

# Third Parties (Venue Owners, Managers, Security, etc.) and Access to Occupational Health and Safety Among Sex Workers in a Canadian Setting: 2010–2016

Bronwyn McBride, MPH, Shira M. Goldenberg, PhD, Alka Murphy, Sherry Wu, Melissa Braschel, MSc, Andrea Krüsi, PhD, and Kate Shannon, PhD

**Objective.** To determine the impact of engagement with third parties (i.e., managers, receptionists, or owners of in-call venues; advertisers; security; spotters; and others) on sex workers' occupational health access.

**Methods.** We drew longitudinal data from An Evaluation of Sex Workers' Health Access, a community-based cohort of more than 900 women sex workers. We used multivariable logistic regression and generalized estimating equations to (1) examine factors correlated with accessing third-party administrative or security services and (2) evaluate the impact of third-party services on access to mobile condom distribution and sex worker and community-led services (2010–2016). Finally, we evaluated changes in accessing third-party services pre–post end-demand criminalization (2010–2017).

**Results.** Im/migrant sex workers (persons with any type of legal status who were born in another country; adjusted odds ratio [AOR]=2.32; 95% confidence interval [CI]=1.35, 3.98) had higher odds of accessing third-party services. In confounder models, third-party services were independently correlated with increased access to mobile condom distribution (AOR=1.84; 95% CI=1.47, 2.31) and sex worker and community-led services (AOR=1.61; 95% CI=1.15, 2.24). End-demand criminalization was linked to a decrease in access to third-party services (AOR=0.79; 95% CI=0.63, 0.99).

**Conclusions.** This research suggests that access to administrative and security services from third parties increases sex workers' occupational health and safety. Policy reforms to ensure sex workers' labor rights, including access to hiring third parties, are recommended. (*Am J Public Health.* 2019;109:792–798. doi:10.2105/AJPH.2019.304994)

**G**lobally, sex workers continue to face severe health disparities, with disproportionate burdens of violence, HIV, and sexually transmitted infections (STIs) that vary substantially by work environment and policy contexts.<sup>1,2</sup> In criminalized settings, sex workers face physical and sexual workplace violence<sup>1–3</sup> and other rights violations that prevent access to health and safety resources.<sup>1</sup> A global comprehensive review has demonstrated that safer work environments and community-led supports can play a key role in promoting sex workers' health, safety, and human rights.<sup>4</sup>

A critical component of sex work environments are third parties, including managers, receptionists, or owners of in-call venues (e.g., massage parlors); advertisers; bookkeepers; security; spotters, drivers; and others. Globally, public discourse and media

portrayals shape homogenous representations of third parties as exploitative “pimps” and “parasites”<sup>5,6</sup> who coerce sex workers and profit from their labor. This discourse also informs legal strategies addressing third parties in sex work: pimping, procuring, brothel ownership, and brothel management were criminalized across 80 countries in 2012.<sup>7</sup> However, evidence suggests that third parties are heterogeneous, with involvement ranging from exploitative and coercive to protective and supportive,<sup>8</sup> and in criminalized settings where sex workers do not have access to workplace protections as in other industries, the nexus of power and control between sex workers and third parties varies considerably.<sup>5</sup> Furthermore, growing social science research and epidemiological evidence suggest that third parties can play an important role in mediating sex workers' access to occupational health and labor protections.<sup>5,9–11</sup>

In a 2015 metasynthesis of sex worker narratives, access to supportive third parties was identified by both indoor and street-based sex workers as a critical facet of HIV prevention.<sup>8</sup> However, third parties' ability to support sex workers depends on macro-structural determinants such as policy environments, and criminalized conditions constrain third parties from offering security protections or distributing condoms within in-call venues.<sup>8,12–14</sup> Despite calls for further

## ABOUT THE AUTHORS

All of the authors are with the Centre for Gender and Sexual Health Equity, Vancouver, BC. Bronwyn McBride is also with the Interdisciplinary Studies Graduate Program, University of British Columbia, Vancouver. Shira M. Goldenberg is also with the Faculty of Health Sciences, Simon Fraser University, Burnaby, BC. Kate Shannon is also with the Faculty of Medicine, University of British Columbia, Vancouver.

Correspondence should be sent to Kate Shannon, Centre for Gender and Sexual Health Equity, 1190 Homby St, Vancouver, BC, V6Z2K5 Canada (e-mail: dr.shannon@ggshe.ubc.ca). Reprints can be ordered at <http://www.ajph.org> by clicking the “Reprints” link.

This article was accepted January 15, 2019.

doi: 10.2105/AJPH.2019.304994

mixed-methods research exploring third parties' heterogeneous roles,<sup>5,8</sup> current epidemiological research has largely explored managerial engagement as a binary variable and little research has examined how various third-party interactions shape workers' occupational health access, particularly in criminalized settings.

In Canada, third parties have historically been criminalized through several federal laws, most notably living on the proceeds of another's prostitution.<sup>15</sup> After these laws were found unconstitutional for violating sex workers' security of person, following a global wave of end-demand criminalization, Canada enacted similar end-demand legislation (known as Protection of Communities and Exploited Persons Act [PCEPA]) in 2014. The PCEPA leaves the sale of sex services legal while introducing new laws to criminalize clients and upholding the criminalization of all third parties (e.g., sex work venue owners, managers) who gain material benefits from the sale of sex services,<sup>16</sup> regardless of whether they provide health or security supports to workers.<sup>16</sup>

Recent qualitative research suggests that law enforcement efforts targeting third parties in in-call venues have increased,<sup>17</sup> with uncertain implications for indoor sex workers. Importantly, im/migrant<sup>1</sup> sex workers in Canada<sup>18</sup> work largely in managed in-call venues,<sup>18,19</sup> may be more likely to access third-party services to counter marginalization related to immigrant status (i.e., language barriers),<sup>17</sup> and face health and social inequities attributable to isolation, racism, and stigma.<sup>19,20</sup> (Because the term "migrant sex worker" is often perceived to refer to persons who do not hold citizenship or permanent residency [i.e., undocumented sex workers or those on temporary visas], community-based organizations locally<sup>18</sup> suggest "im/migrant sex worker" as a term that is more inclusive of the diversity of persons [regardless of legal status] who were born in another country and now work in sex work in Canada.)

However, little is known about im/migrant sex workers' interactions with third parties or links to occupational health supports, particularly within the current policy environment. This is concerning given that Canadian end-demand legislation conflates sex work (consensual exchange of sex services) with violence and sex trafficking (forced sexual labor).<sup>16</sup> Sex work also

remains doubly criminalized for some im/migrant workers: Canadian immigration laws prohibit all open work permit holders and all temporary residents from working for any employer who offers sexual services.<sup>21</sup>

The intersection of prohibitive im/migration policies and end-demand legislation render in-call sex-work venues employing racialized women susceptible to heightened scrutiny from authorities. Recent anti-trafficking raids on sex-work venues across Canada have resulted in manager arrests and deportations of im/migrant workers.<sup>17</sup> In Vancouver, British Columbia, in-call managers have limited workers' access to condoms to minimize the likelihood of having condoms seized as evidence during a police inspection; some have altogether prohibited outreach workers from delivering condoms and HIV and STI testing, fearing criminal prosecution.<sup>12,19</sup> This evidence suggests that further research is urgently needed to assess how laws restricting third-party involvement have an impact on occupational health access among sex workers and particularly im/migrant women.

Seminal social science work by Bruckert et al. has provided empirical evidence on sex industry labor organization and the wide range of sex worker-third-party relationships in Canada.<sup>5,22</sup> However, epidemiological data on how third-party support services (i.e., administrative or security) shape occupational health access and safety remain scant.<sup>5,8</sup> The continued criminalization of third parties (and particularly owners or managers of in-call venues) offers an opportunity to examine how sex workers' occupational health access relates to engagement with third-party services. Drawing on 6 years of community-based cohort data, we aimed to prospectively explore (1) factors correlated with access to third-party administrative or security services and (2) impact of access to third parties on access to mobile condom distribution and sex worker and community-led services (2010–2016). Finally, we examined any changes in accessing third-party services before (2010–2013) and after (2015–2017) law reform.

## METHODS

We drew longitudinal data from a community-based open prospective cohort,

An Evaluation of Sex Workers' Health Access (AESHA), which initiated recruitment in 2010 and is based on community collaborations since 2005. Eligibility criteria include identifying as a woman (cisgender or transgender), having exchanged sex for money in the last month, and providing written informed consent. Time-location sampling was used to recruit women aged 14 years and older through day and late-night outreach to outdoor locations (e.g., streets, alleys), in-call venues (e.g., massage parlors, microbrothels), out-call venues (e.g., hotels, bars), and online solicitation spaces across Metro Vancouver. Since inception, women with lived experience (current or former sex workers) have been hired throughout the project, from interviewers and outreach workers and sexual health research nurses to coordinators.

After informed consent, participants completed interviewer-administered questionnaires in English, French, Spanish, Cantonese, or Mandarin at baseline and semiannual follow-up visits. The primary questionnaire elicited responses on socio-demographics, work environments, and structural factors, and the clinical component elicits responses on health access and outcomes. All participants received CA \$40 at each biannual visit.

We used a structural determinants framework<sup>23</sup> to explore how macrostructural factors (e.g., sex work criminalization, migration) influence work environment factors (e.g., managerial practices, venue policies) and the impact of these interactions on sex workers' health and labor rights. While evidence suggests that sex workers can face poor working conditions (e.g., workplace violence, policing, unsafe venues),<sup>10,11</sup> studies have also shown that supportive formal work environments can enhance access to health services, HIV prevention, and protection against violence.<sup>8,24</sup>

## Primary Variable

We explored 2 measures of third-party services in this study. We used a time-updated measure to examine access to administrative and security third-party services (commonly reported services utilized by sex workers in Canada<sup>5</sup>) in the last 6 months at each semiannual visit. As evidence suggests that supportive third parties can enhance sex workers' working conditions across both indoor and

outdoor workspaces,<sup>4,5,8,10,25</sup> we examined third-party services in both environments. Administrative services included 1 or more of arranging or booking dates, arranging where the worker will pick up or take clients, collecting room or booking fees, negotiating fees for services, negotiating condom use with clients, collecting fees from clients (indoor only), and managing income for the worker. Security services included 1 or more of screening clients, signing clients in at a front desk or collecting IDs (indoor only), and providing protection from police and aggressors.

We also used a broader measure capturing engagement with any third parties (defined as paying any type of third party) to assess changes in overall access to third parties before and after law reform.

## Independent Variables

We explored variables of interest at individual, interpersonal, workplace, and structural levels. Individual-level time-fixed variables included age, identifying as a gender or sexual minority or both (gay, lesbian, bisexual, two-spirit, asexual, transgender, transsexual, intersex, genderqueer, or other vs cisgender and heterosexual), and Indigenous (First Nations, Metis, or Inuit) identity. Time-fixed structural factors included high-school completion (vs less than high school) and im/migrant status (vs Canadian-born). All other variables were time-updated at each semiannual follow-up (examining events during the past 6 months). Individual factors included noninjection substance use (e.g., cocaine, crystal meth; excluding cannabis and alcohol use) and soliciting in isolated areas; interpersonal factors included average number of clients per month and seeing mostly regular versus mostly new clients. Structural and work environment factors included unstable housing (any stays in single-room occupancy hotels or supportive housing), primary place serving clients (informal indoor venue [e.g., bar, hotel] or formal in-call venue [e.g., massage or beauty parlor, microbrothel] vs outdoor or public space [e.g., street, car]), number of condoms carried per shift, experiencing physical or sexual violence from clients or aggressors posing as clients (e.g., sexual assault, rape, being strangled, beaten, locked or trapped in a car or room, assaulted

with a weapon, drugged, or kidnapped), experiencing verbal harassment from community residents or business owners near the workplace, and workplace social cohesion (assessed through the Social Cohesion Scale, a multi-item index measuring levels of trust within a community, which has been validated among sex workers in our setting<sup>26</sup>). A final structural variable was the post-law reform time period (2015–2017 vs 2010–2013). End-demand legislation was introduced in 2014; therefore, we dropped the year 2014 from analyses because of variation in how the laws may have been enforced. We also excluded the first 3 months of 2015 to account for exposure measures referring to the preceding 6 months.

## Occupational Health and Safety Outcomes

We considered 2 time-updated health and safety outcomes in separate confounder models. We defined accessing mobile condom distribution as the participant receiving most (75%–100%) condoms from mobile outreach, and we defined accessing sex worker and community-led services as using any sex worker-specific services (e.g., drop-in spaces).

## Statistical Analyses

We constructed an explanatory model to identify variables associated with accessing administrative or security services over the 6-year study (2010–2016). We calculated descriptive statistics, stratified by access to administrative or security services, and we assessed differences with the Mann–Whitney test for continuous variables and Pearson  $\chi^2$  test (or Fisher exact test for small cell counts) for categorical variables. We conducted bivariate and multivariable analyses by using logistic regression with generalized estimating equations (GEEs) and an exchangeable correlation matrix to account for correlation between repeated observations on the same individual. We considered variables for which  $P < .10$  in bivariate analyses for inclusion in a multivariable model. We used a manual backward model selection process to identify the most parsimonious model with the best fit, as indicated by the lowest quaslikelihood under the independence model criterion. We performed analyses in SAS version 9.4 (SAS

Institute, Cary, NC), and all  $P$  values are 2-sided.

Subsequently, we constructed 2 multivariable GEE confounder models to examine the independent effect of accessing administrative or security third-party services on access to (1) mobile condom distribution and (2) sex worker and community-led services, respectively. We considered all potential confounders identified through the explanatory model process in the full models. We used the variable selection process by Maldonado and Greenland<sup>27</sup> to remove confounders in a stepwise manner; we systematically excluded those that altered the association of interest by less than 5% from the model.

Using updated data (January 2010–August 2017), we conducted bivariate GEE analysis comparing access to any third-party services before (2010–2013) versus after (2015–2017) PCEPA law reform. We subsequently constructed a multivariable GEE confounder model to examine the independent effect of the post-PCEPA law reform period on access to third parties, adjusting for confounders identified in our explanatory model.

## RESULTS

Analyses of access to third-party administrative or security services included 816 sex workers who contributed 3480 observations. The median number of follow-up visits was 3 (interquartile range [IQR] = 1–7).

Participants' median age was 35 years (IQR = 28–42). A total of 770 (94.4%) identified as cisgender women, and 45 (5.5%) identified as trans women. Of the participants, 38.6% were Indigenous, and 28.4% were im/migrants to Canada. With regard to work location, 39.0% worked primarily in outdoor spaces, 27.7% in informal indoor spaces (e.g., apartments), and 30.4% in managed in-call venues (Table 1).

Over the 6-year study, 29.5% ( $n = 241$ ) accessed administrative or security services, contributing 385 events (Table 1). The top 2 third-party services accessed by sex workers related to both on- and off-street work environments: 55.6% engaged a third party for protection from aggressors, and 42.3% for arranging dates or pickup locations. Furthermore, 39.8% had a third party collect

**TABLE 1—Baseline Individual and Structural Factors Stratified by Access to Third-Party Administrative or Security Services Among Sex Workers: An Evaluation of Sex Workers' Health Access; Metro Vancouver, British Columbia; 2010–2016**

Characteristic	Total, No. (%) or Median (IQR)	Accessed Third-Party Administrative or Security Services <sup>a</sup>		P
		Yes (n = 54), No. (%) or Median (IQR)	No (n = 762), No. (%) or Median (IQR)	
<b>Individual factors</b>				
Age, y	35.0 (28.0–42.0)	29.5 (23.0–38.0)	35.0 (28.0–42.0)	< .001
Indigenous vs non-Indigenous	315 (38.6)	19 (35.2)	296 (38.9)	.59
Gender or sexual minority or both <sup>b</sup>	252 (30.9)	20 (37.0)	232 (30.5)	.31
Noninjection drug use <sup>a</sup>	548 (67.2)	33 (61.1)	515 (67.6)	.32
Average number of clients per month <sup>a</sup>	48.0 (20.0–80.0)	78.0 (30.0–90.0)	45.0 (20.0–80.0)	.005
All or most clients were regulars <sup>a</sup>	189 (23.2)	12 (22.2)	177 (23.2)	.87
<b>Structural determinants</b>				
Completed high school	439 (53.8)	29 (53.7)	410 (53.8)	.99
Im/migrant to Canada <sup>c</sup>	232 (28.4)	15 (27.8)	217 (28.5)	.91
Unstable housing <sup>a</sup>	635 (77.8)	42 (77.8)	593 (77.8)	.99
Primary place servicing clients <sup>a</sup>				
Outdoor or public space	318 (39.0)	16 (29.6)	302 (39.6)	
Informal indoor venue (e.g., bars, hotels, out-call)	226 (27.7)	12 (22.2)	214 (28.1)	
In-call sex work venue (e.g., massage parlor, microbrothel)	248 (30.4)	25 (46.3)	223 (29.3)	.036
Services access and utilization				
Accessed sex worker and community-led services <sup>a</sup>	476 (58.3)	26 (48.2)	450 (59.1)	.12
Number of condoms carried per shift <sup>a</sup>	6.0 (4.0–10.0)	6.5 (3.0–15.0)	6.0 (4.0–10.0)	.90
Most condoms come from mobile outreach <sup>a</sup>	257 (31.5)	20 (37.0)	237 (31.1)	.48
Threatened or verbally assaulted by community residents or business owners <sup>a</sup>	106 (13.0)	6 (11.1)	100 (13.1)	.67
Physical or sexual violence from clients <sup>a</sup>	153 (18.8)	20 (37.0)	133 (17.5)	< .001
Community empowerment (standardized social cohesion score) <sup>a,d</sup>	0.18 (–0.55–0.91)	0.42 (–0.43–0.91)	0.18 (–0.55–0.91)	.57

Note. The total sample size was n = 816.

<sup>a</sup>In the last 6 mo.

<sup>b</sup>Gay, lesbian, bisexual, two-spirit, asexual, transgender, transsexual, intersex, genderqueer, or other.

<sup>c</sup>Because the term “migrant sex worker” is often perceived to refer to persons who do not hold citizenship or permanent residency (i.e., undocumented sex workers or those on temporary visas), community-based organizations locally<sup>18</sup> suggest “im/migrant sex worker” as a term that is more inclusive of the diversity of persons (regardless of legal status) who were born in another country and now work in sex work in Canada.

<sup>d</sup>Standardized with mean = 0 and standard deviation = 1.

a room or booking fee from clients, and 21.6% had a third party provide protection from police.

In multivariable GEE analysis (Table 2), participants who were im/migrants (adjusted odds ratio [AOR] = 2.32; 95% confidence interval [CI] = 1.35, 3.98), worked in formal in-call venues (AOR = 3.41; 95% CI = 1.89, 6.15), and experienced recent physical or sexual violence from clients (AOR = 2.07; 95% CI = 1.41, 3.04) had higher odds of accessing administrative or security services.

In separate multivariable GEE confounder models, accessing administrative or security

services was independently correlated with accessing mobile condom distribution (AOR = 1.84; 95% CI = 1.47, 2.31) and sex worker and community-led services (AOR = 1.61; 95% CI = 1.15, 2.24), after we adjusted for key confounders (age, average number of clients per month, Indigeneity, primary place servicing clients, im/migrant status, any physical or sexual violence, and unstable housing).

In multivariable GEE analysis, the post-PCEPA period (2015–2017) was independently correlated with decreased odds of accessing third-party services

(AOR = 0.79; 95% CI = 0.63, 0.99), after we adjusted for the same key confounders as the previous models.

## DISCUSSION

In this study, we found that nearly one third (29.5%) of sex workers in Metro Vancouver accessed administrative or security third-party services over the 6-year study, with a significant decline in access to third parties after end-demand law reform. Third-party administrative and security

**TABLE 2—Generalized Estimating Equations Analysis of Correlates of Access to Third-Party Administrative or Security Services Among Sex Workers: An Evaluation of Sex Workers' Health Access; Metro Vancouver, British Columbia; 2010–2016**

Characteristic	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
<b>Individual factors</b>		
Age, per year older	0.98 (0.97, 1.00)	0.98 (0.96, 1.00)
Indigenous (yes vs no)	0.33 (0.24, 0.44)	
Gender or sexual minority or both <sup>a</sup>	0.66 (0.48, 0.89)	
Noninjection drug use <sup>c</sup> (yes vs no)	0.40 (0.31, 0.51)	
All or most clients were regulars <sup>b</sup> (yes vs no)	0.60 (0.47, 0.77)	0.71 (0.52, 0.98)
<b>Structural determinants</b>		
Completed high school (yes vs no)	2.27 (1.70, 3.02)	
Im/migrant <sup>c</sup> (vs Canadian-born)	4.62 (3.50, 6.08)	2.32 (1.35, 3.98)
Primary place servicing clients <sup>b</sup>		
Informal indoor venue (e.g., bars, hotels, out-call vs outdoor or public space)	0.95 (0.69, 1.32)	1.13 (0.78, 1.64)
In-call sex work venue (e.g., massage parlor, microbrothel vs outdoor or public space)	5.38 (3.92, 7.39)	3.41 (1.89, 6.15)
Physical or sexual violence from clients <sup>b</sup>	1.34 (1.00, 1.81)	2.07 (1.41, 3.04)
Community empowerment (standardized social cohesion score <sup>b,d</sup> [continuous])	1.19 (1.06, 1.34)	

Note. CI = confidence interval; OR = odds ratio. The total sample size was  $n = 816$ .

<sup>a</sup>Gay, lesbian, bisexual, two-spirit, asexual, transgender, transsexual, intersex, genderqueer, or other vs cisgender and heterosexual.

<sup>b</sup>Time-updated measures (serial measures at each study visit using last 6 mo as reference point).

<sup>c</sup>Because the term "migrant sex worker" is often perceived to refer to persons who do not hold citizenship or permanent residency (i.e., undocumented sex workers or those on temporary visas), community-based organizations locally<sup>18</sup> suggest "im/migrant sex worker" as a term that is more inclusive of the diversity of persons (regardless of legal status) who were born in another country and now work in sex work in Canada.

<sup>d</sup>Standardized with mean = 0 and standard deviation = 1.

services had an independent effect on increased odds of accessing mobile condom distribution and sex worker and community-led services. This research adds critical epidemiological evidence to social science literature, suggesting that accessing supportive third-party services may facilitate sex workers' linkage with occupational health and safety supports. Furthermore, im/migrant workers, those in in-call venues, and those experiencing violence from clients or aggressors had significantly higher odds of accessing administrative or security services, suggesting that the continued criminalization of third parties for material benefits (e.g., hiring or paying a portion of your sex work fee to a third party) under Canadian end-demand legislation may restrict protective supports and exacerbate social inequities among these groups. These findings provide

empirical evidence countering homogenous representations of third parties in sex work and are relevant to legal discussions regarding the role of third parties and enhancing sex workers' health and rights.

We found that im/migrant sex workers had more than 2-fold greater odds of accessing third-party services relative to Canadian-born workers, raising concerns about the impact that third-party criminalization may have on their access to occupational health supports. Previous research suggests that im/migrant sex workers in Canada work largely indoors<sup>19</sup> and face structural vulnerabilities including low language proficiency, social isolation, and barriers to health care and legal protections.<sup>18–20</sup> Of concern, the continued criminalization of third parties in Canada is informed by the conflation of sex work with sex trafficking<sup>5,18</sup>: rhetoric about im/migrant sex

trafficking appears in the tenets of current end-demand legislation and its explicit framing of third parties as unilaterally exploitative.<sup>16</sup> However, broad representations of im/migrant sex workers as vulnerable to third-party abuse contrast with evidence that most im/migrant sex workers in Canada are legal im/migrants with no experience of trafficking or exploitation,<sup>18,28</sup> yet who may engage in sex work because of its relative flexibility and higher pay in the context of experiencing barriers to formal labor opportunities, economic marginalization, and discrimination.<sup>17,19,29</sup> In these circumstances, the ability to pay a third party for a service (e.g., a work venue, advertising)—an ability exercised freely among Canadians in other occupations—is an important labor right and may be particularly salient for marginalized im/migrant workers. The ongoing criminalization of third parties in sex work, regardless of whether they act coercively or supportively, restricts the ability of im/migrant and in-call sex workers to access third-party services as they see fit, thereby denying adult women the agency of making livelihood decisions in their own best interests.<sup>29</sup>

## Public Health Implications

Our findings linking third-party administrative and security services (e.g., protections from violence) with access to condoms and sex worker and community-led services contrast against laws based on dominant representations of exploitative third parties. Our results build on widening evidence linking supportive managerial or third-party supports with sex workers' ability to negotiate the terms of their transactions and ensure access to sexual health resources, particularly in in-call spaces.<sup>8,25</sup> In a study among female brothel managers in India, 83% reported providing education on how to put a condom on a male client, and 77% reported always having condoms available.<sup>30</sup> Similarly, a study in the Philippines found that having management trained in HIV and STI prevention (including providing educational materials to workers and clients and ensuring condom availability) significantly increased consistent condom use and HIV testing uptake among workers,<sup>31</sup> while research in China found that sex workers who received managerial

protection (against violence and being underpaid or unpaid) were more likely to successfully negotiate condom use with clients.<sup>10</sup>

Limited research involving sex workers in Canada has shown working in in-call venues to be strongly associated with reduced HIV and STI prevalence and enhanced condom use, with increasing supports where sex workers themselves are managers.<sup>12</sup> Furthermore, where police enforcement use condoms as evidence of criminal sex work activity, many venue managers report limited ability to support access to condoms onsite or sexual health education out of fear of being targeted by police raids, and have even denied sex worker-led outreach services from bringing sexual health resources and testing to venues.<sup>12,19</sup> Our finding of reduced odds of accessing third-party services after law reform is concerning given evidence that third parties who provide administrative and security supports in in-call spaces often facilitate sex workers' ability to access sex worker-led outreach services and safely negotiate client condom use. This evidence suggests that policies aiming to enhance sex workers' occupational health should enable the operation of formal in-call workspaces and support their management in providing administrative support and security protections against violence—activities that remain criminalized under end-demand legislation.

Participants who faced physical or sexual violence or both from clients had 2-fold higher odds of accessing third-party services. Although this association could suggest that those who accessed third-party services were more likely to experience violence, strong evidence from the Canadian context unequivocally suggests that individuals choose to work with third parties in indoor environments for protection against violent perpetrators.<sup>5,17,32,33</sup> Managed indoor spaces have been cited by sex workers across continents as offering greater protection and control over terms of service relative to street-based work.<sup>8,34</sup>

Our findings linking experiencing physical or sexual client violence with accessing third-party services and working in formal in-call venues contrast against Canadian end-demand legislation, which aims to exempt individuals who provide protective services to sex workers from criminalization, while explicitly criminalizing all third-party

activities in in-call venues.<sup>16</sup> This discretionary delineation illustrates this legislation's prescriptive nature: it effectively suggests that it is not possible for third parties in formal in-call venues to be providing protective services to sex workers, despite research evidence and this study's findings, which suggest otherwise.

Furthermore, the sweeping criminalization of third parties disregards the highly variable contextual factors around the services provided and sex workers' own decisions on whether a third party's actions are coercive. It is concerning that recent evidence suggests that third-party criminalization and resulting policing efforts promote harmful managerial practices (e.g., managers restricting condom access and health outreach services), thereby undermining workers' access to health and safety.<sup>12</sup> Research on the many security supports associated with third parties in indoor spaces<sup>5,8,10,14</sup> suggests that criminalizing third parties restricts sex workers' ability to work with others to enhance their own safety, which is a labor and human rights violation and may exacerbate experiences of violence.

## Strengths and Limitations

Despite growing evidence on the protective qualities of supportive indoor workplaces in Canada,<sup>5,11,34</sup> as globally, this is among the first longitudinal epidemiological studies we are aware of to examine how access to third-party services impacts sex workers' occupational health and safety access. A limitation is that our analyses identified only associations (i.e., causality and directionality cannot be inferred) and relied on self-reported data, which may be subject to recall, social desirability, and misclassification biases; however, the community-based nature of this research is likely to mitigate social desirability bias.

## Conclusions

This study provides prospective epidemiological data over 6 years on the impact of third-party services on sex workers' occupational health and safety access. This evidence contradicts end-demand legislation in Canada and globally that continues to criminalize third-party activities, which may inadvertently exacerbate—rather than alleviate—health inequities and barriers to

occupational health and safety faced by both im/migrant and non-im/migrant sex workers. In line with international institutions Amnesty International and UNAIDS who have called to repeal all laws that criminalize any aspect of the sex industry,<sup>2,13</sup> our findings indicate urgent health and safety needs for policy reforms to full decriminalization in Canada toward ensuring health access and labor rights for all sex workers, including the right to hire or engage with third-party services. **AJPH**

## CONTRIBUTORS

B. McBride, S. M. Goldenberg, and K. Shannon conceptualized and designed the study. B. McBride, S. M. Goldenberg, M. Braschel, and K. Shannon contributed to the interpretation and analysis of data. B. McBride prepared the first draft of the article. S. M. Goldenberg, A. Murphy, S. Wu, M. Braschel, A. Krüsi, and K. Shannon contributed critical feedback and edits to article drafts. All of the authors approved the final article.

## ACKNOWLEDGMENTS

This study was funded by the US National Institutes of Health (NIH; R01DA028648), a Canadian Institutes of Health Research (CIHR) Foundation grant, and MacAIDS. S. M. Goldenberg is partially supported by NIH and a CIHR New Investigator Award. K. Shannon is partially supported by a Canada Research Chair in Global Sexual Health and HIV/AIDS and NIH.

The authors wish to thank all who contributed their time and expertise to this project, particularly participants, An Evaluation of Sex Workers' Health Access (AESHA) community advisory board members and partner agencies, and the AESHA team, including Sarah Moreheart, Jennifer Morris, Brittany Udall, Jane Li, Sylvia Machat, Rachel Nicoletti, Emily Leake, Anita Dhanoa, Jenn McDermid, Tave Cole, and Jaime Adams. We also thank Abby Rolston, Peter Vann, Erin Seatter, and Patricia McDonald for research and administrative support.

## CONFLICTS OF INTEREST

The authors have no conflicts of interest to report.

## HUMAN PARTICIPANT PROTECTION

The study holds ethical approval through Providence Health Care/University of British Columbia Research Ethics Board.

## REFERENCES

- Deering KN, Amin A, Shoveller J, et al. A systematic review of the correlates of violence against sex workers. *Am J Public Health*. 2014;104(5):e42–e54.
- UNAIDS. Sex workers. In: *The Gap Report*. 2014. Available at: [http://files.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2014/UNAIDS\\_Gap\\_report\\_en.pdf](http://files.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2014/UNAIDS_Gap_report_en.pdf). Accessed September 6, 2017.
- Lyons CE, Grosso A, Drame FM, et al. Physical and sexual violence affecting female sex workers in Abidjan, Côte d'Ivoire: prevalence, and the relationship with the work environment, HIV, and access to health services. *J Acquir Immune Defic Syndr*. 2017;75(1):9–17.
- Shannon K, Strathdee SA, Goldenberg SM, et al. Global epidemiology of HIV among female sex

- workers: influence of structural determinants. *Lancet*. 2015;385(9962):55–71.
5. Bruckert C, Law T. Beyond pimps, procurers and parasites: mapping third parties in the incall/outcall sex industry. Ottawa, ON: Rethinking Management in the Adult and Sex Industry Project; 2013.
6. Shelby T. Parasites, pimps, and capitalists: a naturalistic conception of exploitation. *Soc Theory Pract*. 2002;28(3):80–110.
7. McCarthy B, Benoit C, Jansson M, Kolar K. Regulating sex work: heterogeneity in legal strategies. *Annu Rev Law Soc Sci*. 2012;8(1):255–271.
8. Goldenberg SM, Duff P, Krusi A. Work environments and HIV prevention: a qualitative review and meta-synthesis of sex worker narratives. *BMC Public Health*. 2015;15(1):1241.
9. Sanders T, Campbell R. Designing out vulnerability, building in respect: violence, safety and sex work policy. *Br J Sociol*. 2007;58(1):1–19.
10. Yi H, Zheng T, Wan Y, Mantell JE, Park M, Csete J. Occupational safety and HIV risk among female sex workers in China: a mixed-methods analysis of sex-work harms and mommies. *Glob Public Health*. 2012;7(8):840–855.
11. Duff P, Shoveller J, Dobrer S, et al. The relationship between social, policy and physical venue features and social cohesion on condom use for pregnancy prevention among sex workers: a safer indoor work environment scale. *J Epidemiol Community Health*. 2015;69(7):666–672.
12. Anderson S, Shannon K, Li J, et al. Condoms and sexual health education as evidence: impact of criminalization of in-call venues and managers on migrant sex workers access to HIV/STI prevention in a Canadian setting. *BMC Int Health Hum Rights*. 2016;16(1):30.
13. Amnesty International. Decision on state obligations to respect, protect, and fulfil the human rights of sex workers. International Council Decision. 2016. Available at: <https://www.amnesty.org/en/policy-on-state-obligations-to-respect-protect-and-fulfil-the-human-rights-of-sex-workers>. Accessed January 9, 2017.
14. O'Doherty TC. *Victimization in the Canadian Off-Street Sex Industry* [dissertation]. Burnaby, BC: Simon Fraser University; 2015.
15. Government of Canada. Criminal code. Justice Laws Website. 2018. Available at: <http://laws-lois.justice.gc.ca/eng/acts/C-46/section-212-20051101.html>. Accessed June 12, 2018.
16. Parliament of Canada. Government Bill (House of Commons) C-36 (41-2) – Royal Assent – Protection of Communities and Exploited Persons Act. 2014. Available at: <http://www.parl.ca/DocumentViewer/en/41-2/bill/C-36/royal-assent/page-33#3>. Accessed October 4, 2017.
17. Lam E; Butterfly Asian and Migrant Sex Workers Support Network. Behind the rescue: how anti-trafficking investigations and policies harm migrant sex workers. 2018. Available at: <https://www.nswp.org/resource/behind-the-rescue-how-anti-trafficking-investigations-and-policies-harm-migrant-sex-workers>. Accessed March 7, 2019.
18. SWAN Vancouver Society. Im/migrant sex workers, myths and misconceptions: realities of the anti-trafficked. 2015. Available at: <http://swanvancouver.ca/wp-content/uploads/2014/01/Realities-of-the-Anti-Trafficked.pdf>. Accessed April 2, 2017.
19. Goldenberg SM, Krusi A, Zhang E, Chettiar J, Shannon K. Structural determinants of health among im/migrants in the indoor sex industry: experiences of workers and managers/owners in Metropolitan Vancouver. *PLoS One*. 2017;12(1):e0170642.
20. Bungay V, Halpin M, Halpin PF, Johnston C, Patrick DM. Violence in the massage parlor industry: experiences of Canadian-born and immigrant women. *Health Care Women Int*. 2012;33(3):262–284.
21. Minister of Justice, Government of Canada. Immigration and Refugee Protection Regulations. 2018. Available at: <http://laws-lois.justice.gc.ca>. Accessed June 14, 2018.
22. Bruckert C, Parent C. *Getting Past “the Pimp”: Management in the Sex Industry*. Toronto, ON: University of Toronto Press; 2018.
23. Shannon K, Goldenberg SM, Deering KN, Strathdee SA. HIV infection among female sex workers in concentrated and high prevalence epidemics: why a structural determinants framework is needed. *Curr Opin HIV AIDS*. 2014;9(2):174–182.
24. Bungay V; The SPACES Team. Recommendations from the off-street sex industry in Vancouver. University of British Columbia School of Nursing. 2016. Available at: <https://open.library.ubc.ca/cIRcle/collections/facultyresearchandpublications/52383/items/1.0340040>. Accessed March 7, 2019.
25. Ghose T, Swendeman DT, George SM. The role of brothels in reducing HIV risk in Sonagachi, India. *Qual Health Res*. 2011;21(5):587–600.
26. Argento E, Putu Duff B, Brittany Bingham B, et al. Social cohesion among sex workers and client condom refusal in a Canadian setting: implications for structural and community-led interventions. *AIDS Behav*. 2016;20(6):1275–1283.
27. Maldonado G, Greenland S. Simulation study of confounder-selection strategies. *Am J Epidemiol*. 1993;138(11):923–936.
28. Goldenberg SM, Liu V, Nguyen P, Chettiar J, Shannon K. International migration from non-endemic settings as a protective factor for HIV/STI risk among female sex workers in Vancouver, Canada. *J Immigr Minor Health*. 2015;17(1):21–28.
29. Belak B, Bennett D. Evaluating Canada's sex work laws: the case for repeal. 2016. Available at: [http://www.pivotlegal.org/evaluating\\_canada\\_s\\_sex\\_work\\_laws\\_the\\_case\\_for\\_repeal](http://www.pivotlegal.org/evaluating_canada_s_sex_work_laws_the_case_for_repeal). Accessed September 6, 2017.
30. Semple SJ, Strathdee SA, Srikrishnan AK, Solomon S, Patterson TL. Social and behavioral characteristics of gharwalis who operate brothels in the Ganga-Jamuna area of Nagpur, India. *AIDS Care*. 2013;25(4):438–442.
31. Chiao C, Morisky DE, Ksobiech K, Malow RM. Promoting HIV testing and condom use among Filipina commercial sex workers: findings from a quasi-experimental intervention study. *AIDS Behav*. 2009;13(5):892–901.
32. O'Doherty T. Victimization in off-street sex industry work. *Violence Against Women*. 2011;17(7):944–963.
33. Anderson S, Jia JX, Liu V, et al. Violence prevention and municipal licensing of indoor sex work venues in the Greater Vancouver Area: narratives of migrant sex workers, managers and business owners. *Cult Health Sex*. 2015;17(7):825–841.
34. Bowen RR, Bungay V, Zangger C. Making SPACES: advancing recommendations from the off-street sex industry in Vancouver. University of British Columbia School of Nursing. 2015. Available at: [https://www.researchgate.net/publication/281845552\\_Making\\_SPACES\\_Advancing\\_Recommendations\\_from\\_the\\_Off-Street\\_Sex\\_Industry\\_in\\_Vancouver](https://www.researchgate.net/publication/281845552_Making_SPACES_Advancing_Recommendations_from_the_Off-Street_Sex_Industry_in_Vancouver). Accessed March 7, 2019.

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.