

HIV in the Leather Community: Rates and Risk-Related Behaviors

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Abstract There exist many subcultures of men who have sex with men (MSM), all with differing values and health behaviors. The Leathermen comprise one such subculture, which is characterized by a heightened valuation of hypersexuality and adherence to sexual control dynamics (i.e., submission and dominance). No previous research has specifically examined this community for differences in sexual health (e.g., HIV rates) and sexual health behaviors (e.g., condom use). We conducted a large survey of men ($N = 1,554$) at one leather and non-leather event, collecting data from 655 Submissives, Dominants, Switches, and non-orienting Leathermen. Leathermen were 61% more likely to be HIV-positive than non-Leathermen. Decreased condom use found in HIV-positive Leathermen (relative to HIV-positive non-Leathermen) was a potential factor contributing to heightened HIV rates. Universal low condom use in Submissives engaging in receptive, and Dominants engaging in insertive, anal intercourse was an additional trend that potentially contributed to increased

numbers of HIV-positive Leathermen. Our recommendation is for heightened awareness of the risks associated with sex among Leathermen, especially unprotected anal intercourse with sero-uncertain Submissives.

Keywords HIV · Leather community · Submission/dominance · MSM · S/M · Condom use · Bondage

Introduction

There is substantial sociological evidence that the population of men who have sex with men (MSM) may be deconstructed into many different communities, all of whom have varying perceptions of sex and sexuality, as well as different behavioral norms [1, 2, 3]. The Leathermen comprise one such community that exists within the greater MSM population [4]. Leathermen are a self-defined culture of “hypermasculine men whose machismo is derived most conspicuously from wearing leather clothing, keeping their hair buzzed, and engaging in ... rougher, passive-aggressive sexual activities” [5, p. 31]. The community is further characterized by a heightened valuation of hypersexuality and adherence to sexual control dynamics (i.e., sexual dominance versus submissiveness) [4, 6]. Generally, men may use leather objects or wear leather garb during or before sexual experiences; this does not ensure such men hold a leather identity. The Leatherman identity and its associated orientations (e.g., being submissive or dominant) must be prevailing facets of the self [4]. In many instances, the men’s leather identity is associated with financial, social service, and time commitments to leather organizations (e.g., the Argonauts Leather Club in Wisconsin, the Portland Leather Alliance, or the KC Pioneers in Kansas). It

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is about such men, and not those who merely enjoy leather from time to time without committing to the identity, that we endeavored to study.

A substantial amount of research has been conducted on the construction of the leather identity [7–10] and the sorts of sadomasochistic sexual behaviors enacted by individuals who tend to adopt such an identity [11, 12]. Yet, to our knowledge, none has specifically examined this community for differences in sexual health and sexual health behaviors—namely rates of HIV, condom use, and HIV/STD testing. Considering the leather identity is intertwined with unconventional sexual behavior enacted with more frequency (e.g., sadomasochism) [8], it is likely the sexual health behaviors of the men who hold such an identity will differ from non-leather MSM. The following research tests this hypothesis.

There is some debate about what drives the leather identity. Previous research indicates this identity may be attributed to an obsession with male gender typicality [8]. Some researchers suggest that, as a response to the commonly held stereotype that MSM are more gender atypical [13], certain MSM come to prioritize male gender typicality. A set of these men may become compulsive about being perceived as masculine and become hypermasculine over time. Hypermasculinity is distinct from masculinity and refers to the degree to which individuals act “macho,” as constructed by callous attitudes towards sexual partners, tendencies towards aggression, and the enjoyment of danger [14]. Leather (chaps, bands, harnesses) becomes a symbol of this hypermasculinity. It is also a commonality around which such men may congregate, build a community, and interact [4].

Other studies posit that the leather identity may extend from a propensity towards sexual control play and sadomasochism (S/M) [10]. Because many of the items used during S/M sexual experiences happen to be constructed from highly durable leather (e.g., horse crops, whips, restraints), the material becomes increasingly associated with arousal and is valued. Men find other men willing to engage in such behaviors, usually at a leather bar, through leather Internet sites, or through leather organizations (as previously mentioned), and may take on the label of Leatherman as a correlate of their preferred sexual behaviors [9]. Overall, leather may be a fetish that some MSM hold [4]. Fetishes are the sexual attraction or arousal to objects (e.g., leather), situations (e.g., exhibitionism/public exposure), or body parts (e.g., feet) that may not be viewed as being sexual in nature [15]. Men may feel comfortable with other men who validate and encourage such eroticism and form an identity around the fetish [7]. These explanations are not mutually exclusive. For example, men who practice S/M may simultaneously and probably have a fetish for leather as well. Alternatively,

a leather fetish may mediate the relationship described above between sensitivity to masculinity and affiliation with the leather community.

As mentioned, S/M and sexual power are highly associated with the leather identity. Leathermen even self-refer as particular labels: Dominants, Submissives, or Switches [4]. Dominants (also known as “Doms,” “Masters,” “Sirs,” “Tops,” or “Daddies”) prefer holding the power in a sexual relationship and tend to be the active partner performing a sexual behavior on another. Submissives (also known as “Subs,” “Slaves,” “Pups,” or “Boys”) prefer to relinquish power in a sexual relationship and tend to be the receptive partners playing an obedient role. Switches are willing to take either the dominant or submissive role depending on the partner or situation [16]. The causes of men to gravitate towards any one of these orientations remain relatively unknown. Cross and Matheson [17] posited that such Dominants might tend towards psychopathology and Submissives towards sexual guilt and escapism; however, they found no significant results to support this hypothesis. It may be an issue of individual difference, as seen in other personality traits.

There have been no studies that have directly explored the sexual or non-sexual health behaviors of submissive and dominant Leathermen. Indirect findings have been published. In previous research [5] with a sample of barebackers (i.e., MSM who eschew condoms), 21% considered themselves Leathermen. Nearly half (46%) of these barebacking MSM reported wanting a partner who self-identified as a Leatherman. Given these associations (which seem to defy the distribution of naturally occurring barebacking) [18], there is some evidence to suggest that there may be a propensity towards decreased condom use within this community. In response, we conducted analyses to explore the HIV rates and sexual health behaviors (i.e., HIV/STD testing and condom use) of Leathermen. These analyses also compared the leather community as divided into groups—Dominants, Submissives, Switches, and non-orienting Leathermen—with respect to these variables.

Methods

Procedures

Data for our analyses were collected using an anonymous survey administered at two MSM events: the International Mr. Leathermen Competition (IML) in Chicago, Illinois, and PrideFest in Milwaukee, Wisconsin. Booths were set up and men attending the events were solicited to take the 15-minute survey. Upon completion, participants received \$5.00 cash as compensation.

Participants

This study focused on self-identified Leathermen. Women were not surveyed. The final sample ($N = 1,554$) was comprised of 868 men (55.9%) who completed the survey at IML and 686 men (44.1%) who completed it at PrideFest.

Measures

Leathermen Affiliation

Participants were asked to indicate if, in the past month, they considered themselves part of the leather community. To gauge strength of affiliation, we asked how many leather activities or events participants had attended outside of IML in the past month. Participants also indicated the degree to which the leather community was important to them (1 = not at all important, 5 = very important). To gauge submissive or dominant orientation, we asked participants if they identified with any of the five dominant (i.e., Master, Daddy, Sir, Dom, Top) and/or any of the four submissive (i.e., Slave, Boy, Sub, or Pup) leather-oriented identities. These identities were suggested by a Master who was highly involved in, and strongly affiliated with, the leather community and who served as a consultant to this current research. If the men identified with any or all of the five dominant labels, they were considered Dominants. If they identified with any or all of the four submissive labels, they were considered Submissives. If they identified with any or all of both dominant and submissive labels, they were considered Switches. Men who registered as being part of the leather community but did not select an orientation were considered “non-orienting Leathermen.”

HIV status, HIV testing, and STD testing

HIV status was measured through self-report. Time since diagnosis was assessed in months. We asked, “If you’re HIV-positive, when did you test positive for HIV?” Time since the participant’s “last HIV test” and “last STD test including syphilis” were also assessed and measured in months.

Number of Partners

We separated number of partners by partner type: partners where the participants were (1) receptive or (2) insertive during anal intercourse. Specifically, we asked for number of partners where “you were receptive” and “you were insertive” over the past 90 days. Men who reported never having any casual partners with whom they were receptive ($n = 830$) or insertive ($n = 750$) during anal intercourse

were omitted from the respective analyses. This still left 724 men and 804 men for analysis regarding receptive and insertive anal intercourse, respectively.

Condom Use

Participants were asked, “In the past 90 days, how often did you use condoms during receptive anal intercourse and [as a separate question] insertive anal intercourse with casual male partners?” (0 = I haven’t had this sort of partner in the past 90 days, 1 = never used a condom, 5 = always used a condom). Men who reported never having “had this sort of partner” were omitted from the respective analyses.

Statistical Analysis

The data were analyzed using hierarchical multiple linear, weighted least squares (WLS), binary logistic, and moderated regressions. Cross tabulation was also used in some instances. We weighted (i.e., used WLS regressions) the analyses that featured condom use by number of anal intercourse partners: number of receptive anal partners when testing for receptive anal condom use, and number of insertive anal partners when testing for insertive anal condom use. This was conducted because the variance associated with inconsistent condom users who had few actual anal sex partners was not equivalent to the variance associated with inconsistent condom users who had many actual anal sex partners.

The sample size varied across tests; individuals could report not engaging in behaviors. Hierarchical multiple regression models were used to control for certain key variables. Specifically, we controlled for age and survey location across all tests, which were entered on the first step of all regressions. We also included HIV-status on the second step in all regression models in which condom use was the dependent variable. For some tests, we used moderated regression, in which an interaction term was created by multiplying the given moderator with the independent variable [19]. Variables were entered on different steps of the regression, with controlled variables (steps one and two) entered before the independent and moderator variable. The interaction term was entered last. When an interaction term proved to be significant, we deconstructed the relationship between HIV status and condom use to measure the strength of the association at the different intervals of the leather-oriented moderator. For example, the Leathermen moderator would be broken down into its dichotomous intervals, Leathermen versus non-Leathermen; the Submissive moderator would be broken down into its intervals, Submissives versus non-Submissives.

Results

Sample

As Table 1 shows, the majority of the sample was White and fairly educated. Most men reported being homosexual. We recruited more men from IML because it was a longer event (four vs. two and a half days for PrideFest). Virtually all of the Leathermen (88.5% of *N*) were recruited from the IML event. If PrideFest (a non-leather, MSM event) gave any indication of the size of the naturally occurring leather population, about one in ten MSM was a Leatherman (11.5%). In terms of leather orientation and of those who registered as part of the leather community (*n* = 655), 257 (39.2%) labeled as exclusively dominant, 186 (28.4%) labeled as exclusively submissive, 105 (16.0%) labeled as both dominant and submissive (i.e., Switches), and 107 (16.3%) did not choose any label (i.e., non-orienting Leathermen). These orientations were mutually exclusive. We tested to see if men holding these orientations were more prevalent at IML relative to PrideFest. There were no differences found between Leathermen attending the different events after accounting (i.e., layering in cross tabulation) for the prevalence of Leathermen attending IML relative to PrideFest. Additionally, none of these orientations differed with respect to number of leather events attended. Only one difference emerged: Leathermen who *did not* orient as Dominants, Submissives, or Switches reported finding the leather community less important relative to those that did choose to label, $F(3, 594) = 6.24$, $\eta^2 = 0.03$, $P < 0.001$.

Analyses

HIV Rates

The HIV self-reported prevalence of the entire sample was 18.7%. Table 2 shows the rates of HIV across the different groups. A total of 1512 men reported their serostatus; the following tests described in this paragraph were conducted using the responses from these men. After controlling for age and location, logistic regression revealed that Leathermen were about 61% more likely than Non-Leathermen to be HIV-positive ($P < 0.01$, OR = 1.62, 95% CI = 1.19–2.21). Though the (11%) difference in HIV rates between individuals at the two events was significant (see Table 2, the IML vs PrideFest samples), this relationship was mediated by the correlation between leather identification and being HIV-positive (Sobel test statistic = 3.82, $P < 0.001$). Specifically, Submissives were over two times more likely than non-Leathermen to be HIV-positive ($P < 0.001$, OR =

Table 1 Distribution of variables

Demographic and independent variables	<i>n</i>	% of <i>N</i>
Location		
International Mr. Leatherman competition (IML)	868	55.9
PrideFest	686	44.1
Race/ethnicity		
Asian/Pacific Islander	26	1.7
Black	143	9.2
Hispanic/Latino	105	6.8
Indian (subcontinent)	5	0.3
Middle/Eastern	7	0.5
Native American	17	1.1
White	1180	76.0
Other/Mixed	69	4.4
Education		
Some high school	54	3.5
Finished high school	173	11.1
Some undergraduate	382	24.6
Finished undergraduate	469	30.2
Some graduate	100	6.4
Finished graduate	376	24.2
Sexual orientation		
Homosexual	1382	89.3
Bisexual	86	5.6
Heterosexual	79	5.1
Leather identities		
Master	84	12.8
Daddy	158	24.1
Sir	116	17.7
Dom	106	16.2
Top	216	33.0
Slave	62	9.5
Boy	157	24.0
Sub	159	24.3
Pup	51	7.8
	<i>M</i>	<i>SD</i>
Age	38.39	12.18
Importance of leather community	3.71	0.90
Number of leather events attended (1 month)	1.57	1.54
Number of insertive anal partners	2.02	4.86
Number of receptive anal partners	2.31	6.23

Note: Leather identities were not mutually exclusive. Leather identities were only reported in cases where the participant registered as a member of the leather community. Participants were able to choose more than one identity. Percentages therefore add up to more than 100% for identity. Some of the other percentages may vary due to a small degree of missing data. Sexual orientation was measured by nominal, exclusive choices (i.e., heterosexual, homosexual, or bisexual)

Table 2 HIV rates and last HIV/STD test

Population	HIV rate % of <i>n</i>	Time since diagnosis <i>M</i> (SD)	Last HIV test <i>M</i> (SD)	Last STD test <i>M</i> (SD)
IML sample *	23.88	117.33 (89.67)	11.65 (18.11)	10.51 (16.67)
PrideFest sample	12.86	79.70 (91.72)	11.80 (21.34)	10.75 (20.39)
Leathermen **	27.77	117.27 (94.23)	11.84 (20.79)	9.61 (15.81)
Non-Leathermen	13.33	92.51 (87.02)	11.68 (19.13)	11.29 (19.77)
Non-orienting Leathermen **	31.13	126.00 (92.43)	13.31 (21.86)	10.38 (16.74)
Submissives **	29.73	90.87 (83.66)	12.10 (23.72)	8.89 (16.71)
Switches	26.67	106.23 (113.21)	10.08 (15.21)	10.58 (19.02)
Dominants	23.23	133.07 (96.97)	11.12 (18.28)	8.93 (11.91)

Note: Last HIV test refers only to those who reported being HIV-negative. Last STD test included both serostatuses. All means and standard deviations listed in the last three columns are in months. Greater when compared with the PrideFest sample: * $P < 0.01$. Greater when compared with the reference group, non-leathermen: ** $P < 0.01$

2.19, 95% CI = 1.46–3.26). Non-orienting Leathermen were about two times more likely than non-Leathermen to be HIV-positive ($P < 0.01$, OR = 1.96, 95% CI = 1.18–3.18). The other groups, the Dominants and Switches, were not significantly more likely to be HIV-positive relative to non-Leathermen. No differences were found regarding time since HIV diagnosis between the groups.

Sexual Health Behaviors

To understand why Leathermen and, in particular, some of the leather orientations (e.g., the Submissives) reported higher HIV rates, we explored the sexual behavioral health of the groups.

HIV/STD testing. No significant differences were found between any of the groups listed on Table II and time since their last HIV/STD test.

Condom use. The men “usually” used condoms during receptive ($M = 3.73$, $SD = 1.46$) and insertive ($M = 3.71$, $SD = 1.43$) anal intercourse. Because our previous research showed HIV-positive MSM tend to use condoms with different consistencies [20], we created an interaction term of HIV serostatus by Leathermen, and then HIV serostatus by each orientation of Leatherman. A main effect was found in which combined HIV-negative and HIV-positive Leathermen ($M = 3.59$, $SD = 1.50$) were less likely to use condoms during receptive anal intercourse than non-Leathermen ($M = 3.84$, $SD = 1.41$), $t(597) = -2.24$, $P < 0.001$, $\beta = -0.19$. Furthermore, the HIV serostatus and Leathermen interaction was significant, $t(597) = 3.85$, $P < 0.01$, $\Delta R^2 = 0.02$, $\beta = 0.30$. Subsequent analyses indicated that HIV-positive Leathermen ($P < 0.001$, $\beta = -1.20$) used condoms less than HIV-positive non-Leathermen ($P < 0.001$, $\beta = -0.49$) during receptive anal intercourse (Fig. 1). Turning to insertive anal intercourse, combined HIV-negative and HIV-positive

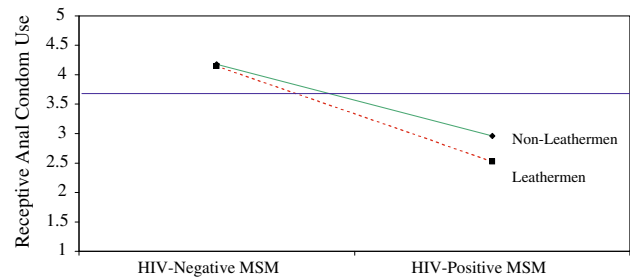


Fig. 1 HIV-status predicting receptive anal condom use by Leathermen affiliation. Note, the x-axis represents HIV-negative compared with HIV-positive men, and the y-axis represents increasing condom use. The horizontal line running across the figure represents the mean for receptive anal condom use. A score of one on the y-axis represents never using condoms. A score of five on the y-axis represents always using condoms

Leathermen ($M = 3.53$, $SD = 1.48$) were less likely to use condoms than non-Leathermen ($M = 3.85$, $SD = 1.37$) during this sort of intercourse, $t(602) = -3.22$, $P = 0.001$, $\beta = -0.29$. No differences were found between HIV-positive Leathermen and HIV-positive non-Leathermen, and insertive anal intercourse.

With respect to leather orientations and receptive anal condom use, combined HIV-negative and HIV-positive Submissives ($M = 3.59$, $SD = 1.55$) were less likely than non-Submissives ($M = 3.76$, $SD = 1.44$) to use condoms, $t(592) = -2.12$, $P = 0.03$, $\beta = -0.19$. No other main effects were found. Regarding serostatus interactions, Fig. 2 shows HIV-positive Dominants ($P < 0.001$, $\beta = -1.42$) were less likely than HIV-positive non-Dominants ($P < 0.001$, $\beta = -0.76$) to use condoms during receptive anal intercourse, $t(592) = 4.59$, $P < 0.001$, $\Delta R^2 = 0.03$, $\beta = 0.48$. HIV-positive Switches ($P < 0.001$, $\beta = -1.76$) were less likely than HIV-positive non-Switches ($P < 0.001$, $\beta = -0.76$) to use condoms during receptive anal

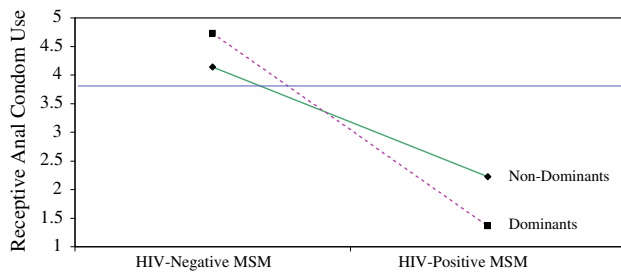


Fig. 2 HIV-status predicting receptive anal condom use by Dominant affiliation. Note, the *x*-axis represents HIV-negative compared with HIV-positive men, and the *y*-axis represents increasing condom use. Though HIV-negative Dominants reported more consistent condom use than HIV-negative non-Dominants, this effect was not statistically significant. The *horizontal line* running across the figure represents the mean for receptive anal condom use. A score of one on the *y*-axis represents never using condoms. A score of five on the *y*-axis represents always using condoms

intercourse, $t(592) = 4.25$, $P < 0.001$, $\Delta R^2 = 0.02$, $\beta = 0.57$ (Fig. 3).

As for leather orientation and insertive anal condom use, combined HIV-negative and HIV-positive Submissives ($M = 3.24$, $SD = 1.62$), $t(597) = -2.03$, $P = 0.04$, $\beta = -0.17$, and combined HIV-negative and HIV-positive Dominants ($M = 3.59$, $SD = 1.47$), $t(597) = -2.25$, $P = 0.02$, $\beta = -0.22$, were less likely than their non-Leather counterparts ($M = 3.77$, $SD = 1.39$) to use condoms. The only significant interaction between leather orientation and HIV-status for insertive condom use is shown by Fig. 4, $t(597) = 2.04$, $P = 0.04$, $\Delta R^2 = 0.01$, $\beta = 0.26$. HIV-positive Submissives ($P < 0.001$, $\beta = -1.18$) used condoms less than HIV-positive non-Submissives ($P < 0.001$, $\beta = -0.71$) during insertive anal intercourse.

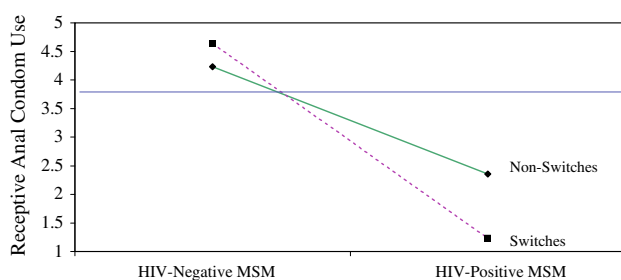


Fig. 3 HIV-status predicting receptive anal condom use by Switch affiliation. Note, the *x*-axis represents HIV-negative compared with HIV-positive men, and the *y*-axis represents increasing condom use. Though HIV-negative Switches reported more consistent condom use than HIV-negative non-Switches, this effect was not statistically significant. The *horizontal line* running across the figure represents the mean for receptive anal condom use. A score of one on the *y*-axis represents never using condoms. A score of five on the *y*-axis represents always using condoms

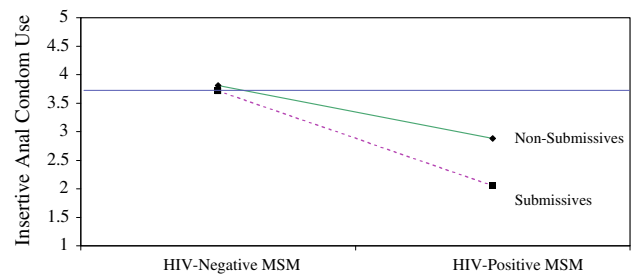


Fig. 4 HIV-status predicting insertive anal condom use by Submissive affiliation. Note, the *x*-axis represents HIV-negative compared with HIV-positive men, and the *y*-axis represents increasing condom use. The *horizontal line* running across the figure represents the mean for insertive anal condom use. A score of one on the *y*-axis represents never using condoms. A score of five on the *y*-axis represents always using condoms

Discussion

An increased likelihood for HIV seroconversion was evident among MSM who self-labeled as Leathermen, particularly in Submissives and Leathermen who chose not to label as any of the orientations. For example, almost one in three Submissives was HIV-positive. Decreased condom use by HIV-positive Leathermen across many of the leather orientations might be a potential reason why HIV infection was so prevalent among this subculture. Yet, this lowered condom use by HIV-positive men was also coupled with lowered condom use by *HIV-negative* Leathermen (specifically, HIV-negative Submissives during receptive anal intercourse and HIV-negative Dominants during insertive intercourse). Risky behavior likely predated seroconversion for many practitioners of S/M behavior [20]. This has consequences. Submissives have been found to pair with Dominants for sexual encounters [4]. Both orientations have been found to tend towards particular penetrative role orientations (Dominants—insertive and Submissives—receptive) [21]. Both orientations also tended towards decreased condom use during these penetrative roles in our sample. These previous and current findings might provide the ideal climate for HIV to spread. Additionally, this would be only exacerbated by the already high degree of HIV within this group.

Some of the leather orientations were found to significantly amplify condom disuse among HIV-positive men, specifically seropositive Dominants and Switches during receptive intercourse and Submissives during insertive intercourse (Figs. 2, 3, 4). This could be a result of the added arousal of taking discordant anal penetrative roles by men already HIV-positive. As mentioned, Dominants and Submissives tend to have preferred penetrative roles. The disuse of condoms for such HIV-positive men might facilitate anal intercourse during role discordant sex (i.e., contribute to a sustained erection, increase the erotic

value of the experience). However, this speculation fails to explain why the intrinsically versatile, HIV-positive Switches would use condoms disproportionately less during receptive anal intercourse. It might be that such behavior is a response to their partner's wishes. Alternatively, it might be that seropositive Switches ultimately prefer to be, or behave more like, Dominants than Submissives. Condom disuse might facilitate anal intercourse for them and increase its erotic value.

Serostatus aside, sexual power seemed involved, to some degree, with decision-making about condom use in the leather population. The exact explanation for this remains unclear. One potential reason may be that Submissives who tend to be highly sexually submissive may relinquish the choice to use or not use condoms to their Dominants. Condom use may be a component of submission where communication or input by the Submissive would be a violation of the relationship and would suggest free will. Complementarily, Dominants who tend to be highly sexually dominant may strip the power to use/not use condoms from their Submissives as part of the sexual ritual. Condom use may be incompatible with the power dynamics adopted by Submissives and Dominants.

In addition, lowered condom use may be a function of the interplay between the Dominant, the Submissive, and the semen itself. That is, the idea of being “bred” (the internal reception of ejaculate) may be appealing for Submissives who are highly sexually submissive and Dominants who are highly dominant. In other literature [5, 22] that explores condom eschewal and barebacking, semen deposition and reception is viewed as an act of domination or submission. To take the semen of another is to accept his will and authority; the Dominant leaves his mark. Conversely, to inseminate another is to force will and authority on another; the Submissive is marked. This allure may be compounded when a Submissive is being “used” by multiple Dominants at the same time [23]. Further research is needed to explore this and other potential reasons for condom disuse.

Our research was not without limitations. Our creation of the “Switch” identity from those who selected both dominant and submissive labels may have inaccurately reflected the orientations of such participants. The use of only one leather community consultant, who happened to be a Dominant (a Master), may have provided us with limited insight. However, these associations were supported by a significant amount of literature [4, 7, 9, 17]. In these articles, Leathermen are documented as actively recognizing the association between orientations and categorizations (e.g., a Master who does not take on any submissive orientations is a Dominant in the leather community). Similarly, the literature cites Switches as those who admit to taking on either dominant (e.g., DOM) or submissive (e.g., BOY) roles depending on their partners and situations. As

for environmental factors, the venues themselves may have affected the validity of the responses by influencing the men's psychosexual arousal. IML is admittedly a sexually charged event replete with male nudity. The men may have unconsciously exaggerated the number of partners they had accrued. Other studies might circumvent this limitation by assessing Leathermen in less sexually charged venues.

One additional limitation that was unforeseen during the creation of our protocol concerned dynamics within the population of Leathermen—most notably Dominants and Submissives that approached our survey booth as a pair (e.g., the Master and his Slave, the Master and his Pup, the Daddy and his Boy). It has been documented that Submissives relinquish their will to their Dominants [4, 8, 16]. As it were, this includes the decision to take an institutional survey on sexual health. On several occasions Dominants denied their Submissives the choice to take the survey *or* to abstain from taking the survey. In one instance, a Master forced his Pup to lie down on the floor next to the chair and wait while the Master slowly completed the survey. We cannot know the exact implications of the extension of dominance and submission into the realm of survey participation. We cannot know if those who were forbidden to take our survey were different than Submissives who did take it. Furthermore, if this sort of domination was applied to something as benign as survey participation, we cannot begin to predict the amenability of these extreme Dominants and their Submissives towards cooperative sexual health decision-making. Past research [24] has explored the role of extreme domination and submission in everyday life. Additional research is needed to address the sexual health of Submissives who relinquish *all* decision-making abilities.

This is but one area for future research. There are clearly other questions and areas of research that our study encourages. For example, we only explored the MSM population. A heterosexual leather community exists and practices S/M [25]. Heterosexual men and women in their leather communities may very well use condoms with different consistencies, particularly when compared against their non-Leather counterparts. Additionally, we did not explore sexual communication in this study (e.g., HIV disclosure). Others might confirm whether such communication occurs less frequently among Submissives or if such talk is potentially taboo. Given its disproportionately high HIV rate and inconsistent condom use, this community might benefit from increased epidemiological scrutiny. Sexually transmitted infections also might be impacting the MSM leather community with more frequency. As we demonstrated, the self-imposed, added layer of domination and submission makes health outcomes substantially more difficult to predict. Simply, the sexual and non-sexual health of this community is just beginning to be understood.

Few MSM (11.5%) are part of the leather community. Yet, this should not diminish the significance of our results. This is a subculture of MSM that is widely recognized by the greater MSM population. Furthermore, our findings suggested that non-Leathermen communities might not be discrete from leather community: Our data indicated that about 25% percent of those taking our survey at IML were non-Leathermen. Thus, there is the potential for non-Leather and Leathermen to engage in sexual intercourse. Considering these populations have a different rate of HIV and tend to use condoms with different consistencies, HIV-negative men who engage in intercommunity sex may be at an even more elevated risk for HIV infection. Our conclusion is not intended to judge such sex partner decisions or Leathermen in general. However, our recommendation is for heightened awareness of the risks associated with such sex, especially unprotected anal intercourse with sero-uncertain Submissives and non-orienting Leathermen.

The leather community is a high-risk population for negative sexual health outcomes. Yet, it remains unclear what sort of intervention or program might be effective at increasing condom use, awareness of sexual health, and concern about HIV transmission/acquisition. The leather identity is built on masculinity, hypermasculinity, submission, and dominance. These constructs are fundamentally antithetical to risk reduction: The hypermasculine man does not protect himself from harm; he encourages it [14]. A culturally focused intervention directed by researchers, yet led by activist Leathermen may be one way to evoke change. The appeal is not at the individual level, but at the community level, where the shared values and norms that govern individual behavior could be addressed and changed to accommodate—at a minimum—awareness about HIV prevention. This might be accomplished through popular opinion leadership or social network-based interventions, particularly given the tight-knit nature of leather groups. The promotion of positive sexual health values and behaviors as compatible with the leather identity is an important step toward the reduction of HIV transmission within this community.

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