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A Quantitative Study of Michigan's Criminal HIV Exposure Law

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Abstract

The objectives of the project were 1) to determine the extent to which HIV-positive persons living in Michigan were aware of and understood Michigan's criminal HIV exposure law, 2) to examine whether awareness of the law was associated with seropositive status disclosure to prospective sex partners, and, 3) to examine whether awareness of the law was associated with potential negative effects of the law on persons living with HIV (PLWH) including heightened HIV-related stigma, perceived societal hostility toward PLWH, and perceived need to conceal one's HIV infection.

The study design was cross-sectional. A statewide sample of 384 PLWH in Michigan completed anonymous pen and paper surveys in 1 of 25 data collection sessions.

A majority of participants were aware of Michigan's HIV exposure law. Awareness of the law was not associated with increased seropositive status disclosure to all prospective sex partners, decreased HIV transmission risk behavior, or increased perceived responsibility for HIV transmission prevention. However, awareness of the law was significantly associated with disclosure to a greater proportion of sex partners prior to respondents' first sexual interaction with that partner. Awareness of the law was not associated with increased HIV-related stigma, perceived societal hostility toward PLWH, or decreased comfort with seropositive status disclosure.

Evidence of an effect of Michigan's HIV exposure law on seropositive status disclosure was mixed. Further research is needed to examine the various forms of HIV exposure laws among diverse groups of persons living with or at increased risk of acquiring HIV.

Introduction

A majority of US states have HIV-specific criminal statutes that prohibit HIV-positive persons from engaging in sexual activities without prior disclosure of their HIV status to prospective sex partners (Burris, et al., 2007; Center for HIV Law & Policy (CHLP), 2010; Galletly, et al., 2009). Although these laws are often called HIV "transmission" or "exposure" statutes, transmission of the virus is not required for prosecution, and in some cases even lower risk activities such as engaging in condom-protected sex constitutes a criminal offence (Galletly & Pinkerton, 2004). The crime is a felony in most jurisdictions with penalties ranging from a fine and/or six months in jail to a maximum of forty years in prison (CHLP, 2010; Galletly & Pinkerton, 2006).

There has been considerable speculation about the impact of these laws on persons living with HIV (PLWH) (Burris & Cameron, 2008; Dodds, et al., 2009; Horvath, et al., 2010; Weait, 2005). Although the laws' presumptive purpose is to increase serostatus disclosure to sexual partners (with the assumption that informed partners will decline to have sex or

practice safer sex), little is known about their effectiveness as a structural-level HIV prevention intervention. It is not clear whether the laws increase serostatus disclosure or reduce unprotected sex (Galletly & Pinkerton, 2006; Adam, et al., 2008; Scamell & Cameron, 2008; Wolf & Vezina, 2004).

Even less is known about the potential negative effects of HIV exposure laws on PLWH. Concerns about the negative impact of these laws include that they may heighten HIV-positive persons' perceptions of societal hostility against PLWH (Galletly & Pinkerton, 2006; UNAIDS, 2008), that they may exacerbate HIV-related stigma by implying that PLWH are likely to act in ways that are a threat to others (Burris, et al., 2007; Weait, 2005; Wolf & Vezina, 2004), and that the laws may inadvertently decrease HIV-positive persons' willingness to disclose their positive serostatus by increasing the nature and severity of consequences of being known as someone who has HIV (Dodds, et al., 2009; Weait, 2005; Galletly & Dickson-Gomez, 2009; Lowbury & Kinghorn, 2006).

Very little empirical research has been conducted on the influence of these laws on PLWH (Galletly, et al., 2009; Horvath, et al., 2010). A previous quantitative study of US exposure laws compared the safer sex and serostatus disclosure behavior of 162 HIV-positive and 328 "at-risk" HIV-negative persons living in two major US cities, one in a state with an HIV exposure law and one in a state with no such law (Burris, et al., 2007). Belief that the law required HIV-positive persons to practice condom-protected anal or vaginal sex was not associated with participants having had protected sex during their last sexual encounter. Participants did, however, "strongly agree" that it was wrong for an HIV-positive person to have unprotected sex with a partner without prior disclosure.

A recent on-line survey of 1,725 men who have sex with men in the US found that residence in a state with an HIV-specific law was not associated with decreased unprotected anal intercourse, when compared to participants living in states without an HIV-specific law (Horvath, et al., 2010). These findings were consistent for both HIV-positive and HIV-negative participants. There was considerable support among participants for criminal sanctions against HIV-positive persons who have unprotected sex with uninformed partners.

We report here the results of an empirical study of Michigan's HIV exposure law.¹ Study objectives included: 1) to determine the extent to which HIV-positive persons living in Michigan were aware of and understood Michigan's criminal HIV exposure law; 2) to examine whether awareness of the law was associated with seropositive status disclosure to prospective sex partners; and 3) to examine whether awareness of the law was associated with potential negative effects of the law on PLWH including heightened HIV-related stigma, perceived societal hostility toward PLWH, and perceived need to conceal one's HIV-positive serostatus.

Methods

Study Sample

We surveyed 384 HIV-positive Michigan residents. Just over half were African American (54.3%) and just over one-third (35.6%) were female. Participants ranged from 19 to 70 years of age. The mean age was 43 (SD = 10.28).

¹Michigan has a particularly onerous HIV exposure law. The law requires PLWH to disclose their HIV-positive serostatus to prospective sex partners prior to engaging in "sexual penetration" with that partner. Sexual penetration is defined very broadly to include not only anal, vaginal, and oral intercourse but also "...any other intrusion, however slight, of any part of a person's body or of any object into the genital or anal openings of another person's body..." (Mich. Comp. Law §333.5210, 2011).

More than two-thirds of the participants (68.3%) reported anal, vaginal, or oral sex in the previous 12 months. Among sexually-active participants, 26.4% reported vaginal or anal sex with a partner to whom they had not disclosed their HIV status, and 29.3% reported oral sex with an uninformed partner in the previous year. Five percent of participants reported having unprotected vaginal or anal sex, without prior disclosure, with their last sexual partner.

Data Collection

Participants individually completed a self-report pen-and-paper questionnaire during 1 of 25 group data collection sessions conducted throughout Michigan. The questionnaire required 30-40 minutes to complete. To ensure data reliability, data collection sessions began with an overview of question types, response options, and definitions for words commonly used in the survey. To encourage participants to respond candidly when answering sensitive questions, participants were reassured that their surveys were anonymous. The study protocol and materials were approved by the Medical College of Wisconsin Institutional Review Board.

Study Measures

Demographic Information and Awareness of the Law—The survey elicited the following demographic information: age, gender, race and ethnicity, marital status, date of HIV diagnosis (month and year), education, monthly income, and whether the participant lived in a rural, suburban, or urban area.

Participant awareness of Michigan's HIV exposure law was assessed via a single survey item: "To the best of your knowledge, does Michigan have a law that requires HIV-positive persons to tell their sex partners that they have HIV?" Response options were 'Yes,' 'No,' and 'Not Sure.' The latter two categories were merged for analyses.

Attitudes toward the Criminalization of Sexual Behaviors Absent Disclosure and Perceived Responsibility for HIV Prevention—Participants were asked to indicate which, if any, of five sexual circumstances should be criminalized. The first three items addressed sexual activities that HIV-positive persons engaged in without disclosure to their seronegative partner. The fourth and fifth items involved an HIV-positive person lying to an "at-risk" sex partner about their HIV status and an HIV-positive person trying to infect the sex partner. See Table 1.

A single survey item asked participants to allocate responsibility for HIV prevention: "Who is responsible for making sure that an HIV-negative person does not get HIV through sex?" The five response options ranged from "The HIV-positive person has full responsibility" to "the HIV-negative person has full responsibility." This item was transformed into a dichotomous variable for analyses: the HIV-positive person has full responsibility for transmission prevention versus all other responses.

Sexual Behavior and Compliance with Michigan's HIV Exposure Law

Participants were asked to indicate the number of persons they had vaginal, anal, or oral sex with in the previous 12 months, the number of these persons who *knew* that the participant had HIV, the number of these persons they personally informed, and the number who were informed *prior* to their first vaginal or anal intercourse or oral sex with the participant. Participants were also asked whether in the previous year they had chosen not to have sex with a prospective partner rather than disclose.

Perceived Importance of the Law—Participants who were aware of Michigan's HIV exposure law were asked how important the law was in their decision to tell their sex

partners they have HIV. Response options were “very important,” “somewhat important,” and “not important.”

HIV-related Stigma, Perceived Hostility toward Persons Living with HIV, and Comfort with Seropositive Status Disclosure—HIV-related stigma, defined as the internalization of negative character traits associated with being a PLWH, was assessed through a series of 24 first-person statements PLWH might make about themselves (e.g., “I deserve a lot of credit for how well I have coped with HIV”) (adapted from Westbrook & Bauman, 1996). A second 18-item scale assessed respondents’ perceptions of the general public’s attitudes toward PLWH (e.g., “Some people think you should be embarrassed about having HIV”) (adapted from Westbrook & Bauman, 1996). Likert-type response options were on a 4-point scale ranging from “strongly disagree” to “strongly agree.” Cronbach’s alphas for these scales were .81 and .83, respectively.

Comfort with HIV-positive serostatus disclosure was measured with an 11-item scale assessing HIV-positive participants’ comfort with telling others about, or having others know, their HIV-positive serostatus. (e.g., “at parties and other social gatherings, I don’t want people to know I have HIV”). Response options ranged from “strongly disagree” to “strongly agree.” Cronbach’s alpha for this scale was .83.

Statistical Analyses

To determine whether awareness of the law was associated with the attitudes and behaviors of HIV-positive persons, we conducted a series of univariate analyses comparing participants who were or were not aware of the law. Additional analyses examined differences between participants who were in compliance with Michigan’s exposure law and those who were not. The statistical significance of intergroup differences was assessed using Pearson chi-square for categorical data. For numerical outcome variables, which included counts of sexual behaviors, we used a non-parametric test for significant differences, the Mann-Whitney U-test. The alpha level for statistical significance was set at .05 for all analyses.

Results

Awareness of Michigan’s HIV Exposure Law

More than three-quarters (76%) of the 384 HIV-positive study participants were aware that Michigan had an HIV exposure law. Understanding of the law was generally good (Galletly, et al., 2009). Just under half of the law-aware participants (42%) reported they were told about the law when they first tested HIV-positive, and nearly two-thirds (62%) reported that a case manager told them about the law. Overall, 68% of participants were informed by at least one of these two sources.

Compliance with the Law

The majority (71%) of participants had been in compliance with Michigan’s HIV exposure law. By definition, 100% of participants who reported they had been sexually abstinent for the previous 12 months were in compliance with the law. Sixty-one percent of sexually-active participants were also in compliance with the law in that they reported disclosure of their HIV-positive serostatus to all vaginal, anal, and oral sex partners before first sex with the partner.

Awareness of the Law and Disclosure and Sexual Behaviors

Awareness of the law was not significantly associated with seropositive status disclosure to all sex partners or with reduced sexual risk activity. Sexually-active participants who were aware of the law did not report disclosing to all vaginal, anal, or oral sex partners prior to having sex with the partner for the first time more often than those who were unaware of the law, did not have fewer sex partners in the last year, and were no less likely to have had unprotected sex with their most recent sex partner. Participants who were aware of the law were also no more likely to report being abstinent in the previous 12 months than those who were unaware of the law.

Participants who were aware of the law did, however, disclose their seropositive status to a greater proportion of their anal and vaginal sex partners *before the first time* they had sex with that partner ($p = .04$). Still, law-aware participants did not disclose to a greater proportion of their sex partners overall (i.e., at some point in the relationship) than did law-naïve participants.

Over half (58.9%) of the law-aware, sexually-active participants reported the law was “very important” in their decision of whether or not to disclose their serostatus to prospective sexual partners. Importance of the law in sexually-active participants’ decisions to disclose was significantly associated with compliance ($p = .04$). Law-aware participants were also more likely to report that at least once in the previous year they had chosen not to have sex rather than disclose their serostatus to a prospective partner ($p = .02$) than those unaware of the law.

Awareness of the Law and Attitudes toward HIV Prevention

Nearly half of all respondents (45.8%) placed all or most of the responsibility for HIV prevention on the HIV-positive partner. Another 42.9% believed responsibility for HIV prevention should be shared equally between persons who know they are HIV-positive and “at risk” sex partners. Only 11.4% of respondents placed all or most of the responsibility on the “at risk” partner. There was no association between awareness of the law and perceived responsibility for preventing HIV infection.

Awareness of the Law, Stigma, and Comfort with Disclosure

To examine evidence related to inadvertent negative effects of Michigan's HIV exposure law, we compared law-aware and -unaware participants with regard to internalized stigma, perceptions of societal hostility toward PLWH, and comfort with seropositive status disclosure. There was no statistically significant difference between the scores of law-aware and law-unaware participants on the perceived hostility toward PLWH or comfort with seropositive status disclosure scales. Unexpectedly, participants aware of Michigan's law scored significantly lower on the HIV-related stigma scale than did law-unaware participants ($p = .03$).

Attitudes toward the Criminalization of Sexual Behaviors Absent Disclosure

Most participants endorsed the criminalization of at least some sexual interactions between a person who knows he or she is HIV-positive and an uninformed partner (see Table 1). Law-aware persons were more likely to believe protected anal or vaginal sex without prior disclosure should be criminalized ($p = .002$).

Overall support for criminal HIV exposure laws was operationalized as the sum of affirmative responses to the items in Table 1. Awareness of the law was not associated with support for criminalization. Perceived responsibility for HIV prevention was, however, strongly associated with support for criminalization ($p < .001$). Participants who believed

responsibility for HIV prevention between an HIV-positive person and an “at risk” partner falls solely on the HIV-positive person (rather than a shared responsibility or solely the “at risk” partner's responsibility) were much more likely to endorse criminalization ($p < .001$).

Discussion

We surveyed 384 HIV-positive Michigan residents to begin to explore fundamental questions and concerns about the impact of the HIV exposure law on these residents. The majority of participants (76%) were aware of Michigan's HIV exposure law. Michigan's state health department requires Ryan White case managers to discuss the law with their clients. State policy also requires HIV testing counselors to inform persons who test HIV-positive about Michigan's HIV exposure law. More than two-thirds of law-aware participants cited one or both of these information sources (Galletly, et al., 2009).

Persons aware of the law were not significantly more likely to disclose their HIV-positive status to all of their sex partners than were persons unaware of the law. Nor were they more likely to have disclosed to their most recent sex partner or to have been sexually abstinent for the previous year than persons unaware of the law. Furthermore, there was no evidence that law-aware participants had fewer sex partners in the previous year, or were less likely to have unprotected sex.

Still, several findings were consistent with an effect of Michigan's HIV exposure law. Law-aware persons, when compared with persons unaware of the law, more often reported that at least once in the previous year they had chosen to abstain from sex with a new sex partner rather than disclose to that new partner. Also, half of all sexually-active, law-aware participants reported the law was an important or very important factor in their decision to disclose. These participants were more likely to have been in compliance with the law than other participants. Most importantly, law-aware participants disclosed their positive serostatus to a greater proportion of their sex partners *before the first time* they had sex with the partner ($p = .04$) as would be required by Michigan's law. Notably, however, law-aware participants did not disclose to a greater proportion of their partners overall (i.e., at some point in the relationship).

Evidence of a normative effect of the law was mixed. Participants who were aware of the law did not assign greater responsibility for HIV prevention to the HIV-positive partner, as normative theories of the function of the law would suggest (Kaplan, et al., 1996). A substantial proportion of participants placed full responsibility for HIV prevention on the HIV-positive partner, but there was no statistically significant difference in the allocation of responsibility between those who were aware and those who were unaware of Michigan's exposure law. Law-aware participants were also not more likely to endorse the criminalization of sexual activities absent HIV disclosure than were participants who were unaware of the law. Although there was strong support for criminalization, levels of support were similar between those who were and were not lawaware, with one exception: law-aware participants were significantly more likely to support the criminalization of condom-protected anal or vaginal sex with an uninformed partner.

Concerns about harmful effects of HIV exposure laws on PLWH were not supported by our data. Law-aware participants did not perceive greater societal hostility toward PLWH than those who were unaware of the law. Participants' comfort with serostatus disclosure also did not differ significantly between persons who were and were not aware of the law, suggesting that the law does not have an inadvertent deterrent effect on seropositive status disclosure.

Comparisons of aware and unaware participants' scores on the internalized HIV-related stigma scale revealed a significant difference. There was an inverse relationship between

internalized stigma and awareness of the state HIV exposure law. Persons unaware of Michigan's law perceived *more* HIV-related stigma, perhaps because social isolation led both to their ignorance of the law and their internalization of stigmatizing attitudes toward PLWH.

The results of this study are limited by several factors. First, the results were based on self-report data which were not (and in many cases could not be) verified externally. The accuracy of self-report data may be compromised by recall biases or participant desire to offer socially-desirable responses (Berk, et al., 1995; Cantania et al., 1990).

A second limitation of the study is that participants formed a convenience sample. Participant recruitment plans were designed to ensure the project sample was representative of the wide variety of PLWH in Michigan on a variety of variables including type of area lived in (i.e., urban, suburban, or rural), income and employment status, and risk group membership (Galletly, et al., 2009). Still, it is the possible groups of persons along one or more of these or other significant characteristics were under-represented. Generalizability of these findings from Michigan is further limited by the nature of criminal HIV exposure laws, which vary greatly from state to state (Galletly & Pinkerton, 2006).

Additional research on the impact of HIV exposure laws is needed. States have very different laws and, unlike Michigan, many states do not require information about the law to be disseminated to PLWH. Also, there is no direct information on the awareness and reactions to HIV exposure laws of persons who believe they are HIV-negative or do not know their serostatus. Exposure laws may empower them to discuss serostatus with prospective sex partners or, on the other hand, may foster misplaced confidence in disclosure as an HIV transmission prevention method.

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References

- Adam BD, Elliott R, Husbands W, Murray J, Maxwell J. Effects of the criminalization of HIV transmission in Cuernier on men reporting unprotected sex with men. *Can J Law and Society*. 2008; 23:143–159.
- Berk, R.; Abramson, PR.; Okami, P. Sexual activities as told in surveys.. In: Abramson, PR.; Pinkerton, SD., editors. *Sexual Nature/Sexual Culture*. The University of Chicago Press; Chicago: 1995. p. 371-386.
- Burris S, Beletsky L, Burleson J, Case P, Lazzarini Z. Do criminal laws influence HIV risk behavior? An empirical trial. *Arizona State Law J*. 2007; 39:467–519.
- Burris S, Cameron E. The case against criminalization of HIV transmission. *JAMA*. 2008; 300:578–581. [PubMed: 18677032]
- Cantania JA, Gibson DR, Chitwood DD, Coates TJ. Methodological problems in AIDS behavioral research: Influences on measurement errors and participation bias in studies of sexual behavior. *Psych Bull*. 1990; 108:339–362.
- Center for HIV Law and Policy. *Ending and Defending against HIV Criminalization: State and Federal Laws and Prosecutions*, vol. 1, CHLPP's Positive Justice Project. Center for HIV Law and Policy; New York: 2010.
- Dodds C, Keogh P. Criminal prosecutions for HIV transmission: People living with HIV respond. *Intl J STD AIDS*. 2006; 17:315–318.

- Dodds C, Weatherburn P, Bourne A, Hammond G, Weait M, Hickson F, Reid D, Jessup K. Sexually charged: The views of gay and bisexual men on criminal prosecutions for sexual HIV transmission. Sigma Research Original Research Report. 2009:1–33.
- Galletly CL, Dickson-Gomez J. HIV sero-positive status disclosure to prospective sex partners and criminal laws that require it: Perspectives of persons living with HIV. *Int J STD AIDS*. 2009; 20:613–618. [PubMed: 19710333]
- Galletly CL, DiFranceisco W, Pinkerton SD. HIV-positive persons' awareness and understanding of their states' criminal HIV disclosure law. *AIDS & Behav*. 2009; 13:1262–1269.
- Galletly CL, Pinkerton SD. Toward rational criminal HIV disclosure laws. *J Law, Med Ethics*. 2004; 32:327–337. [PubMed: 15301197]
- Galletly CL, Pinkerton SD. Conflicting messages: How criminal HIV disclosure laws undermine public health efforts to control the spread of HIV. *AIDS Behav*. 2006; 10:451–461. [PubMed: 16804750]
- Horvath KJ, Weinmeyer R, Rosser S. Should it be illegal for HIV-positive persons to have unprotected sex without disclosure? An examination of attitudes among US men who have sex with men and the impact of state law. *AIDS Care*. 2010; 22:1221–1228. [PubMed: 20635241]
- Kaplan, J.; Weisberg, R.; Binder, G. *Criminal Law: Cases and Materials*. Little, Brown and Company; New York: 1996.
- Lowbury R, Kinghorn GR. Criminal prosecution for HIV transmission: A threat to public health. *BMJ*. 2006; 333:666–667. [PubMed: 17008647]
- Mich. Comp. Law 333.5210. (LEXIS through P.A. 282 & Senate Joint Resolution V of the 2010 Legislative Session).
- Scamell D, Cameron S. The impact of criminalizing transmission and exposure on HIV prevention. XVII International AIDS Conference, 2008. Abstract: WEPE1085.
- UNAIDS. Brief Policy: Criminalization of HIV Transmission. 2008:1–7.
- Weait M. Criminal law and the sexual transmission of HIV: *R v Dica*. *Modern Law Review Limited*. 2005; 68:121–134.
- Weait M, Azad Y. The criminalization of HIV transmission in England and Wales: Questions of law and policy. Canadian HIV/AIDS Legal Network, HIV/AIDS Policy and Law Review. 2005; 10:1, 5–12.
- Westbrook, LE.; Bauman, LJ. *The Perceived Stigma of AIDS: Personal view and Public View Scales*. Albert Einstein College of Medicine; Bronx, NY: 1996.
- Wolf LE, Vezina R. Crime and Punishment: Is there a role for criminal law in HIV prevention policy? *Whittier Law Review*. 2004; 25:821–886.

Table 1

Percent of all participants who believe various sexual activities should be criminalized by awareness of Michigan's HIV disclosure law

Percent (n) who think it should be a crime to... ^a	Total	Aware of Law	Unaware of Law	Signif ^b
Have oral sex without disclosing HIV status	63.6% (239)	63.6% (182)	63.3% (57)	n.s.
Have condom-protected vaginal or anal sex without disclosing HIV status	50.8% (192)	55.2% (159)	36.7% (33)	.002
Have unprotected vaginal or anal sex without disclosing HIV status	88.4% (335)	88.2% (254)	89.0% (81)	n.s.
Lie to another person about having HIV in order to have sex	91.1% (346)	91.0% (263)	91.2% (83)	n.s.
Intentionally try to infect someone with HIV	97.1% (369)	96.9% (281)	97.8% (88)	n.s.

^aBetween 4 and 8 participants were missing on each of the items.

^bStatistical significance assessed by Pearson Chi Square; "n.s." indicates a non-significant difference.