV Status Not Known</i>	71.5%	28.6%
<i>Tests Provided</i>	44.8%	55.2%
	No	Yes
<i>Jason Criminal Act</i>	10.4%	89.6%
<i>Neil Criminal Act</i>	41%	59%
<i>Sharon Criminal Act</i>	87.5%	12.5%
<i>Zach Criminal Act</i>	69.3%	30.7%
<i>Beverly Criminal Act</i>	20.4%	79.6%
<i>Andrew Criminal Act</i>	25.2%	74.8%

The sample profile consisted of a snapshot of how people answered survey questions relating to the predictor and outcome measures.

Demographic variables

Overall, participants in the sample ranged from the ages of 18 to 55 years. On average, participants were about 21 years of age. The majority of participants were between the ages of 18 and 21 years (81.3%).

Approximately, 61.7% were women and 36.7% men. The variation found in terms of ethnicity was minimal. The majority of this sample was Caucasian (57%), compared to approximately 28% who represented ethno-racial categories of South Asian (15.5%), African Canadian (8.7%), and East Asian (3.6%). As the majority of the sample was Caucasian, there is limited variation to explore the relationship between ethnicity and being in favour of the

criminalization of HIV transmission. In regards to relationship status, about 56% were not in a relationship and 44% were in a relationship.

Experiential variables

Approximately 58% of participants claimed to be sexually active and about 42% were not sexually active. Of those who were sexually active, 70% of participants stated that they do practice safer sex while in a relationship. This allows for the exploration of whether or not people who have had sex perceive the criminalization of HIV transmission differently than people who have not had sex.

The majority of participants, almost 72%, indicated that they have had three or less different sexual partners. Research indicates that people with a higher number of sexual partners engage in more risk taking behaviors (Cooper, 2002). As the response to this question has limited variation, the relationship between this variable and being in favour of the criminalization of HIV transmission is limited.

Attitudinal variables

In regards to partner honesty, a very high majority (96.7%) had the expectation that their partners would be honest about their HIV status. This indicates that the vast majority of participants feel that their partners would tell them if they are HIV positive. As the responses to this question lack variation, exploration of this variable in relation to being in favour of the criminalization of HIV transmission is limited.

Many participants indicated that “discussion” of one’s HIV status with their sexual partners prior to any sexual activity had strong support with about 91% of the sample to favour

this statement. In terms of discussing HIV/STI issues with a health care professional before engaging in sexual activities for the first time, 73.8% of participants agreed. As previous research indicates, there are consequences when health care professionals are compelled to disclose a patient's serostatus (Odunsi, 2007). However, participants in this sample may not be aware of the risks or the obligation on health practitioners to inform sexual partners. Due to limited variation with the response, exploring the relationship between this variable and being in favour of the criminalization of HIV transmission is limited. Also, 55.2% of participants felt that physical copies of the most current STI and HIV tests should be provided to sexual partners prior to engaging in unprotected sex.

Attitudes toward criminalization of HIV transmission

Seventy-nine percent of participants agreed that the government should create specific criminal sanctions for the transmission of HIV. This was an unexpected outcome. As the participant pool was drawn from undergraduate social science students, it was expected that participants would be less inclined to rely on the criminal justice system to correct behavior.

A minority of participants (46.9%) felt that the transmission of a curable STI warrants criminal sanctions, while 79.5% of participants felt that the transmission of a non-curable STI does warrant criminal sanctions. This finding suggests that some participants feel that any form of harm in terms of contracting STIs should be criminal, but that for a substantial subgroup whether or not the STI was curable had an impact on the appropriateness of criminal sanctions.

In regards to HIV disclosure, 83.9% of participants felt that failure to disclose one's HIV status before engaging in sexual intercourse is sufficient for criminal prosecution. This supports Horvath et al.'s study (2010) that people believe it should be illegal for an HIV positive person to

have sex with someone without disclosing their serostatus. However, the relationship between this variable and being in favour of the criminalization of HIV transmission is limited due to lack of variation within the response. Seventy-one percent of participants felt that people who do not know they are HIV positive are liable for giving another person HIV. Fifty six percent of participants felt that the criminal justice system is a cost effective way to address HIV transmission.

A total of 55.2% of participants felt that people who are convicted of crimes related to HIV transmission should not serve their sentence in prison, while 55.9% of participants felt that they should not be registered as sex offenders. This indicates that participants feel that people who transmit HIV should not be labeled a sex offender. A total of 56% of the participants also felt that criminal prosecutions should not take place when HIV transmission has not occurred. The indicates that participants feel the criminal justice system is not appropriate in these cases where there was only a risk of harm with no harm actually being done. Furthermore, 56.5% of participants felt that HIV positive sex workers should not be punished more harshly for crimes relating to sex work or prostitution, which may indicate that participants feel sex workers should not be punished based on what their serostatus is.

Dependent variables

With regards to the dependent variable or outcome variable for the various vignettes the following descriptive results occurred: 89.6% of participants believed Jason committed a criminal act (10.4% believed a criminal act did not occur), 59% of participants believed Neil committed a criminal act (41% believed a criminal act did not occur), 79.6% of participants believed Beverly committed a criminal act (20.4% believed a criminal act did not occur), and

74.8% of participants believed Andrew committed a criminal act (25.2% believed a criminal act did not occur). 87.5% of participants believed Sharon did not commit a criminal act (12.5% believed a criminal act did occur), and 69.3% of participants believed Zach did not commit a criminal act (30.7% believed a criminal act did occur).

Overall, findings suggest that participants generally were in favour of the criminalization of HIV transmission across a variety of situations. However, as the results were not homogeneous, a clear distinction that participants are in favour of the criminalization of HIV transmission 100% of the time cannot be made.

Research Hypothesis

Null hypothesis.

The predictor variables, demographic, experiential, and attitudinal variables are not related to the probability of occurrence of people being in favour of criminal sanctions in response to HIV transmission.

Multiple Logistic Regression Analyses

In order to test the research hypothesis, a total of six multiple logistic regressions were run. Each model tested comprised of the dependent variable/outcome variable, HIV criminalization or specifically whether or not a criminal act has occurred against a total of 21 predictor variables, namely demographic variables (age, gender, ethnicity, relationship status), experiential variables (sexual activity, HIV discussion, safer sex practices, number of sex partners), and attitudinal variables related to intimate relationships (partner expectation of honesty, discuss STI status with doctor before sex, and tests should be provided to sexual partners prior to unprotected sex) and related to criminalization of HIV transmission (create HIV specific legislation, curable STI transmission is criminal, non-curable STI transmission is

criminal, failure to disclose serostatus is criminal, HIV status not known not liable for transmission, criminal justice system is a cost effective way to address HIV transmission, HIV positive people should serve their sentence in prison, people who are convicted of HIV transmission are sex offenders, criminal prosecution should take place when no HIV transmission occurs, and HIV positive sex workers should be punished harshly) (see Table 4).

Table 4: Multiple Logistic Regression Analyses

Predictor Variables and Vignette Outcome Variables	B	Odds Ratio	Wald	Cox & Snell R ²
Vignette Jason				0.176
Age	0.360*(0.172)	1.433	4.367	
Curable STI Transmission Criminal	2.502*(0.732)	12.207	11.679	
Failure Disclose Criminal	1.589*(0.638)	4.899	6.197	
Vignette Neil				0.263
Age	0.105*(0.043)	1.111	6.105	
Relationship Status	-0.903*(0.396)	0.405	5.202	
Non Curable STI Transmission Criminal	1.027*(0.372)	2.792	7.608	
HIV Status Not Known Not Liable	-1.047*(0.362)	0.351	8.374	
HIV People In Prison	-1.098*(0.437)	0.333	6.321	
HIV Transmit Registered Sex Offender	1.060*(0.374)	2.886	8.028	
Prosecution No Transmission	1.801*(0.369)	6.053	23.747	
Failure Disclose Criminal	0.304*(0.479)	1.355	0.403	
Vignette Sharon				0.186
Non Curable STI Transmission Criminal	1.511*(0.681)	4.530	4.919	
Prosecution No Transmission	-1.289*(0.580)	0.276	4.941	
HIV Sex Workers Punish Harshly	1.555*(0.537)	4.737	8.399	
Vignette Zach				0.161
HIV Status Not Known Not Liable	-1.333*(0.434)	0.264	9.443	
Criminal Justice System Cost Effective	1.025*(0.345)	2.788	8.849	
HIV People In Prison	0.851*(0.401)	2.343	4.508	
Vignette Beverly				0.216
Gender	0.851*(0.417)	2.34	4.160	

HIV Status Not Known Not Liable	-1.103*(0.422)	0.332	6.837	
HIV People In Prison	-1.612*(0.546)	0.199	8.731	
HIV Transmit Registered Sex Offender	1.362*(0.501)	3.903	7.378	
Prosecution No Transmission	1.798*(0.486)	6.037	13.668	
Vignette Andrew				0.232
Non Curable STI Transmission Criminal 1	1.307*(0.448)	3.694	8.498	
Failure Disclose Criminal	1.697*(0.504)	5.455	11.312	

Overall Model χ^2 for Jason Vignette, Neil Vignette, Sharon Vignette, Zach Vignette, Beverly Vignette, and Andrew Vignette are 47.905, 74.713, 50.530, 43.291, 12.280, and 65.868 respectively * $p < .05$

The Logistic Regression Results for Each of the Six Vignettes

This study assessed six vignettes that were designed to examine how participants view criminal sanctions as a response to HIV transmission. The vignettes discussed HIV transmission in a variety of contexts. These contexts include whether HIV status was discussed between partners, partner honesty, whether transmission occurred, and whether or not the partners in question were sexually exclusive.

Furthermore, it is important to note that in multiple logistic regression analysis, the coefficient of determination, Cox and Snell R^2 , provides the explanatory power of the model based on the predictors. This may range from 0% explanation to 100% explanation, with 100% explanation being ideal. While any variance value over 1% explanation is deemed reasonable, it is important to note that the closer the model's percent variance is to 100, the greater the explanatory power of that model (Meyers, Gamst & Guarino, 2006).

With respect to this thesis, the Cox and Snell R^2 across the six vignettes ranged from 17.6% to 26.3% explanation. This translates to certain predictor variables having greater explanatory power based on the individual context of the vignettes on whether or not participants

deemed criminal sanctions to be appropriate. Moreover, in accordance with the logistic model results, there were specific predictors from demographic, experiential and attitudinal variables that contributed to the explained variance of whether or not participants believed that a criminal act had occurred in each vignette.

Jason's vignette.

The first vignette was designed to portray unprotected non-monogamous heterosexual contact in which HIV transmission occurred from a male to females. This vignette contained several factors relating to some of the independent variables. The first variable is partner expectation of honesty. In this vignette, Jason was not honest with either of the two women, who expected Jason to be honest about his HIV status. Another variable was that Jason was aware of his HIV status and was informed by medical health professionals to inform his sexual partners of his HIV status but did not, which related to another variable regarding HIV disclosure.

Vignette 1: Jason

Jason was diagnosed with HIV two years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he engaged in unprotected intercourse with at least two women with whom he was not in an ongoing relationship. Jason did not disclose his HIV status to his sexual partners, nor was he asked. Both women tested positive for HIV after engaging in sexual intercourse with Jason. Jason was not sexually exclusive (i.e., monogamous) with either woman. The women were not sexually exclusive with Jason

The sample size for this logistical regression run was 219 participants, with only 97 missing cases. This specific logistic regression model comprised of 21 predictor variables on a single outcome, of whether or not a criminal act has occurred.

The omnibus chi-square test for Block 1 indicated that the model containing all predictors was statistically significant ($\chi^2(21, n=219) = 47.905, p < .05$). Thus, the model was able to

successfully distinguish between those who believed a criminal act had occurred in the vignette and those who did not believe a criminal act had occurred.

In accordance with the Cox and Snell R^2 value, all 21 predictor variables in this model explained about 17.6% of the variance in whether or not a criminal act had occurred, correctly classifying 91.5% of cases.

The results of the logistic regression model suggested that the only predictor variables that were statistically significant were the participant's age and two attitudinal variables (curable STI transmission is criminal, and failure to disclose serostatus is sufficient for criminal prosecution). All other predictors were not statistically significant. The strongest predictor in the entire set of predictors was the attitudinal variable "curable STI transmission", with an odds ratio of 12.207. Therefore, those participants who believe the transmission of a curable STI warrants criminal sanctions were 12.207 times more likely to believe a criminal act had occurred for this vignette, while controlling for all other factors in the model.

Failure to disclose serostatus warranted an odds ratio of 4.899. Participants who believe the failure to disclose one's HIV status prior to intercourse warrants criminal sanctions are 4.899 times more likely than people who do not believe the failure to disclose one's HIV status prior to intercourse warrants criminal sanctions believe a criminal act had occurred in this vignette.

The odds ratio of 1.433 for age indicated that for every year increase in age, people are 1.433 times more likely to believe that a criminal act had occurred in this vignette.

Overall, the results of the vignette suggest that older participants have more punitive views than younger participants. Additionally, those with more punitive views in terms of other, and sometimes less harmful infections, are more in favour of the criminalization of HIV transmission than those who have less punitive views.

Neil's vignette.

This vignette examined a potential for HIV transmission. The context of this vignette was protected monogamous heterosexual contact in which HIV transmission did not occur from a male to female. In this vignette, HIV status was discussed, however Neil lied about his positive serostatus while his partner expected him to be honest. Additionally, another variable that factors into this vignette is safer sex practices, which were followed.

Vignette 2: Neil

Neil is HIV positive. He was diagnosed 3 years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he met a woman. They casually dated for 3 weeks and were sexually exclusive during that time. STI and HIV status was discussed, but Neil denied having HIV. Neil and his partner used a condom each time they had sexual intercourse. His partner did not contract HIV

The sample size is 316, with 100 missing cases. Therefore, 216 cases were included in this analysis. Multiple logistic regression was conducted to assess the impact of a number of factors on the likelihood that participants would believe that a criminal act has occurred in this vignette. The multiple logistic regression model comprised of 21 predictor variables, listed under the multiple logistic regression heading above. The full model containing all predictors was statistically significant, $\chi^2(21, n=216) = 74.713, p < .05$, indicating that the model was able to distinguish between those who believed a criminal act had occurred in the vignette and those who did not believe a criminal act had occurred. The model explained 26.3% (Cox and Snell R square) of the variance in whether or not a criminal act had occurred, correctly classifying 75.1% of cases.

Within the model, seven independent variables made a unique statistically significant contribution to the model: two demographic variables (age, relationship status) and five attitudinal variables (non-curable STI transmission is criminal, HIV status not known not liable for transmission, HIV positive people should serve their sentence in prison, people who are convicted of HIV transmission should be registered sex offenders, criminal prosecution should take place when no HIV transmission occurs, and failure to disclose serostatus is sufficient for criminal prosecution). All other predictor variables were not statistically significant.

As for the significant demographic variables, the odds ratio of 1.111 for age indicated that for every one year increase in age, participants are 1.111 times more likely to believe a criminal act had occurred in this vignette. The odds ratio of 0.405 for relationship status indicated that participants who are in a relationship are 0.405 times more likely than participants who are not in a relationship to believe a criminal act had occurred in this vignette.

The attitudinal variables indicated much stronger significance. The strongest predictor of whether or not a participant believed a criminal act had occurred was the belief that criminal prosecution should take place when no HIV transmission occurs, with an odds ratio of 6.053. This indicated that people who believe criminal prosecution should take place when HIV transmission has not occurred are 6.053 times more likely than those who do not to believe a criminal act had occurred in this vignette, controlling for all other factors in the model.

The odds ratio of 0.333 for the belief that HIV positive people should serve their sentence in prison indicated that participants who believe HIV positive people should serve their sentence in prison are 0.333 times more likely than those who do not believe HIV positive people should not serve their sentence in prison to believe a criminal act had occurred in this case.

The odds ratio of 2.886 for people who are convicted of HIV transmission should be registered sex offenders indicated that participants who believe that people who are convicted of crimes related to transmitting HIV should be registered as sex offenders are 2.886 times more likely than participants who do to believe that a criminal act had occurred in this vignette.

The odds ratio of 0.351 for HIV status not known not liable for transmission indicated that participants who believe that people who do not know they are HIV positive are not liable for giving another person HIV are 0.351 times more likely than participants who do not that a criminal act occurred in this vignette.

The odds ratio of 2.792 for non-curable STI transmission is criminal indicated that participants who believe that the transmission of a non-curable STI warrants criminal sanctions are 2.792 times more likely than participants who do not that a criminal act occurred in this vignette.

Overall, the results of the vignette suggest that participants feel that the risk of contracting HIV without actually contracting HIV is sufficient for criminal prosecution. Also, contracting less harmful infections, such as curable STIs also warrants criminal sanctions for a significant subgroup of participants. Older people are more likely than younger people to believe a criminal act had occurred in this vignette. Additionally, those in relationships were less likely to believe a criminal act occurred than single people.

Sharon's vignette

This vignette examined HIV transmission in a context in which there was unprotected monogamous heterosexual contact in which HIV transmission occurred from a female to a male. STI/HIV status was discussed. Variables that factor into this vignette include partner expectation of honesty. Sharon was honest about her HIV status. Another variable that factors into this

vignette is that safer sex practices were not followed. Sharon's partner convinced her to have unprotected sex.

Vignette 3: Sharon

Sharon is HIV positive. She was diagnosed with HIV 10 years ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. Afterwards, she began to seriously date a man. Sharon informed her partner of her HIV status. Her partner wanted to have unprotected sex, and after six months of dating, Sharon agreed. They were sexually exclusive throughout the relationship. Her partner tested positive for HIV

The sample size is 316, with 99 missing cases. Therefore, 217 cases were included in this analysis. Multiple logistic regression was conducted to assess the impact of a number of factors on the likelihood that participants would believe that a criminal act had occurred in this vignette. The multiple logistic regression model comprised of 21 predictor variables, listed under the multiple logistic regression heading. The full model containing all predictors was statistically significant, $\chi^2(21, n=217) = 50.530, p < .05$, indicating that the model was able to distinguish between those who believed a criminal act had occurred in the vignette and those who did not believe a criminal act had occurred. The model explained 18.6% (Cox and Snell R square) of the variance in whether or not a criminal act had occurred, correctly classifying 90.2% of cases.

Within the model, three attitudinal variables made a unique statistically significant contribution to the model (non-curable STI transmission is criminal, criminal prosecution should take place when no HIV transmission occurs, and HIV positive sex workers should be punished harshly). All other variables were statistically non-significant.

The strongest predictor of whether or not a participant believed a criminal act had occurred was the belief that HIV positive sex workers should be punished harshly, with an odds ratio of 4.737. This indicated that participants who believe sex workers who transmit HIV should be punished harshly are 4.737 times more likely than participants who do not to believe a criminal act had occurred in this vignette, controlling for all other factors in the model.

The odds ratio of 0.276 for the belief that criminal prosecution should take place when no HIV transmission occurs indicated that people who believe criminal prosecution should take place when HIV transmission has not occurred are 0.276 times more likely than those who do not to believe a criminal act had occurred in this vignette.

The odds ratio of 4.530 for the belief that non-curable STI transmission is criminal indicated that participants who believe the transmission of a curable STI warrants criminal sanctions are 4.530 times more likely than participants who do not to believe a criminal act had occurred in this vignette.

Overall, the results of the vignette suggest that participants with more conservative views, in terms of believing that (1) criminal prosecution should take place when HIV transmission has not occurred, (2) HIV positive sex workers should be punished harshly for crimes relating to HIV transmission, and (3) the transmission of non-curable STIs warrants criminal sanctions are more likely to be in favour of the criminalization of HIV transmission in this context.

Zach's vignette

This vignette examined HIV transmission in a context in which there was unprotected sexual contact between a sex worker and a client, in which HIV transmission occurred from a male to a male. A variable that factors into this vignette is that safer sex practices were not

followed (Zach's client offered him more money to have unprotected sex), and that Zach did not know he was HIV positive.

Vignette 4: Zach

Zach is HIV positive but does not know it, nor does he show any symptoms of being HIV positive. The last HIV test Zach had was 18 months ago and it was negative. Zack is a sex worker. When working, Zach always practices safer sex. However, a male client of Zach's offered him \$300 more to have unprotected sex. Zach was desperate for money, so he agreed. STI and HIV status were not discussed. Afterwards, Zach's client tests positive for HIV. Zach and the client were not sexually exclusive

The sample size is 316, with 99 missing cases. Therefore, 217 cases were included in this analysis. Multiple logistic regression was conducted to assess the impact of a number of factors on the likelihood that participants would believe that a criminal act has occurred in this vignette. The multiple logistic regression model comprised of 21 predictor variables, listed under the multiple logistic regression heading. The full model containing all predictors was statistically significant, $\chi^2(21, n=217) = 43.291, p < .05$, indicating that the model was able to distinguish between those who believed a criminal act had occurred in the vignette and those who did not believe a criminal act had occurred. The model explained 16.1% (Cox and Snell R square) of the variance in whether or not a criminal act had occurred, correctly classifying 73.6% of cases.

Within the model, three attitudinal independent variables made a unique statistically significant contribution to the model (the belief that no criminal act occurs where HIV status is not known, that the criminal justice system is a cost effective way to address HIV transmission, and that HIV positive people should serve their sentence in prison). No other variables were statistically significant.

The strongest predictor of whether or not a participant believed a criminal act had occurred was the belief that the criminal justice system is a cost effective way to address HIV transmission, with an odds ratio of 2.788. This indicated that participants who believe the criminal justice system is a cost effective way to reduce HIV transmission are 2.788 times more likely than participants who do not to believe a criminal act had occurred in this vignette.

The odds ratio of 2.343 for the belief that HIV positive people should serve their sentence in prison indicated that participants who believe HIV positive people should serve their sentence in prison are 2.343 times more likely than those who do not to believe a criminal act had occurred in this case.

The odds ratio of 0.264 for the belief that no criminal liability occurs where HIV status not known indicated that participants who believe that people who do not know they are HIV positive are not liable for giving another person HIV are 0.264 times more likely than participants who do not to believe that a criminal act occurred in this vignette.

Overall, the results of the vignette again suggest that people who hold strongly conservative views regarding criminalization – that is, those who believe that HIV positive people who do not know their serostatus are still liable for transmission, that HIV positive people should serve their sentence in prison, and that the criminal justice system is a cost effective way to address HIV transmission are more likely to believe a criminal act occurred in this vignette.

Beverly's vignette

This vignette examined HIV transmission in a context in which there was unprotected monogamous heterosexual contact in which HIV transmission did not occur from a female to a male. Variables that factor into this vignette include partner expectation of honesty. Beverly

knew her HIV status and lied about it. Further, safer sex practices were not followed. There was a risk of transmission occurring in this vignette, however transmission did not happen.

Vignette 5: Beverly

Beverly is HIV positive. She was diagnosed with HIV six months ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. After her diagnosis, she began to date a man. HIV status was discussed, but she denied having HIV. They had an ongoing sexual relationship for six months, engaging in unprotected intercourse over 30 times. Her partner did not test positive for HIV after the relationship ended. Beverly and her partner were sexually exclusive during their relationship

The sample size is 316, with 98 missing cases. Therefore, 218 cases were included in this analysis. Multiple logistic regression was conducted to assess the impact of a number of factors on the likelihood that participants would believe that a criminal act has occurred in this vignette. The multiple logistic regression model comprised of 21 predictor variables, listed under the multiple logistic regression heading. The full model containing all predictors was statistically significant, $\chi^2(21, N=218) = 59.981, p < .05$, indicating that the model was able to distinguish between those who believed a criminal act had occurred in the vignette and those who did not believe a criminal act had occurred. The model explained 21.6% (Cox and Snell R square) of the variance in whether or not a criminal act had occurred, correctly classifying 79.8% of cases.

Within the model, one demographic and four attitudinal independent variables made a unique statistically significant contribution to the model (gender, and the beliefs that unknown HIV status makes one not liable for transmission, that HIV positive people should serve their sentence in prison, that people who are convicted of HIV transmission should be registered sex offenders, and that criminal prosecution should take place even when no HIV transmission occurs).

As for the demographic variable, the odds ratio of 2.342 for gender indicated that women are 2.342 times more likely than men to believe a criminal act occurred in this vignette.

The odds ratio of 6.037 for the belief that HIV positive people should serve their sentence in prison indicated that participants who believe HIV positive people should serve their sentence in prison are 6.037 times more likely than those who believe HIV positive people should not serve their sentence in prison to believe a criminal act had occurred in this case.

The odds ratio of 3.903 for the belief that people who are convicted of HIV transmission should be registered sex offenders indicated that participants who believe that people who are convicted of crimes related to transmitting HIV should be registered as sex offenders are 3.903 times more likely than participants who do to believe that a criminal act had occurred in this vignette.

The odds ratio of 0.332 for the belief that unknown HIV status makes a person not liable for transmission indicated that participants who believe that people who do not know they are HIV positive are not liable for giving another person HIV are 0.332 times more likely than participants who do not to believe that a criminal act occurred in this vignette.

The odds ratio of 0.199 for the belief that HIV positive people should serve their sentence in prison indicated that participants who believe HIV positive people should serve their sentence in prison are 0.199 times more likely than those who do not to believe a criminal act had occurred in this case.

Overall, the results of the vignette suggest that women were more likely than men to believe a criminal act had occurred in this context. Additionally, as with the results of the above vignettes, participants who hold strongly conservative views on criminalization of HIV transmission were more likely to believe a criminal act occurred in this vignette.

Andrew's vignette.

This vignette examined a non-curable STI transmission in which there was unprotected non-monogamous heterosexual contact in which genital herpes transmission occurred from a male to a female. Variables that factor into this vignette are that safer sex practices were not followed and that STI/HIV status was never discussed.

Vignette 6: Andrew

Andrew was diagnosed with genital herpes one year ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his STI status. Afterwards, he engaged in unprotected intercourse with one woman, with whom he was not in an ongoing relationship. Andrew did not disclose his STI status, nor was he asked. The woman tested positive for genital herpes after engaging in sexual intercourse with Andrew. Andrew and the woman were not sexually exclusive with each other

The sample size is 316, with 96 missing cases. Therefore, 220 cases were included in this analysis. Multiple logistic regression was conducted to assess the impact of a number of factors on the likelihood that participants would believe that a criminal act has occurred in this vignette.

The multiple logistic regression model comprised of 21 predictor variables, listed under the multiple logistic regression heading. The full model containing all predictors was statistically significant, $\chi^2(21, N=220) = 65.868, p < .05$, indicating that the model was able to distinguish between those who believed a criminal act had occurred in the vignette and those who did not believe a criminal act had occurred. The model explained 23.2% (Cox and Snell R square) of the variance in whether or not a criminal act had occurred, correctly classifying 81.5% of cases.

Within the model, two attitudinal independent variables made a unique statistically significant contribution to the model (the beliefs that non-curable STI transmission is criminal and that failure to disclose serostatus is sufficient for criminal prosecution).

The odds ratio of 3.694 for non-curable STI transmission is criminal indicated that participants who believe the transmission of a curable STI warrants criminal sanctions are 3.694 times more likely than participants who do not to believe a criminal act had occurred in this vignette.

The odds ratio of 5.455 for the belief that failure to disclose serostatus is sufficient for criminal prosecution indicated that participants who believe the failure to disclose one's HIV status prior to intercourse warrants criminal sanctions are 5.455 times more likely than people who do not to believe a criminal act had occurred in this vignette.

Overall, the results of the vignette again suggest that those who strongly support criminalization are more likely to be in favour of criminal sanctions in this vignette.

Chapter Eight: Discussion, Conclusion & Limitations of the Research

Discussion

A majority of participants felt that a criminal act had occurred in four of the six vignettes. This would suggest that generally participants feel criminal justice responses are an appropriate response to HIV exposure. Perhaps it is not surprising that one of the most frequent, statistically significant findings was that those who felt that failure to disclose one's HIV status was in itself criminal, were more likely to feel that criminal sanctions were appropriate for HIV transmission across the various contexts. The vignettes in which the most participants felt criminal acts had occurred shared common elements, in particular, that STI/HIV status was not discussed at all, or STI/HIV status was discussed and the offender lied about his or her serostatus. Almost all participants expected partner honesty in their own relationships (97%). Therefore, they may feel that someone who lied about their HIV status is particularly morally culpable, and therefore legally responsible for their behavior. Or perhaps, as suggested by other findings in this study, informed consent is critical to participants.

For example, in two of the six vignettes, a majority of participants felt that criminal charges were not warranted. One of these vignettes was based on an exchange between a sex worker and his client, the other was based on a woman who was honest about her HIV status but was still pressured into unprotected sex. The factor that may play the most important role in these vignettes is that of partner honesty. In one vignette, HIV status was discussed honestly and unprotected sex was knowingly engaged in afterwards. While HIV transmission did occur, participants largely felt that a criminal act did not occur in this vignette. This is most likely because the HIV positive person disclosed their positive serostatus before engaging in

unprotected sexual contact and was therefore absolved of the responsibility of transmitting the virus to another person.

The other vignette in which participants felt a criminal act did not occur was of a sex worker and a client who insisted on having unprotected intercourse. The sex worker did not know his serostatus and STI status was not discussed between either party. HIV transmission also occurred in this vignette. These findings may suggest that people differentiate between “knowing” and “unknowing” victims – and that a client of sex workers should assume that the sex worker has a higher likelihood of having HIV and so carries the burden of ensuring that safer sex practices are used. In other words, an important distinction for participants may be whether there was informed consent to unprotected sexual relations or not, certainly an important distinction in the law.

Older participants in this study were more likely to support the criminalization of transmission. This is an unexpected finding. Based on previous research it was thought that older participants would not support criminalization and younger participants would. The fact that the individual in the vignette with HIV was male or female appeared to make no difference in whether a respondent supported criminalization of HIV transmission. This too is a surprising finding and suggests that the gender of those who transmit or the gender of the victim may not necessarily garner empathy in participants. Interestingly, the use of protection does not mitigate the risk for participants if the HIV positive person lied.

It is noteworthy that participants were not in favour of the criminalization of HIV transmission across all six vignettes. This indicates that the general use of the criminal sanctions in response to HIV transmission may not be appropriate in all cases. Second, in the Andrew vignette, the majority of participants were in favour of criminal sanctions because the

transmission of genital herpes occurred. This indicates that participants feel that criminal sanctions are an appropriate response to the transmission of other non-curable STIs in addition to HIV, such as genital herpes. However, 55% of participants felt that curable STIs and their transmission should not be criminalized. These findings together suggest that participants may consider the level of perceived harm in regard to the appropriateness of legal sanctions.

Limitations

There are a number of factors that make this study non-generalizable. First, there is a small sample size. Also, the sample was quite homogeneous, as the majority of participants were of Caucasian descent and were mostly 19 years of age. Additionally, the study utilized a non-probabilistic convenience sample and therefore is not representative of the general public. Furthermore, the participants gathered in this study must have attended UOIT and therefore were drawn from a particular geographic region and likely from a particular social class.

Given the fact that the survey asked intimate questions about sex and sexuality, participants may have given what they perceived as socially desirable answers or perhaps did not tell the truth. In terms of survey design, political orientation questions should have been asked to provide greater insight into how and why people may be in favour of the criminalization of HIV transmission. Finally, this study was quantitative in nature. Given the limited research that exists on this subject, a qualitative element could have been included to probe opinions in a deeper manner.

Policy Implications

The findings from this study suggest that at least among a group of university students, there is support for the criminalization of HIV transmission. Given the author's view that the criminalization of HIV exposure may be detrimental to public health on a macro level, this level

of support for criminalization among young people is troubling. Criminalization diverts resources and attention away from harm reduction policies and initiatives such as: HIV/AIDS education; access to the means of protecting against infection; access to testing, treatment, and support services; and remedies for the root causes of vulnerability to HIV infection, such as poverty, violence, discrimination, and substance use (Elliott, 2000).

Furthermore, criminalizing HIV exposure further stigmatizes those who have HIV. The introduction of HIV-specific criminal legislation, or individual criminal prosecutions against people with HIV for risky conduct, is usually accompanied by inflammatory and ill-informed media coverage. This contributes to moral panics and adds to the stigma surrounding HIV and people living with HIV/AIDS (Elliott, 2000).

Additionally, the criminalization of HIV exposure deters people from getting tested. This is because people would rather not know about their HIV status than risk getting prosecuted for having risky sex. Knowing one is HIV positive means that one immediately becomes subject to a legal obligation of disclosure to all sexual partners, and failure to disclose one's status results in prosecution, which is just another reason not to get tested (Elliott, 1999; Elliott, 2000; UNAIDS, 2008). For example, in the United Kingdom, a participant in a focus group on the criminalization of HIV transmission stated that the only thing the criminalization of HIV transmission accomplishes is discouraging more people from coming forward and getting tested (Weait & Azad, 2005). Also, the criminalization of HIV exposure undermines access to support. If risky behaviour is discussed with a physician or counsellor, one does not know what use can be made of that information. This creates a lack of trust between the counsellor and the person (Elliott, 2000).

Interestingly, criminalization also creates a false sense of security among people who are, or think they are, HIV-negative, and so may encourage risky behaviour on their part. Public health policy states everyone should assume their partners are infected and should take measures accordingly, however, the criminalization of HIV exposure/disclosure undermines this principle by creating the false belief that criminal statutes have helped reduce the risk but attaching criminal liability to partner dishonesty (Elliott, 2000; UNAIDS, 2008). The criminalization of HIV exposure/disclosure therefore undermines notions of shared responsibility. The public health approach to HIV transmission favours everyone to adopt a shared responsibility approach to sexual activities: that is, not to rely on a sexual partner to shoulder the responsibility for safer sex practices (Klein, 2009). The legal system undermines notions of shared responsibility by criminalizing HIV exposure/disclosure in situations where the victim has not insisted on safer sex practices. Furthermore, HIV transmission laws are likely to be disproportionately applied to marginalized and minority groups. HIV already affects marginalized and minority people in severe negative ways, such as higher infection rates (Klein, 2009). For example, the risk profile for testing positive for HIV in the context of being homeless includes being male, having sex with other males, using intravenous drugs, and being over 21 years of age (DeMatteo, Major, Block, Coates, Fearon, Goldberg, & Read, 1999). Considering the war on drugs in the United States, which has resulted in the mass incarceration of African Americans, it is logical to conclude that the criminalization of HIV transmission would have the same effect on HIV positive people.

Further, criminalizing HIV exposure oppresses women. There are many factors that hinder many women's ability to freely negotiate their sexual lives, such as social, economic, political, legal, and cultural factors. Women are more likely to be blamed by their intimate

partners, their partners' families, and their communities for HIV transmission (Jürgens et al., 2009). Criminalizing HIV exposure/disclosure oppresses women. Unfortunately, attempts by women to assert their sexual freedom may result in violence. In some cases, a wife's mere suggestion that her husband use a condom can provoke physical abuse. Research has shown disturbing levels of physical violence against people with HIV/AIDS following disclosure of their status. This is especially true for HIV positive women who are beaten at the hands of partners following disclosure of their status (Elliott, 2000; Kane & Mason, 2001; Burris & Cameron, 2008).

Lastly, one of the hidden impacts of criminalizing HIV transmission is social control. The impact of legislation may eventually lead to giving the government the authority to regulate specific groups of people. For example, the government may want to take precautions concerning the transmission of HIV and require that all persons who are HIV positive are required to wear gloves on their hands when they have any open wound (Elliott, 2000).

Clearly, the impact of criminalization of HIV transmission is potentially non-trivial. Like many morally blameworthy acts or non-violent offences, it is likely that HIV transmission is best approached from a preventative harm reduction approach, which would require education and support of healthy lifestyles –and of course notions of shared responsibilities.

Future Research

The research conducted in this study raises questions for future research. First, the current study could be extended to the general population on a quantitative basis to assess their perceptions of HIV exposure/disclosure and the law. This would allow for more generalizable results as the participant pool would be more reflective of the population in Canada today.

In regards to partner honesty, a very high majority (96.7%) had the expectation that their partners would be honest about their HIV status. This indicates that the vast majority of participants feel that their partners would tell them if they are HIV positive. This expectation of partner honesty is dangerous. Proponents of safer sex practices argue for everyone to assume that their partner has HIV, regardless of what he or she says. Research needs to be conducted to explore the reasons, explanations, and causes as to why people expect and rely on this honesty from their partners.

Additionally, the majority of the sample was heterosexual, or at least identified as heterosexual, therefore regression based on sexual orientation could not be run. Future research should explore the relationship between sexual orientation and being in favour of the criminalization of HIV transmission and examine the differences between heterosexual versus homosexual people. Or more generally, a future study might explore how membership in a higher risk group (for demographic or experiential reasons, such as intravenous drug use) affects attitudes toward criminalization of HIV transmission.

Conclusion

In conclusion, this study indicates that university students broadly support criminalizing HIV transmission. This view runs counter to the position of many advocates, legal professionals, and academics, who feel that the transmission of HIV should be addressed via harm reduction methods rather than through the criminal law. Future research should continue to explore why members of the public hold these views in order to educate, and ultimately change them.

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Appendix A

Student Perceptions of HIV Transmission and the Law 2012

RESEARCH CONSENT FORM

Student Perceptions of HIV Transmission and the Law

Dear Participants:

I am writing to invite you to participate in a research project that will explore perceptions regarding HIV transmission and the law. Specifically, this study is looking at how people feel about HIV transmission under a variety of circumstances, and whether or not criminal sanctions are an appropriate response to cases of HIV transmission, and if so, under what conditions.

We appreciate your willingness to provide data that will assist us in exploring public perceptions concerning this issue. This exploratory study will provide insights into how students at UOIT perceive this important and emerging issue.

If you agree to participate in this study, you will be asked to complete an online survey regarding your views on HIV transmission and the law. This survey will require approximately 20-25 minutes of your time.

This study has been reviewed and approved by a UOIT Ethics Review Committee (REB #11-074). Participation in this study is completely voluntary. If you choose to participate, your privacy and confidentiality will be protected. All information you provide in the on-line questionnaire will remain private and confidential, and only accessible by the researcher and his research supervisors. Identifiers (codes that link your name to your responses) will not be used. Every precaution has been taken to ensure confidentiality and anonymity. Your name will never appear in any report or publication about this study. You may feel embarrassed or shy to answer particular questions relating to HIV and sexuality. As a researcher I will try my best to minimize any discomforts. Should you feel uncomfortable, you have the right to not answer a question or withdraw from the study completely. If you decide to participate in the study and then decide to stop participating, you may do so at any time, without explanation, and with no consequences of any kind.

There are minimal risks in participating in this project, but there are benefits! You will be providing UOIT researchers with exploratory data regarding HIV transmission and the law,

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an issue that affects everyone who is sexually active. The results of this study may be published in academic journals. A summary of the findings will be made available to all participants on request. You can request a copy of the findings, when available, by emailing me at: Michael.perkins@uoit.ca. The information gathered in this study may also be used in other research projects for comparison purposes. In the unlikely event of research-related harm, the participant has not given up his/her rights to legal recourse.

It is important to note that the raw data for the survey is stored on a server located in the United States. As such, should the United States government wish, they have the ability to access data from said servers through the USA Patriot Act. As this study has no relevance to terrorism, I anticipate this to be an unlikely, albeit possible, scenario.

Please note that upon completion of the survey, the data you provide cannot be retrieved and destroyed as there is no way to identify participants to their survey. Essentially, once you have completed the survey, there is no way to withdraw from the study.

If you have further questions regarding any aspect of this study, please do not hesitate to contact me at michael.perkins@uoit.ca. Should you have any questions, concerns, or complaints about the research ethics of this study.

Regards,

**Michael Perkins
Principal Researcher**

Consent to Participate

If you would like to participate in this study, please click "Accept" to start the questionnaire.

By clicking "Accept", you agree that you have read, understood and agreed to the terms and conditions of this research study.

Accept

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Decline

Student Perceptions of HIV Transmission and the Law

This anonymous survey takes about 20-25 minutes to complete and asks about attitudes, opinions and perceptions of HIV transmission and the law. Specifically it focuses on issues related to sexual knowledge, sexual behaviour, STIs, specifically HIV transmission and the Criminal Justice System. If you take this opportunity to contribute information to this study, it is essential that you do so seriously and honestly. Your responses should represent only your own personal opinions and experiences. Every precaution has been taken to ensure that your responses remain private. This study has been approved by the university ethics committee for the protection of human subjects' rights.

Please note that you have the ability to navigate to previous pages and modify your answers at any time while you are completing the survey. However, you cannot exit the survey and come back to finish it. Additionally, once the survey is submitted there is no way to change your responses to the questions.

Should you wish to withdraw from the study, please click the "Exit Survey" button, located in the upper right corner of the screen at any time. Your responses will be deleted.

Again, Thank You so much for taking the time to complete this survey.

Demographic Section

This section will ask general questions about you and your background.

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1. What is your age?

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Demographic Section

This section will ask general questions about you and your background.

2. What is your gender?

- Male
- Female

3. What is your ethnicity?

- Black, African Canadian, African American
- Middle Eastern, Arabic
- South Asian (i.e., Indian, Pakistan)
- East Asian (i.e., China, Japan)
- Southeast Asian (i.e., Thailand, Philippines, Malaysia)
- Hispanic
- White, Caucasian
- Native
- Other

4. What is your sexual orientation?

- Heterosexual
- Other than Heterosexual

Demographic Section

This section will ask general questions about you and your background.

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5. If you identify as other than heterosexual, are you:

- Gay
- Lesbian
- Bisexual
- Transgender
- Other

Demographic Section

This section will ask general questions about you and your background.

6. What is your religion, if any?

- Protestant
- Catholic
- Other Christian
- Jewish
- Muslim
- Hindu
- Buddhist
- Agnostic/Atheist/Non-religious
- Other

7. What is your current relationship status?

- Single
- In a relationship

Demographic Section

This section will ask general questions about you and your background.

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8. If you are in a relationship, what type of relationship are you in?

- Casual dating
- Seriously dating
- Common-law
- Legally married (and not separated)
- Separated, but still legally married
- Divorced
- Widowed

9. If you are in a relationship, is your relationship monogamous ? Here, monogamous is defined as having a sexual relationship with only one partner and no one else.

- No
- Yes

10. If you are currently in a relationship, how long have been together?

- Less than one year
- More than 1 year and less than 3 years
- More than 3 years and less than 4 years
- More than 4 years and less than 5 years
- More than 5 years

Demographic Section

This section will ask general questions about you and your background.

11. Where do you live?

- At home (with parents, Grandparents, or guardians)
- On campus
- Off campus

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12. Who do you live with?

- By yourself
- With roommates
- With family
- Romantic partner
- Other arrangements

Sexual Behaviour

This section asks you questions about your sexual attitude and behaviour. Specifically, it will ask questions concerning sexually transmitted infections (STIs), followed by a series of questions regarding HIV.

Please indicate how strongly you disagree or agree with the following statements.

13. The onus for safer sex is on oneself. Basically, the onus of practicing safer sex is solely on each individual. Here, safer sex is defined as barrier protection precautions taken during sexual activity to protect against sexually transmitted infections. These precautions are defined as: condoms, female condoms, dental dams, and/or medical gloves.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

14. People with higher sex drives are less likely to disclose their HIV status.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

15. People with multiple sex partners are more likely to practice safer sex.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

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16. It is more difficult for women to practice safer sex, when compared to men.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

17. Women have a harder time than men asserting their own sexual safety. Here, sexual safety is defined as the ability to insist that safer sex practices are followed during sexual activity.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

18. If medical technology makes it so that HIV no longer poses significant bodily harm, HIV should still be considered harmful. Here, significant bodily harm is defined as any hurt or injury to a person that interferes with the health or comfort of the person and that is more than merely transient or trifling in nature.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

19. Prior to engaging in sexual activities, people should have an explicit and detailed discussion regarding STIs with their sexual partner(s). Here, sex, sexual activity, and sexually active are defined as engaging in: mouth to penis oral sex, mouth to vagina oral sex, penis to vagina intercourse, and/or penis to anus intercourse.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

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20. Prior to engaging in sexual activities, people should have an explicit and detailed discussion regarding their HIV status with their sexual partner(s).

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

21. Prior to engaging in sexual activities, PEOPLE WITH HIV should have an explicit and detailed discussion regarding HIV with their sexual partner(s).

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

22. Prior to engaging in sexual activities, PEOPLE WITH HIV should have an explicit and detailed discussion regarding their HIV status with their sexual partner(s).

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

23. Prior to engaging in sexual activities, people should attend an appointment with a health care professional discussing STI and/or HIV related issues. Here, a health care professional is defined as an individual or an institution that provides preventive, curative, promotional or rehabilitative health care. Health care practitioners include, but are not limited to: physicians, dentists, nurses, therapists, and psychologists.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

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24. Prior to engaging in sexual activities, PEOPLE WITH HIV should attend an appointment with a health care professional discussing STI and/or HIV related issues.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

25. If someone tells you they are HIV positive and you consent to have sex with them, is it right or wrong for you to charge them with assault (or another crime).

- Wrong
- Right

26. Any relationship should have an explicit, detailed, conversation about HIV.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

27. Any relationship should have an explicit, detailed, conversation about curable STIs. STIs are defined as sexually transmitted infections, including but not limited to Chlamydia, Gonorrhoea, Syphilis, and HIV (Human Immunodeficiency Virus). STIs used to be referred to as STDs (sexually transmitted diseases).

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

28. STI and HIV testing should be done prior to engaging in unprotected sex with a sexual partner.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

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29. Having an HIV test done every three to six months is adequate.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

30. Physical copies of the most current STI and HIV tests should be provided to sexual partners prior to engaging in unprotected sex.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

31. If one has provided proof of being STI and HIV free by providing physical copies of their STI and HIV tests to their sexual partner and their sexual partner has done the same, it is safe to have unprotected sex without fear of criminal prosecution.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

32. Currently, are you sexually active (oral, vaginal, or anal)?

- No
- Yes

Sexual Behaviour

33. If yes, what type of sexual activities do you engage in?

- Oral
- Vaginal
- Anal
- Oral and Vaginal
- Oral and Anal
- Oral, Vaginal, and Anal

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Sexual Behaviour

34. When was the last time you were in a serious relationship? Here, serious relationship is defined as an established relationship between two people lasting longer than three months.

- I am currently in a serious relationship
- 1 year
- 2 years
- 3 years
- 4 years
- 5 years
- 6 years
- 7 years plus

35. When in a serious relationship, do you practice safer sex (using a condom, dental dam, female condom)?

- No
- Yes

36. How many sexual partners, to date, have you had?

- 0-3
- 4-6
- 7-9
- 10 plus

37. Have you been diagnosed with a sexually transmitted infection in the past two years?

- No
- Yes

Perceptions of HIV Transmission

This section will ask you questions about STIs, formerly known as STDs, and specifically HIV transmission.

Student Perceptions of HIV Transmission and the Law 2012

38. How likely do you think it is that you could be infected with a sexually transmitted infection in your lifetime?

- Not at all likely
- Slightly likely
- Moderately likely
- Very likely
- Completely likely

39. How likely do you think it is that you could be infected with HIV in your lifetime?

- Not at all likely
- Slightly likely
- Moderately likely
- Very likely
- Completely likely

40. If you do not have HIV, how likely is it that you would practice safer sex (using a condom, dental dam, female condom)?

- Not at all likely
- Slightly likely
- Moderately likely
- Very likely
- Completely likely

41. If you were HIV positive, how likely is it that you would practice safer sex (using a condom, dental dam, female condom)?

- Not at all likely
- Slightly likely
- Moderately likely
- Very likely
- Completely likely

42. If you were HIV positive, would you inform your sexual partner(s)?

- No
- Yes

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43. If you were HIV positive, and you knew it was ILLEGAL to have sex with someone without disclosing your HIV positive status, would you inform your sexual partner(s)?

- No
- Yes

44. Do you expect your sexual partner(s) to be honest about their STI status?

- No
- Yes

45. Do you expect your sexual partner(s) to be honest about their HIV status?

- No
- Yes

Perceptions of the Criminal Justice System

This section asks you questions concerning HIV transmission in the context of the law. Please respond to the following questions, indicating whether you strongly disagree or strongly agree with each statement.

46. People who do not know they are HIV positive are not liable for giving another person an HIV.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

47. People who know their sexual partner(s) is HIV positive before engaging in sexual activities cannot take legal action against said partner for transmitting the virus to them.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

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48. People who inform sexual partner(s) that they are HIV positive before engaging in sexual activities are not legally liable for transmitting HIV to a partner.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

49. People should be held criminally responsible for transmitting HIV.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

50. The transmission of a non-curable STI warrants criminal sanctions. Here criminal sanctions are defined as penalties or other means of enforcement used to provide incentives for obedience with the law, or with rules and regulations. Criminal sanctions can take the form of serious punishment, such as incarceration. Other forms of punishment include community service, and fines.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

51. The transmission of a curable STI warrants criminal sanctions.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

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52. Legislators should create laws that specifically create criminal sanctions for the transmission of HIV.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree

53. Would you be inclined to talk to a health care worker about HIV if you feared that you could be legally prosecuted for disclosing your sexual activities?

- No
- Yes

54. Do you feel the criminalization HIV transmission further stigmatizes those who have HIV? Here, stigmatization is defined as severe social disapproval of personal characteristics or beliefs.

- No
- Yes

55. Would you be less inclined to find out your HIV status if there were legal sanctions against knowingly transmitting HIV (such as fines, community service, incarceration)?

- No
- Yes

56. HIV prevention initiatives are a cost effect way to reduce HIV transmission. HIV prevention initiatives are defined as programs, policies, and practices done by health care professionals, outreach groups, and community groups to prevent HIV transmission. Initiatives include education campaigns, and harm reduction programs such as clean needles programs and providing condoms to those who are at risk of contracting HIV.

- No
- Yes

57. Criminal justice responses are a cost effect way to reduce HIV transmission. Criminal justice responses are defined as legal sanctions.

- No
- Yes

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58. In order for the criminal justice system to become involved in an HIV transmission case, the victim has to have contracted HIV.

- No
- Yes

59. The risk of contracting HIV from someone is sufficient for criminal prosecution.

- No
- Yes

60. Criminal prosecutions should take place even when HIV transmission has not occurred.

- No
- Yes

61. HIV transmission cases will likely be disproportionality applied to people of lower socio-economic status. Socioeconomic status (SES) is defined as an economic and sociological combined total measure of a person's work experience, wealth, and social position in relation to others. It is based on income, education, and occupation.

- No
- Yes

62. People who are convicted of crimes related to transmitting HIV should serve their sentence in prison.

- No
- Yes

63. People who are HIV positive should serve their sentence in prison.

- No
- Yes

64. People who are convicted of crimes related to transmitting HIV should be registered as sex offenders.

- No
- Yes

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65. The media should publish the identities of those charged but not yet tried of crimes related to transmitting HIV.

- No
- Yes

66. HIV specific laws can be used to prosecute people just for being HIV positive.

- No
- Yes

67. The media stigmatizes those who are charged with HIV related crimes.

- No
- Yes

68. The media stigmatizes those who are HIV positive in general.

- No
- Yes

69. Activities that pose little or no risk of HIV transmission (such as biting, scratching, and spitting) should be excluded from criminal prosecution.

- No
- Yes

70. Sex workers should be penalized harshly if they transmit HIV to clients.

- No
- Yes

71. Is lack of awareness of one's HIV status relevant to criminal prosecution?

- No
- Yes

72. Should the intent to transmit HIV have an impact on prosecution and sentencing?

- No
- Yes

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73. Should HIV positive people receive harsher sentences for crimes related to sex work or prostitution?

- No
- Yes

74. Information regarding legal cases involving HIV transmission is easily accessible.

- No
- Yes

75. Failure to disclose one's HIV status before engaging in sexual intercourse is sufficient for criminal prosecution.

- No
- Yes

76. Should HIV positive people in prison be segregated from the general population?

- No
- Yes

Vignettes

The last section of this survey will go through a series of vignettes or case scenarios involving HIV transmission. Each case should be considered separately and the questions relating to that case follow below each one.

Vignette 1

Jason was diagnosed with HIV two years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he engaged in unprotected intercourse with at least two women, with whom he was not in an ongoing relationship. Jason did not disclose his HIV status to his sexual partners, nor was he asked. Both women tested positive for HIV after engaging in sexual intercourse with Jason. Jason was not sexually exclusive (i.e., monogamous) with either woman. The women were not sexually exclusive with Jason.

77. In your opinion, did Jason commit a criminal act?

- No
- Yes

Vignette 1

Jason was diagnosed with HIV two years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he engaged in unprotected intercourse with at least two women, with whom he

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was not in an ongoing relationship. Jason did not disclose his HIV status to his sexual partners, nor was he asked. Both women tested positive for HIV after engaging in sexual intercourse with Jason. Jason was not sexually exclusive (i.e., monogamous) with either woman. The women were not sexually exclusive with Jason.

78. If yes, what type of criminal act occurred?

- Assault
- Sexual assault
- Aggravated assault
- Attempted murder
- Reckless endangerment
- Other

Vignette 1

Jason was diagnosed with HIV two years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he engaged in unprotected intercourse with at least two women, with whom he was not in an ongoing relationship. Jason did not disclose his HIV status to his sexual partners, nor was he asked. Both women tested positive for HIV after engaging in sexual intercourse with Jason. Jason was not sexually exclusive (i.e., monogamous) with either woman. The women were not sexually exclusive with Jason.

79. In your opinion, did Jason commit an act that was morally wrong? Here, morally wrong is defined as the differentiation among intentions, decisions, and actions between those that are good (or right) and bad (or wrong).

- No
- Yes

80. If found guilty, what form of punishment should Jason receive?

- None
- Community Service/Fines
- Imprisonment
- Both Community Service/Fines & Imprisonment

Vignette 1

Jason was diagnosed with HIV two years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he engaged in unprotected intercourse with at least two women, with whom he was not in an ongoing relationship. Jason did not disclose his HIV status to his sexual partners, nor was he asked. Both women tested positive for HIV after engaging in sexual intercourse with Jason. Jason was not sexually exclusive (i.e., monogamous) with either woman. The women were not sexually exclusive with Jason.

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81. If imprisonment, how long should the sentence be?

- Less than 1 year
- 1 to 2 years less a day
- 2 to 5 years
- 5 to 10 years
- 11 to 15 years
- 16 to 20 years
- 20+ years
- [7] Life without parole

Vignette 1

Jason was diagnosed with HIV two years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he engaged in unprotected intercourse with at least two women, with whom he was not in an ongoing relationship. Jason did not disclose his HIV status to his sexual partners, nor was he asked. Both women tested positive for HIV after engaging in sexual intercourse with Jason. Jason was not sexually exclusive (i.e., monogamous) with either woman. The women were not sexually exclusive with Jason.

82. In your opinion, is the involvement of the criminal justice system appropriate in this case?

- No
- Yes

Vignette 2

Zach is HIV positive but does not know it, nor does he show any symptoms of being HIV positive. The last HIV test Zach had was 18 months ago and it was negative. Zack is a sex worker. When working, Zach always practices safer sex. However, a male client of Zach's offered him \$300 more to have unprotected sex. Zach was desperate for money, so he agreed. STI and HIV status were not discussed. Afterwards, Zach's client tests positive for HIV. Zach and the client were not sexually exclusive.

83. In your opinion, did Zach commit a criminal act?

- No
- Yes

Vignette 2

Zach is HIV positive but does not know it, nor does he show any symptoms of being HIV positive. The last HIV test Zach had was 18 months ago and it was negative. Zack is a sex worker. When working, Zach always practices safer sex.

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However, a male client of Zach's offered him \$300 more to have unprotected sex. Zach was desperate for money, so he agreed. STI and HIV status were not discussed. Afterwards, Zach's client tests positive for HIV. Zach and the client were not sexually exclusive.

84. If yes, what type of criminal act occurred?

- Assault
- Sexual assault
- Aggravated assault
- Attempted murder
- Reckless endangerment
- Other

Vignette 2

Zach is HIV positive but does not know it, nor does he show any symptoms of being HIV positive. The last HIV test Zach had was 18 months ago and it was negative. Zack is a sex worker. When working, Zach always practices safer sex. However, a male client of Zach's offered him \$300 more to have unprotected sex. Zach was desperate for money, so he agreed. STI and HIV status were not discussed. Afterwards, Zach's client tests positive for HIV. Zach and the client were not sexually exclusive.

85. In your opinion, did Zach commit an act that was morally wrong? Here, morally wrong is defined as the differentiation among intentions, decisions, and actions between those that are good (or right) and bad (or wrong).

- No
- Yes

86. If found guilty, what form of punishment should Zach receive?

- None
- Community Service/Fines
- Imprisonment
- Both Community Service/Fines & Imprisonment

Vignette 2

Zach is HIV positive but does not know it, nor does he show any symptoms of being HIV positive. The last HIV test Zach had was 18 months ago and it was negative. Zack is a sex worker. When working, Zach always practices safer sex. However, a male client of Zach's offered him \$300 more to have unprotected sex. Zach was desperate for money, so he agreed. STI and HIV status were not discussed. Afterwards, Zach's client tests positive for HIV. Zach and the client were not sexually exclusive.

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87. If imprisonment, how long should the sentence be?

- Less than 1 year
- 1 to 2 years less a day
- 2 to 5 years
- 5 to 10 years
- 11 to 15 years
- 16 to 20 years
- 20+ years

Vignette 2

Zach is HIV positive but does not know it, nor does he show any symptoms of being HIV positive. The last HIV test Zach had was 18 months ago and it was negative. Zack is a sex worker. When working, Zach always practices safer sex. However, a male client of Zach's offered him \$300 more to have unprotected sex. Zach was desperate for money, so he agreed. STI and HIV status were not discussed. Afterwards, Zach's client tests positive for HIV. Zach and the client were not sexually exclusive.

88. In your opinion, is the involvement of the criminal justice system appropriate in this case?

- No
- Yes

Vignette 3

Andrew was diagnosed with genital herpes one year ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his STI status. Afterwards, he engaged in unprotected intercourse with one woman, with whom he was not in an ongoing relationship. Andrew did not disclose his STI status, nor was he asked. The woman tested positive for genital herpes after engaging in sexual intercourse with Andrew. Andrew and the woman were not sexually exclusive with each other.

89. In your opinion, did Andrew commit a criminal act?

- No
- Yes

Vignette 3

Andrew was diagnosed with genital herpes one year ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his STI status. Afterwards, he engaged in unprotected intercourse with one woman, with whom he was not in an ongoing relationship. Andrew did not disclose his STI status, nor was he asked. The woman tested positive for genital herpes after engaging in sexual intercourse with Andrew. Andrew and the woman were not sexually exclusive

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with each other.

90. If yes, what type of criminal act occurred?

- Assault
- Sexual assault
- Aggravated assault
- Attempted murder
- Reckless endangerment
- Other

Vignette 3

Andrew was diagnosed with genital herpes one year ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his STI status. Afterwards, he engaged in unprotected intercourse with one woman, with whom he was not in an ongoing relationship. Andrew did not disclose his STI status, nor was he asked. The woman tested positive for genital herpes after engaging in sexual intercourse with Andrew. Andrew and the woman were not sexually exclusive with each other.

91. In your opinion, did Andrew commit an act that was morally wrong? Here, morally wrong is defined as the differentiation among intentions, decisions, and actions between those that are good (or right) and bad (or wrong).

- No
- Yes

92. If found guilty, what form of punishment should Andrew receive?

- None
- Community Service/Fines
- Imprisonment
- Both Community Service/Fines & Imprisonment

Vignette 3

Andrew was diagnosed with genital herpes one year ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his STI status. Afterwards, he engaged in unprotected intercourse with one woman, with whom he was not in an ongoing relationship. Andrew did not disclose his STI status, nor was he asked. The woman tested positive for genital herpes after engaging in sexual intercourse with Andrew. Andrew and the woman were not sexually exclusive with each other.

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93. If imprisonment, how long should the sentence be?

- Less than 1 year
- 1 to 2 years less a day
- 2 to 5 years
- 5 to 10 years
- 11 to 15 years
- 16 to 20 years
- 20+ years

Vignette 3

Andrew was diagnosed with genital herpes one year ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his STI status. Afterwards, he engaged in unprotected intercourse with one woman, with whom he was not in an ongoing relationship. Andrew did not disclose his STI status, nor was he asked. The woman tested positive for genital herpes after engaging in sexual intercourse with Andrew. Andrew and the woman were not sexually exclusive with each other.

94. In your opinion, is the involvement of the criminal justice system appropriate in this case?

- No
- Yes

Vignette 4

Beverly is HIV positive. She was diagnosed with HIV six months ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. After her diagnosis, she began to date a man. HIV status was discussed, but she denied having HIV. They had an ongoing sexual relationship for six months, engaging in unprotected intercourse over 30 times. Her partner did not test positive for HIV after the relationship ended. Beverly and her partner were sexually exclusive during their relationship.

95. In your opinion, did Beverly commit a criminal act?

- No
- Yes

Vignette 4

Beverly is HIV positive. She was diagnosed with HIV six months ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. After her diagnosis, she began to date a man. HIV status was discussed, but she denied having HIV. They had an ongoing sexual relationship for six months, engaging in unprotected intercourse over 30 times. Her partner did not test positive for HIV after the relationship ended. Beverly and her partner

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were sexually exclusive during their relationship.

96. If yes, what type of criminal act occurred?

- Assault
- Sexual assault
- Aggravated assault
- Attempted murder
- Reckless endangerment
- Other

Vignette 4

Beverly is HIV positive. She was diagnosed with HIV six months ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. After her diagnosis, she began to date a man. HIV status was discussed, but she denied having HIV. They had an ongoing sexual relationship for six months, engaging in unprotected intercourse over 30 times. Her partner did not test positive for HIV after the relationship ended. Beverly and her partner were sexually exclusive during their relationship.

97. In your opinion, did Beverly commit an act that was morally wrong? Here, morally wrong is defined as the differentiation among intentions, decisions, and actions between those that are good (or right) and bad (or wrong).

- No
- Yes

98. If found guilty, what form of punishment should Beverly receive?

- None
- Community Service/Fines
- Imprisonment
- Both Community Service/Fines & Imprisonment

Vignette 4

Beverly is HIV positive. She was diagnosed with HIV six months ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. After her diagnosis, she began to date a man. HIV status was discussed, but she denied having HIV. They had an ongoing sexual relationship for six months, engaging in unprotected intercourse over 30 times. Her partner did not test positive for HIV after the relationship ended. Beverly and her partner were sexually exclusive during their relationship.

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99. If imprisonment, how long should the sentence be?

- Less than 1 year
- 1 to 2 years less a day
- 2 to 5 years
- 5 to 10 years
- 11 to 15 years
- 16 to 20 years
- 20+ years

Vignette 4

Beverly is HIV positive. She was diagnosed with HIV six months ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. After her diagnosis, she began to date a man. HIV status was discussed, but she denied having HIV. They had an ongoing sexual relationship for six months, engaging in unprotected intercourse over 30 times. Her partner did not test positive for HIV after the relationship ended. Beverly and her partner were sexually exclusive during their relationship.

100. In your opinion, is the involvement of the criminal justice system appropriate in this case?

- No
- Yes

Vignette 5

Neil is HIV positive. He was diagnosed 3 years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he met a woman. They casually dated for 3 weeks and were sexually exclusive during that time. STI and HIV status was discussed, but Neil denied having HIV. Neil and his partner used a condom each time they had sexual intercourse. His partner did not contract HIV.

101. In your opinion, did Neil commit a criminal act?

- No
- Yes

Vignette 5

Neil is HIV positive. He was diagnosed 3 years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he met a woman. They casually dated for 3 weeks and were sexually exclusive during that time. STI and HIV status was discussed, but Neil denied having HIV. Neil and his partner used a condom each time they had sexual intercourse. His partner did not contract HIV.

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102. If yes, what type of criminal act occurred?

- Assault
- Sexual assault
- Aggravated assault
- Attempted murder
- Reckless endangerment
- Other

Vignette 5

Neil is HIV positive. He was diagnosed 3 years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he met a woman. They casually dated for 3 weeks and were sexually exclusive during that time. STI and HIV status was discussed, but Neil denied having HIV. Neil and his partner used a condom each time they had sexual intercourse. His partner did not contract HIV.

103. In your opinion, did Neil commit an act that was morally wrong? Here, morally wrong is defined as the differentiation among intentions, decisions, and actions between those that are good (or right) and bad (or wrong).

- No
- Yes

104. If found guilty, what form of punishment should Neil receive?

- None
- Community Service/Fines
- Imprisonment
- Both Community Service/Fines & Imprisonment

Vignette 5

Neil is HIV positive. He was diagnosed 3 years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he met a woman. They casually dated for 3 weeks and were sexually exclusive during that time. STI and HIV status was discussed, but Neil denied having HIV. Neil and his partner used a condom each time they had sexual intercourse. His partner did not contract HIV.

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105. If imprisonment, how long should the sentence be?

- Less than 1 year
- 1 to 2 years less a day
- 2 to 5 years
- 5 to 10 years
- 11 to 15 years
- 16 to 20 years
- 20+ years

Vignette 5

Neil is HIV positive. He was diagnosed 3 years ago. He was told by doctors at the time of his diagnosis to inform his sexual partners of his HIV status. Afterwards, he met a woman. They casually dated for 3 weeks and were sexually exclusive during that time. STI and HIV status was discussed, but Neil denied having HIV. Neil and his partner used a condom each time they had sexual intercourse. His partner did not contract HIV.

106. In your opinion, is the involvement of the criminal justice system appropriate in this case?

- No
- Yes

Vignette 6

Sharon is HIV positive. She was diagnosed with HIV 10 years ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. Afterwards, she began to seriously date a man. Sharon informed her partner of her HIV status. Her partner wanted to have unprotected sex, and after six months of dating, Sharon agreed. They were sexually exclusive throughout the relationship. Her partner tested positive for HIV.

107. In your opinion, did Sharon commit a criminal act?

- No
- Yes

Vignette 6

Sharon is HIV positive. She was diagnosed with HIV 10 years ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. Afterwards, she began to seriously date a man. Sharon informed her partner of her HIV status. Her partner wanted to have unprotected sex, and after six months of dating, Sharon agreed. They were sexually exclusive throughout the relationship. Her partner tested positive for HIV.

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108. If yes, what type of criminal act occurred?

- Assault
- Sexual assault
- Aggravated assault
- Attempted murder
- Reckless endangerment
- Other

Vignette 6

Sharon is HIV positive. She was diagnosed with HIV 10 years ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. Afterwards, she began to seriously date a man. Sharon informed her partner of her HIV status. Her partner wanted to have unprotected sex, and after six months of dating, Sharon agreed. They were sexually exclusive throughout the relationship. Her partner tested positive for HIV.

109. In your opinion, did Sharon commit an act that was morally wrong? Here, morally wrong is defined as the differentiation among intentions, decisions, and actions between those that are good (or right) and bad (or wrong).

- No
- Yes

110. If found guilty, what form of punishment should Sharon receive?

- None
- Community Service/Fines
- Imprisonment
- Both Community Service/Fines & Imprisonment

Vignette 6

Sharon is HIV positive. She was diagnosed with HIV 10 years ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. Afterwards, she began to seriously date a man. Sharon informed her partner of her HIV status. Her partner wanted to have unprotected sex, and after six months of dating, Sharon agreed. They were sexually exclusive throughout the relationship. Her partner tested positive for HIV.

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111. If imprisonment, how long should the sentence be?

- Less than 1 year
- 1 to 2 years less a day
- 2 to 5 years
- 5 to 10 years
- 11 to 15 years
- 16 to 20 years
- 20+ years

Vignette 6

Sharon is HIV positive. She was diagnosed with HIV 10 years ago. She was told by doctors at the time of her diagnosis to inform her sexual partners of her HIV status. Afterwards, she began to seriously date a man. Sharon informed her partner of her HIV status. Her partner wanted to have unprotected sex, and after six months of dating, Sharon agreed. They were sexually exclusive throughout the relationship. Her partner tested positive for HIV.

112. In your opinion, is the involvement of the criminal justice system appropriate in this case?

- No
- Yes

Thank You!

THANK YOU FOR PARTICIPATING IN THIS SURVEY