Structural drivers and risks for STIs among female sex workers in Baltimore, MD

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Risk environment framework

A space where a number of environmental factors interact to increase the chances of risk occurring.

Rhodes, 2002



Police

Police should have custodial role in protecting sex workers' safety.

However, sex workers are vulnerable to:

- > Human rights abuse by police
- Aggressive enforcement approaches
- > Failure to protect

Police directly (e.g., moving women along, condom confiscation) and indirectly (e.g., sexual and physical harassment, sexual coercion) create an environment in which SWs' rights and health is compromised and violated.



SAPPHIRE



Goal

To create an evidence base for aligning public health and public safety approaches to sex work.

Aims

- 1. Qualitatively explore police culture, attitudes towards, and experiences with SWs among police leadership (N=15) and street-level police (N=55 ride-alongs) working in high crime areas of Baltimore City.
- 2. Examine the associations between SWs' HIV risk and the frequency and type of police encounters among a cohort of cis-(N=250) and trans (n=62) SWs at baseline, 3-, 6-, 9-, and 12-months.



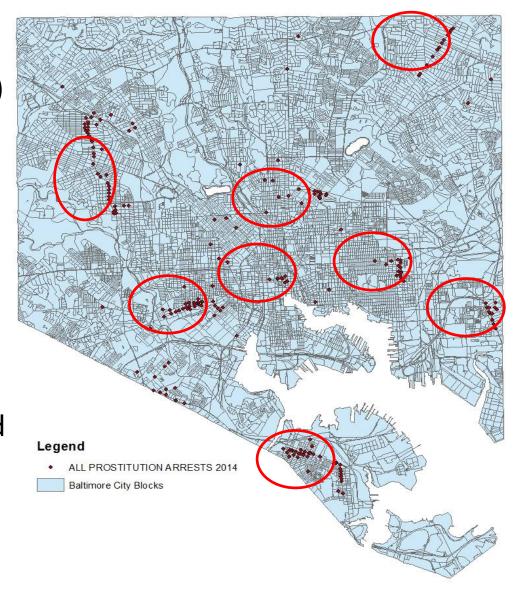
Recruitment

Targeted sampling (2016-2017)

n=250 cis FSWs n=62 trans FSWs

<u>Interviews</u>

- 40-55 minutes
- Resources tailored by site
- Goody bags (condoms, hand sanitizer, wipes, chapstick, candy, Narcan, feminine hygiene); safe injection kits
- Compensation



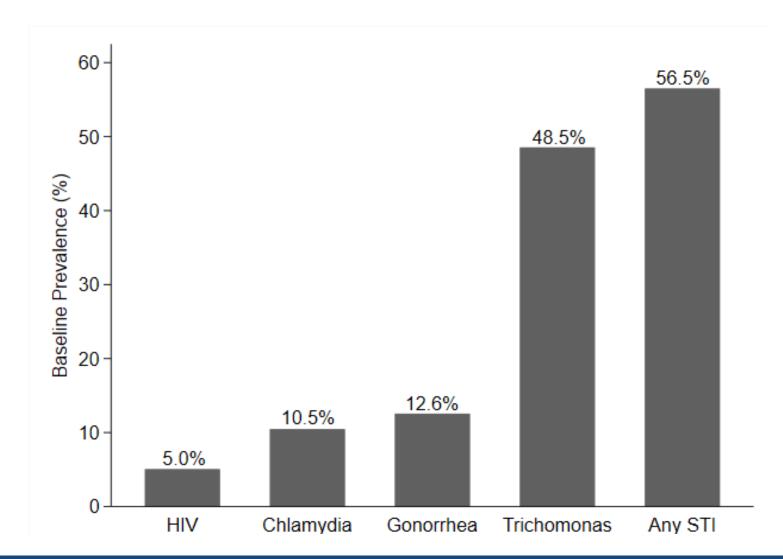
Demographics and STIs

Characteristics of CFSWs and TFSWs

	CFSW (N=250)	TFSW (N=62)
Mean age (IQR)	36 (18-61)	30 (16-58)
White Non-Hispanic black Hispanic	166 (67%) 57 (23%) 27 (11%)	0 (0%) 46 (74%) 16 (26%)
Did not complete high school No legal occupation, past 3 months Went to sleep hungry >once a week Homelessness, past 3 months Arrest, ever	131 (52%) 229 (92%) 135 (54%) 156 (62%) 206 (82%)	18 (29%) 50 (79%) 11 (18%) 15 (24%) 51 (81%)
Age started in sex work, mean (IQR) Client violence	25 (11-61) 115 (50%)	18 (10-39) 26 (41%)

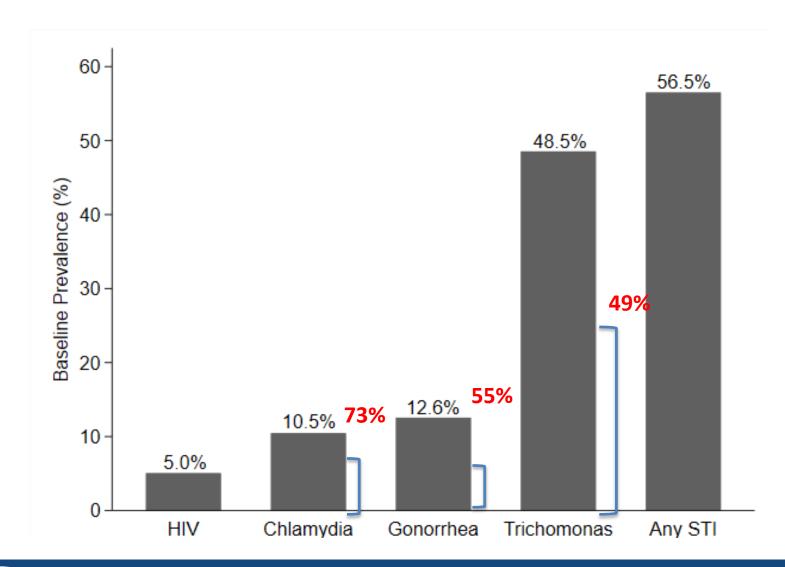


Baseline STIs/HIV among CFSW (n=239)



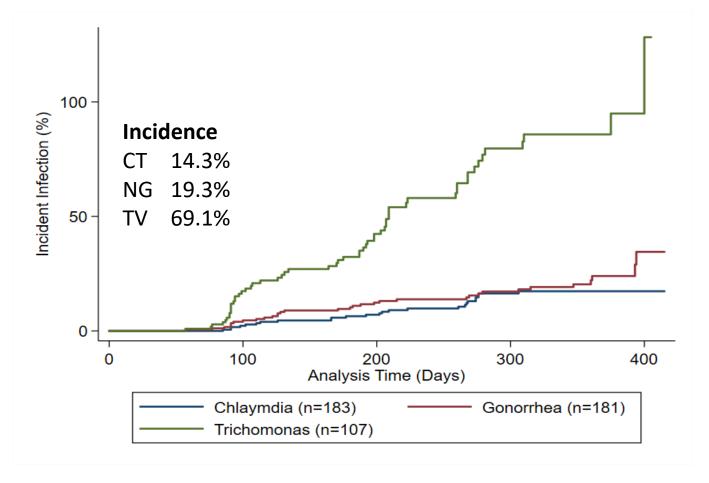


Baseline Infection among CFSW (n=239)





Kaplan Meier Curves for Chlamydia, Gonorrhea and Trichomonas infection among CFSW (N=239): Baltimore, MD





Predictors of Incident Chlamydia, Gonorrhea and Trichomonas infection among STI-negatives at Baseline: Age-Adjusted Multivariate Cox Proportional Hazards Models

(clustered variance for recruitment zone)

	N=183		N=181		N=106				
	Chlamydia		Gonorrhea		Trichomonas				
	aHR	95%	CI	aHR	95%	6 CI	aHR	95%	6 CI
Recent sex work initiation									
(≤1 year)	2.7	1.3	6.0	2.5	0.7	8.7	1.7	1.0	2.8
Forced sex by clients ¹				2.9	1.2	7.1			
Drug/alcohol intoxication									
during sex (client) ¹				0.5	0.3	0.8			
Had female sexual partners									
(clients/intimate partners) ¹							3.4	1.3	8.5
Has a usual healthcare									
provider, current							0.6	0.5	0.7

^{*}p<0.05



¹ past 3 months; measured at baseline aHR = Age-Adjusted Hazard Ratio;

Police as Clients

Sociodemographics (baseline), by police as clients (N=246)

	Total	No Police Clients	1+ Police Clients
Age in years, mean (SD)	35.77 (9.00)	35.98 (9.20)	34.71 (7.90)
Race/ethnicity			
White	162 (65.9%)	135 (65.9%)	27 (65.9%)
Black	57 (23.2%)	51 (24.9%)	6 (14.6%)
Hispanic or Other	27 (11.0%)	19 (9.3%)	8 (19.5%)
Highest education level			
Less than grade 12	131 (53.3%)	108 (52.7%)	23 (56.1%)
Graduated high school/GED	115 (46.7%)	97 (47.3%)	18 (43.9%)
Homeless, past 3 months	153 (62.2%)	126 (61.5%)	27 (65.9%)
Financial Instability, past 3 months	203 (82.5%)	171 (83.4%)	32 (78.0%)
Hungry more than once a week, past 3 months	133 (54.1%)	108 (52.7%)	25 (61.0%)



Substance use, violence, HIV/STIs (baseline), by police as clients (N=246)

	Total	No Police Clients	1+ Police Clients
Daily cocaine use, past 12 months	156 (63.4%)	130 (63.4%)	26 (63.4%)
Daily heroin use, past 12 months**	173 (70.3%)	139 (67.8%)	34 (82.9%)
Daily drug injection, past 3 months	139 (56.5%)	113 (55.1%)	26 (63.4%)
Daily sex work, past 3 months*	164 (66.7%)	133 (64.9%)	31 (75.6%)
Minor at sex work entry	52 (21.1%)	43 (21.0%)	9 (22.0%)
Physical or sexual violence by paying non-police clients, past 3 months	84 (34.2%)	65 (31.7%)	19 (46.3%)
Positive test for chlamydia/gonorrhea infection*	44 (18.7%)	30 (15.2%)	14 (36.8%)
Positive test for HIV infection	13 (5.3%)	10 (4.9%)	3 (7.3%)

^{*} *p*<0.05



Longitudinal Correlates of Police as Clients (N=246)

	Longitudinal Multivariate GEE
	Adjusted OR (95% CI) ^a
Recent homelessness	0.87 (0.51, 1.48)
Daily drug injection	1.35 (0.78, 2.35)
Sexual or physical violence by paying clients	0.87 (0.54, 1.42)
Recent arrest*	1.78 (1.05, 3.02)
Number of patrol practices experienced	1.11 (0.94, 1.31)
Number of egregious practices experienced**	2.01 (1.59, 2.53)
Positive chlamydia/gonorrhea test**	2.46 (1.48, 4.09)

^a Adjusted for all variables listed, age, and race/ethnicity

^{**} p<0.001



^{*} p<0.05

Health services used (past 6 months) (N=385)

Greatest Health Concern	N (%)
Reproductive Health	36 (9.2)
HIV or STI	141 (36.1)
Mental Health	79 (20.2)
Primary Care	117 (29.2)
Basic Needs (Food, Housing)	168 (43.0)
Legal	39 (10.0)
Safe Space to Relax	48 (12.3)
Drug Treatment (n=369)	124 (33.6)

33% had not used a single resource in the past 6 months

71% used the ED at least once in the past 12 months, 58% visited for a non-urgent reason.





A CENTER FOR WOMEN 908 Washington Blvd. 410.624.7554

To enhance community capacity among cis FSWs in Baltimore through the creation of a full service, harm reduction drop-in center and well-trained cadre of peer outreach workers.

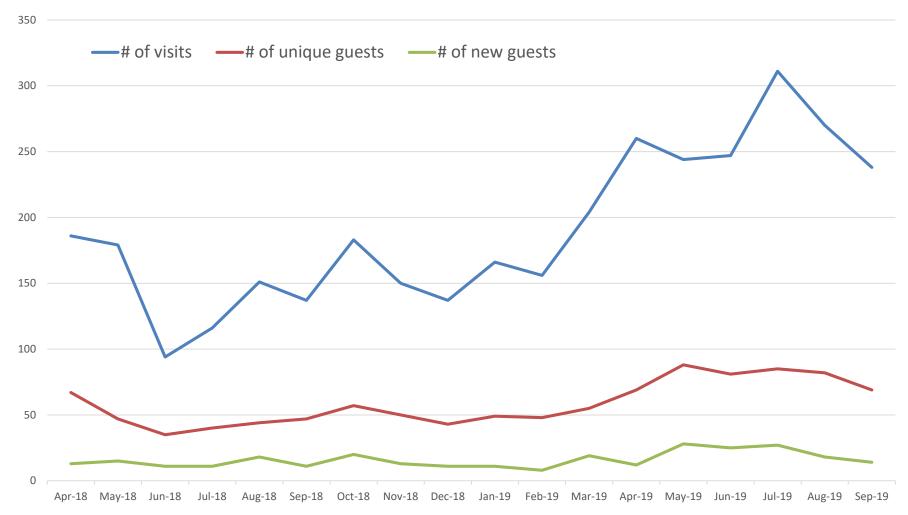


SPARC Center Services

- Trained peer outreach workers
- Reproductive health, HIV/STI testing, STI treatment (BCHD)
- Buprenorphine Induction (Behavioral Health Leadership Initiative)
- Legal Aid and Maryland Volunteer Lawyer Services Legal Clinics
- Syringe services program- (Baltimore Harm Reduction Coalition)
- Case management
- PrEP treatment (study)
- Psychiatrist (coming soon)
- HIV and STI testing, STI treatment
- Showers, laundry, lockers, computer lab, TV, toys, food pantry, safe injection and crack-use kits
- Overdose prevention training and naloxone distribution
- Weekly lunches, monthly community meetings, yoga, workshops (e.g., sexuality, financial literacy, parenting classes)



Visits & guests per month at SPARC (April 2018-September 2019)





Conclusions

High rates of STIs among a population rarely studied and as a result rarely focused upon programmatically in the US.

Structural violence (e.g., forced sex, police as clients), lack of healthcare access, and structural vulnerability (<1 year sex work) are associated with STIs.

Need for socio-structural interventions to address high rates of STIs among FSWs in the context of meeting their broad range of needs.



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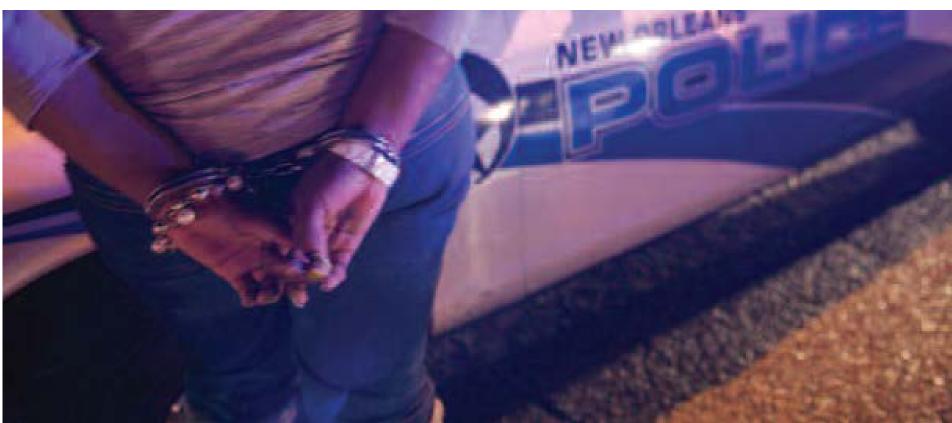
AIDS Care, 2014 http://dx.doi.org/10.1080/09540121.2014.970504



"What makes you think you have special privileges because you are a police officer?" A qualitative exploration of police's role in the risk environment of female sex workers

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Distrust

They can't be trusted. I'd rather go to a stranger on the street before I go to the police. Half of them are crooked. How I was raised, you don't go to the police. You handle it yourself.

Age 38, Black

Verbal Harassment

They harass you. Sometimes you aren't even be doing anything ... You could just be coming out the gas station and they harass you just walking by. You don't even have to be in the drug area ... but they just assume that every woman that is walking is a hooker and because we're Black and we're in their neighborhood.



Routine police practices, (baseline), by police as clients (N=250)

	Total	No Police Clients	1+ Police Clients	p-value
Arrest, past 12 months	113 (45.9%)	85 (41.5%)	28 (68.3%)	0.002
Routine patrol practices, past 3 months:				
Number of patrol practices				
experienced, mean(SD)	2.00 (1.46)	1.87 (1.50)	2.63 (1.07)	0.002
Asked to move along	164 (66.9%)	130 (63.7%)	34 (82.9%)	0.017
 Routine stop 	159 (64.6%)	124 (60.5%)	35 (85.4%)	0.002
 Searched person or property 	97 (39.4%)	74 (36.1%)	23 (56.1%)	0.017
 Confiscated drugs/drug 				
paraphernalia	63 (25.6%)	47 (22.9%)	16 (39.0%)	0.031
 Confiscated condoms 	9 (3.7%)	9 (4.4%)	0 (0.0%)	0.363

^{*} *p*<0.05



^{**} p<0.001

Abusive policing practices (baseline), by police as clients (N=250)

	Total	No Police Clients	1+ Police Clients	p- value
Number of egregious practices				
experienced, mean (SD), past 12 months	0.59 (0.91)	0.48 (0.78)	1.12 (1.29)	<0.001
 Verbal/emotional harassment 	74 (30.1%)	57 (27.8%)	17 (41.5%)	0.082
Sexual harassment	44 (17.9%)	25 (12.2%)	19 (46.3%)	<0.001
 Damaged property 	12 (4.9%)	9 (4.4%)	3 (7.3%)	0.427
Physical violence	4 (1.6%)	2 (1.0%)	2 (4.9%)	0.131
 Pressured or forced sex 	7 (2.9%)	3 (1.5%)	4 (9.8%)	0.016
 Accepted money/goods in exchange 				
for no arrest	3 (1.2%)	2 (1.0%)	1 (2.4%)	0.423



Impact of policing on safety (baseline), by police as clients (N=245)

		No Police	1+ Police
Because of fear of police:	Total	Clients	Clients
Avoided carrying condoms	34 (13.9%)	25 (12.3%)	9 (22.0%)
Avoided carrying ID	74 (30.5%)	61 (30.2%)	13 (31.7%)
Moved to unfamiliar location	55 (22.4%)	48 (23.5%)	7 (17.1%)
Rushed negotiations with clients	135 (54.9%)	108 (52.7%)	27 (65.9%)



Supples Distributed on Outreach

From October 2018 to March 2019

