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ORIGINAL ARTICLE

Associations between transactional sex and intimate and non-intimate partner violence: findings from project WINGS of Hope

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Abstract

Women who engage in transactional sex experience disproportionately high rates of intimate partner violence (IPV) and non-intimate partner violence (nIPV); However little research has examined whether these risks vary by recency of transactional sex. Drawing on baseline data from a GBV pilot intervention among 213 women with a history of substance use in Kyrgyzstan, we used descriptive, bivariate, and multivariate logistic regression analyses to examine the associations between history of transactional sex (never, former, recent-past 90 days) and IPV and nIPV. 108 (50.7%) participants reported a history of transactional sex: 65 of whom reported former transactional sex (FTS) and 43 of whom reported recent transactional sex (RTS). The prevalence of recent IPV ($n = 163$, 76.5%) and nIPV ($n = 141$, 66.2%) were high for the overall sample. Adjusted multivariate models indicated that women who reported RTS were significantly more likely to report recent physical, sexual, emotional, and any type of IPV, compared to women who reported FTS and no transactional sex (NTS). No significant differences were observed between women who reported NTS and FTS. Examining nIPV, women who reported RTS were significantly more likely to report deprivation of resources, injurious, physical, sexual, emotional, and any recent nIPV compared to women who reported FTS and NTS. Women who reported FTS were significantly more likely to report recent physical and sexual nIPV compared to women who reported NTS. Findings suggest that GBV risks shift over time with active engagement in transactional sex and by perpetrator, and that interventions should attune closely to these patterns.

Keywords Gender-based violence · Female sex work · Transactional sex · Substance use · Intimate partner violence · Kyrgyzstan · Central Asia

Introduction

Women who engage in transactional sex (the exchange of sex for money, food, drugs, shelter, or other resources) are disproportionately affected by gender-based violence (GBV), with a global systematic review estimating past-year prevalence to be between 32 and 55% (Deering et al., 2014). Perpetrated against someone based on their gender identity or expression, GBV may be perpetrated by intimate and non-intimate partners (IASC, 2015; United Nations, 1993). Intimate partners include romantic, dating or regular non-transactional sexual partners, while non-intimate partners include police, employers, drug dealers, family members, or community members, for example. Additional research shows that women currently engaged in transactional sex are at particularly elevated risk of exposure to severe forms or types of GBV, including being at 17.7 times greater risk of homicide (Potterat et al., 2004). This high risk of GBV leads to a range of outcomes including adverse mental

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health, physical injury, and an odds of HIV infection 13.5 times higher than other women of reproductive age (Baral et al., 2012).

Extant literature has shown that multiple factors contribute to the elevated risk of GBV seen among women who engage in transactional sex. Whereas women who have not previously engaged in transactional sex are predominantly at risk of GBV from intimate partners, women who engage in transactional sex additionally and frequently face violence from work-related perpetrators such as clients, drug dealers or others. Structural forces such as the frequent and harsh criminalization of transactional sex, or what is often labeled as sex work or prostitution in legal settings, also leaves women vulnerable to violence from perpetrators who take advantage of the fact that women who engage in transactional sex are often without recourse for the violence they experience, and indeed are often subject to harassment and violence from police themselves (Decker et al., 2014). This broad range of perpetrators represents a heightened risk environment, though research with this population has historically neglected to study IPV due to stereotypes that women who engage in transactional sex do not have intimate partners (Shannon et al., 2015).

GBV experienced in the course of transactional sex can lead to alcohol or drug use as a coping mechanism for trauma. Substance use can then place women who engage in transactional sex at further vulnerability to violence in a reinforcing cycle (El-Bassel et al., 2005). Because of the stigma against women who use drugs and/or engage in transactional sex, partners may also feel more justified in perpetrating violence against them. Research also suggests partners may also drive women into transactional sex to obtain money or drugs for them (El-Bassel et al., 2011; Gilbert et al., 2001). Indeed, women who engage in transactional sex are vulnerable to becoming stuck in a cycle known as a syndemic, where substance use, HIV risk, poor mental health, and violence reinforce one another and become deeply entrenched (Singer & Clair, 2003).

Entry into and Exiting from Transactional Sex and GBV

In many regions of the world, engagement in transactional sex is economically driven and thus, intermittent, with women engaging in it until they make enough money to achieve a defined goal (e.g. clearing a debt, paying their children's school fees, or obtaining housing), and re-entering into transactional sex, as necessary (Ham & Gilmour, 2017; Manopaiboon et al., 2003). Even women who self-identify as formal sex workers (i.e. view transactional sex as their primary employment or career) frequently make "exit plans" for when they foresee that age, relationship status, or other factors make transactional sex less financially supportive, acceptable, or satisfying. Some women may not completely exit from engaging in transactional sex, but will reduce their number of clients as the need for income fluctuates, and may transition from having transactional sex be a primary source of income to exchanging in transactional sex only occasionally. By contrast, the literature on transactional sex/sex work frequently describes it as a "master status" identity that is permanent and unchanging, classifying women in a binary manner as either "sex workers" or "non-sex workers," based on a response to a single question about whether having exchanged sex in either their lifetime or within a certain period. In reality, mobility in and out of transactional sex makes these categories more porous over time.

Little research has been conducted comparing women who have engaged in transactional sex in the past, but who are not currently engaging in transactional sex; It is currently unclear whether women who previously engaged in transactional sex experience similar levels and types of GBV compared to women who are currently engaged in transactional sex, or who have never engaged transactional sex. Reducing or exiting engagement in transactional sex could be a dangerous period: Leaving may result in loss of social networks and financial supports, which could make women more dependent on intimate partners who may use violence against them. Intimate partners might also be upset by the loss of income and use violence to pressure women to re-enter or continue engaging in transactional sex (Thaller & Cimino, 2017). Alternatively, exiting may provide protection against GBV as transactional sex itself is associated with increased risks for intimate partner violence (IPV), as partners may use violence to punish their partner for exchanging sex (Decker et al., 2013; Shannon & Csete, 2010). Women who are currently engaging in transactional sex are also at risk for violence from non-intimate partners (nIPV) such as clients, pimps, or police. Women who are no longer engaging in transactional sex may be less at risk for violence from these perpetrators, though this depends on the degree to which they still frequent the same spaces or networks as they did when exchanging sex; women whose drug use and engagement in transactional sex are intertwined may still be embedded within the same risk environment if drug use continues (Rhodes et al., 2012).

Understanding the degree to which women who previously, but who are not currently engaged in transactional sex, are at greater, equal, or lesser risk for IPV and nIPV as compared to women who have recently engaged in transactional sex – as well as understanding if they may be at risk for different types of violence than before – has important implications for service provision. Understanding the varied risks is critical as the interventions required to address police violence may look very different than the interventions to address IPV, so understanding how these violence profiles shift is critical for designing effective interventions.

Further, IPV and nIPV both have different implications for HIV risk and substance use risk (Decker et al., 2013; Peitzmeier et al., 2020) and so should be prioritized differently in integrated GBV-HIV or GBV-substance use prevention programming. Considering that women frequently move in and out of engagement in transactional sex, depending on how intervention programs determine eligibility (lifetime, or within a certain recent period), these programs may unknowingly enroll many women with different risk profiles and not appropriately address their needs or multi-level risks.

Transactional Sex and GBV in the Central Asian Context

Examining GBV against women who engage in transactional sex is critically important in Central Asia due to an ongoing HIV epidemic (UNAIDS, 2018), ongoing epidemic of drug use (Hammer et al., 2018) and problematic legal context in protecting women from violence. Although IPV is illegal, implementation of standing legal protections is deficient (Joshi & Childress, 2017). For example, Childress and Hanusa (2018) identified police corruption and negligence, emphasis on reconciliation, and lack of institutional support as barriers to implementation of laws that exist to protect women. Furthermore, widespread societal acceptance (National Statistical Committee of the Kyrgyz Republic & UNICEF, 2019) and a traditional view of IPV as a private issue minimizes victims' ability to receive support. Moreover, although engagement in transactional sex is not illegal, it remains a highly stigmatized behavior (Public Foundation Asteria et al., 2014; Sex Workers' Rights Advocacy Network, 2009), which reinforces the potential risk of GBV.

As in other countries in the WHO Eastern European Region, the HIV epidemic in Kyrgyzstan is transitioning from a primarily intravenous drug use (IDU)-driven epidemic among men to one that is increasingly driven by heterosexual contact and increasingly among women. Some 70% of new diagnoses in 2018 were from heterosexual contact (Hammer et al., 2018). Kyrgyzstan is the second poorest country of the Commonwealth of Independent States (CIS) (World Bank, 2019). The fall of the Soviet Union has had a lasting impact on the country, resulting in ongoing political unrest, high unemployment rates, and decreased gender equity (Omaleki & Reed, 2019). As a result, engagement in transactional sex may provide an opportunity for economic gain, especially for women. Although 'sex work' was decriminalized in 1998, poor police training, discrimination, and negative attitudes toward exchange of sex and people who use drugs often lead to the illegal detaining, extortion, and abuse by law enforcement (Beletsky et al., 2013). While Kyrgyzstan has made strides toward prioritizing harm-reduction among high risk populations (Beletsky et al., 2013), a recent review on the impact of gender on health outcomes among women in Central Asia highlighted the need for integrated interventions to address intersections of HIV, violence, and IDU (Omaleki & Reed, 2019).

This study examines differences in the prevalence rates of different types of GBV (i.e. physical, sexual, etc.), disaggregated by type of partners (intimate vs. non-intimate) in the lives of substance-involved women in Kyrgyzstan who reported former engagement in transactional sex, recent engagement in transactional sex, or never having engaged in transactional sex.

Methods

Study Design

This paper draws on data from the baseline assessment administered in Project WINGS of Hope, a GBV screening, brief intervention and referral to treatment (SBIRT) pilot study among 213 substance-involved women in Kyrgyzstan. The study was conducted over a period of three years, from 2013–2016, in which a different number of women were recruited in each cohort (78; 55, and 80 in each cohort, respectively.) Recruitment of the first two cohorts of participants were conducted in collaboration with two harm reduction non-government organizations (NGOs) in Kyrgyzstan: Asteria in the capital city of Bishkek, and Podruga in the southern border city of Osh. The subsequent cohort of participants were recruited in partnership with two additional NGOs in each city: The Crisis Center "Chance" and Sotsium in Bishkek, and Public Foundation "Positive Dialogue" and Plus Center Public Foundation in Osh.

The study design and forms were approved by the Columbia University Institutional Review Board (IRB) and the IRB Board of the Global Research Institute of Kyrgyzstan. The study was additionally approved by the IRB at Arizona State University for data analysis and reporting. A Community Collaborative Research Board (CCRB) comprising NGO staff, police, in-country Ministry of Interior representatives, substance abuse treatment providers, representatives from UNODC, CDC and UNAIDS, and GBV/IPV service providers was established at the outset of the project. The CCRB and lead members of the partner organizations provided feedback on all stages of the project, including the selection, relevancy, and adaptation of all measures and components of the project. Translation of materials, including measures, were completed by professional translators and bilingual members of the research team reviewed the translations to ensure accuracy.

Outreach workers from partner organizations recruited participants in this study by handing out flyers and inviting women to be screened. Outreach workers also visited public

venues (e.g. parks) to recruit participants and responded to word-of-mouth referrals from other participants. Women who expressed interest in participating completed informed consent prior to being screened. Participants were eligible if they (1) were 18 years or older, (2) self-identified as a woman, (3) demonstrated basic fluency in Russian, and (4) endorsed any of the following criteria: a) past 90-day illicit drug use, b) past 90-day hazardous drinking, c) having received drug or alcohol treatment in the past six months, or d) having exchanged sex for money, goods, food, drugs, or housing in the past 90 days (option d was only added during recruitment of cohort three). Participants completed the baseline assessment using the Audio Computer-Assisted Self-Interview (ACASI), which allowed participants with low levels of literacy to participate (Hewett et al., 2004). Participants were asked a wide range of questions pertaining to several indicators, including their socio-demographics and experience with multiple forms of GBV.

Measures

Participant Socio-Demographic Characteristics

Participant characteristics reported include self-reported age (continuous, measured by subtracting year of birth from year of data collection), ethnicity (Russian, Kyrgyz, or other), marital status (previously married, which included divorced, separated, or widowed; currently married or common law marriage; and never married), education (secondary or lower compared to more than secondary education), parental status (percentage of women with children), monthly income (continuous), food insecurity (did not had enough money to buy food to eat every day for the past 90 days), arrest history (having ever been arrested and recently-past 90 day arrest history), depression, and substance use. Depression was measured using the depression subscale of the Brief Symptom Inventory (BSI) (Derogatis & Melisaratos, 1983), which is a 6-item measure of self-reported symptoms experienced during the prior seven days. Scores were summed and converted into a t-score, with a mean of 50 and a standard deviation of 10. A dichotomized variable for depression was then created using a t-score of 63 or above, based on manual procedure (Derogatis, 1993). Substance use was assessed in multiple ways*:* any recent (past 90 days) illicit drug use; recent (past 90 days) injection drug use; and hazardous alcohol use. Hazardous drinking was measured using the AUDIT-C (Bush et al., 1998), which is comprised of three questions, each scored from 0–4, for a total summed score of 0–12. A score of 3 or higher for women indicates hazardous drinking (dichotomized).

Transactional Sex

Transactional sex was measured by asking participants whether they had exchanged sex for money, goods, drugs or housing, ever (lifetime), and the number of transactional sex partners in the past 90 days. Based on the data, women were divided into three sub-groups: (1) women who reported never having engaged in transactional sex (NTS); (2) women who reported formerly engaging in transactional sex, but not within the past 90 days (FTS); and (3) women who reported recently engaging in sex transactional sex within the past 90 days (RTS). All participants who endorsed transactional sex were also asked at what age they first began exchanging sex and most common locations they met their clients (e.g. brothels/saunas, street). Women who reported RTS were additionally asked the average amount of income gained through exchanging sex and number of male clients in the past month.

Lifetime and Recent Experience of Gender-Based Violence (Intimate Partner Violence–[IPV] and Non-Intimate Partner Violence [nIPV]).

IPV was measured using an adapted version the Revised Conflict Tactics Scale (CTS-2) (Straus et al., 1996). As in the original version of the CTS-2, participants were asked to indicate whether they had ever experienced particular incidents of emotional abuse (verbal and/or psychological), physical violence, injurious, and sexual violence by a current or former intimate partner, and in the past 90 days. Participants reported IPV based on who they considered intimate partners (i.e. it is possible that for some participants, that their intimate partner may also be their pimps). The internal consistency of the CTS-2 ranges from 0.75–0.95 (Straus et al., 1996). In this study, the measure of emotional abuse additionally included culturally-specific items about being blindfolded, stalked or prevented from seeing family members or friends, and/or being forced to eat in isolation from family/friends. These questions were developed based on preliminary work from the research team with feedback from the CCRB. Our study also included an additional type of IPV based on preliminary work: deprivation, wherein participants were asked whether a partner had ever deprived them of food, water, or sleep (single item). Participants responding affirmatively to at least one type of violence were coded as having experienced lifetime IPV. Participants reporting affirmatively to any question in the measure were subsequently asked if they also experienced that form of abuse in the past 90 days to capture recent IPV.

To measure lifetime and recent nIPV, the same set of questions from the adapted version of the CTS-2 were repeated with instructions to report violence by anyone other

than an intimate partner (examples included community members, soldiers, police, clients, family members, among others). As with IPV, violence perpetrated by others was coded as described earlier.

Analysis

We used descriptive statistics to characterize the sample; distributions of sociodemographic characteristics were first assessed for the full sample and then, separately among each of the three groups (women who reported NTS, FTS, RTS). Table 1 includes an overview of sociodemographic characteristics among the sample, with specific indication for variables that were used as covariates in the later adjusted multivariate models (age, marital status, ethnicity, education level, food insecurity, lifetime and past 90-day arrest history, and past 90-day illicit drug use; see Table 4). Table 1 also includes some descriptive data regarding the mean age of first engagement in transactional sex, number of recent male clients, and where women reported meeting their clients.

We then estimated the lifetime prevalence and past three-month prevalence of each type of violence for the overall sample and, separately, among each of the three sub-groups (Tables 2 and 3). Differences in violence reported between transactional sex dyads were assessed using Pearson's Chi-square tests. Finally, we conducted bivariate and multivariate logistic regression analyses, reporting adjusted odds ratio (aOR), to examine the association between prior engagement in transactional sex and each type of violence (Table 4). The following covariates were included in the adjusted models: age, marital status, ethnicity, education level, and food insecurity. During the analytic process, we also examined the data for missing values; given the rarity of missing data and concerns related to estimation errors resulting from imputation, observations were dropped in the reported analysis in instances where there was any missingness (i.e. using modelwise deletion). All analyses were conducted using Stata 15.

Results

Socio-Demographic Characteristics

Table 1 presents participant characteristics for the total sample and by sub-group (NTS, FTS, RTS). The mean age of the participants was 39 (SD = 8.87) years old, and the majority identified as ethnic Russian ($n = 127$, 59.6%). Approximately 48% ($n = 103$) of participants reported being currently married, and 71.8% ($n = 153$) reported having children. Examining socio-economic status, a little under half the sample reported food insecurity (47.0%; $n = 100$) and 66.7% ($n = 142$) reported a secondary or lower level of education. The average monthly income reported was 4,304 (SD = 5098) Kyrgyzstani som (approximately $55 USD per month). As expected, given the inclusion criteria for the study, the prevalence of recent illicit drug use (68.1%, $n = 145$) and hazardous drinking (77.5%, $n = 165$) were high.

Of the total sample, 108 women (50.7%) reported a history of transactional sex, 65 (60.2%) of whom reported FTS and 43 (39.8%) of whom reported RTS. Among participants reporting a history of transactional sex, the mean age of when they first engaged in transactional sex was 23.1 (SD = 6.3) among women who reported FTS and 21.4 (SD = 6.54) among women who reported RTS. The most frequently reported sites for meeting clients among both women who reported FTS and RTS were on the streets and or brothel/sauna (see Table 1). Nearly a third of women who reported RTS (30.23%) reported only having one male transactional sex partner in the past month (range: 1–60; mean = 7.49, SD = 11.19).

Examining differences by transactional sex history (never, former, recent), we observed that significant sociodemographic differences in relation to age, marital status, arrest history, and drug use. More specifically, women who reported RTS were significantly more likely to have been never been married ($p < 0.05$) compared to women who reported FTS or NTS. Women who reported RTS were, on average, significantly younger than women who reported FTS ($p < 0.01$). Finally, women who reported FTS were significantly more likely to have a lifetime arrest history ($p < 0.01$) or recent illicit drug use ($p < 0.01$) compared to women who reported NTS.

Prevalence of IPV and nIPV among the Whole Sample

Tables 2 and 3 summarize lifetime and past three-month prevalence of each type of violence for IPV and nIPV, respectively. The lifetime prevalence of any IPV ($n = 200$, 93.90%) and nIPV ($n = 203$, 95.31%) were high for the overall sample, as were the prevalence figures for the past three-months IPV (n = 163, 76.53%) and nIPV ($n = 141$, 66.20%).

The prevalence of any particular type of lifetime IPV for the whole sample ranged widely from 24.41% (deprivation of resources) to 87.32% (emotional violence) (Table 2). Similarly, for the past three-months, prevalence of IPV sub-types ranged from 14.55% (deprivation of resources) to 53.05% (emotional violence) (see Table 2).

Examining types of nIPV (see Table 3), the lifetime prevalence estimates ranged from 13.62% (deprivation of resources) to as high as 87.79% (physical violence). Past three months nIPV data indicated lowest prevalence of deprivation of resources (6.60%) and highest prevalence of emotional violence (56.34%) (see Table 3).

Table 1 Sociodemographic and Transactional Sex Characteristics among a Sample of Substance-Involved Women in Kyrgyzstan ($N=213$)

		Full sample ($N=213$)		Never (engaged in) transactional sex ($n=105$)		former transactional sex ($n=65$)		recent transactional sex ($n=43$)		NTS & FTS	NTS & RTS	FTS & RTS
Variable		mean	SD	mean	SD	mean	SD	mean	SD	Pr(|T|>|t|)		
Age		38.97	8.87	39.30	9.36	40.69	7.59	35.56	8.72			**
Age started engaging in transactional sex		N/A	N/A	N/A	N/A	23.08[a]	6.34	21.33[a]	6.51	N/A	N/A	
# financial dependents		1.07	1.61	1.00	1.31	1.28	2.22	0.93	1.12			
Income (past month)		4304.29[a]	5097.85	4075.33	4569.00	3482.81[a]	4166.44	6086.05	6958.33		*	*
Income from transactional sex (past month)		N/A	N/A	N/A	N/A	N/A	N/A	5728.57	6973.62	N/A	N/A	N/A
# of male transactional sex partners (past month)		N/A	N/A	N/A	N/A	N/A	N/A	7.49	11.19	N/A	N/A	N/A
variable		*n*	%	*n*	%	*n*	%	*n*	%		Pr	
Year of data collection	2013	78	36.62%	32	30.48%	31	47.69%	15	34.88%	*		
	2014	55	25.82%	31	29.52%	16	24.62%	8	18.60%			
	2016	80	37.56%	42	40.00%	18	27.69%	20	46.51%			*
Ethnicity[+]	Russian	127	59.62%	63	60.00%	41	63.08%	23	53.49%			
	Kyrgyz	25	11.74%	12	11.43%	6	9.23%	7	16.28%			
	Other	61	28.64%	30	28.57%	18	27.69%	13	30.23%			
Education[+]	More than secondary	71	33.33%	42	40.00%	18	27.69%	11	25.58%			
	secondary or less	142	66.67%	63	60.00%	47	72.31%	32	74.42%			
Marital status[+]	never married	22	10.33%	6	5.71%	6	9.23%	10	23.26%		**	*
	previously married	88	41.31%	40	38.10%	30	46.15%	18	41.86%			
	currently married	103	48.36%	59	56.19%	29	44.62%	15	34.88%		*	
Children	no	60	28.17%	24	22.86%	30	40.00%	16	37.21%			
	yes	153	71.83%	81	77.14%	45	60.00%	27	62.79%			
Arrest history (ever) [+]	no	53	24.88%	37	35.24%	10	15.38%	6	13.95%	**		
	yes	160	75.12%	68	64.76%	55	84.62%	37	86.05%			
Arrest history (past 90 days) [a+]	no	178	83.57%	88	83.81%	59	90.77%	31	72.09%			
	yes	35	16.43%	17	16.19%	6	9.23%	12	27.91%			
Illicit drug use (past 90 days) [+]	no	68	31.92%	43	40.95%	13	20.00%	12	27.91%	**		
	yes	145	68.08%	62	59.05%	52	80.00%	31	72.09%			
Injection drug use (past 90 days)	no	116	54.46%	64	60.95%	31	47.69%	21	48.84%			
	yes	97	45.54%	41	39.05%	34	52.31%	22	51.16%			
Hazardous drinking	no	48	22.54%	24	22.86%	18	27.69%	6	13.95%			
	yes	165	77.46%	81	77.14%	47	72.31%	37	86.05%			
Depression	no	190	89.20%	97	92.38%	57	87.69%	36	83.72%			
	yes	23	10.80%	8	7.62%	8	12.31%	7	16.28%			
Food insecurity[+]	no	113	53.05%	58	55.24%	33	50.77%	22	51.16%			
	yes	100	46.95%	47	44.76%	32	49.23%	21	48.84%			

Table 1 (continued)

		Full sample ($N=213$)		Never (engaged in) transactional sex ($n=105$)		former transactional sex ($n=65$)		recent transactional sex ($n=43$)		NTS & FTS	NTS & RTS	FTS & RTS
# of male transactional sex partners (past month)	One	N/A	N/A	N/A	N/A	N/A	N/A	13	30.23%	N/A	N/A	N/A
	More than one	N/A	N/A	N/A	N/A	N/A	N/A	30	69.77%	N/A	N/A	N/A
Locations to meet clients[++ a]	On the streets	N/A	N/A	N/A	N/A	23	54.76%	18	51.43%	N/A	N/A	
	Brothel or Sauna	N/A	N/A	N/A	N/A	10	23.81%	7	20.00%	N/A	N/A	
	Through internet	N/A	N/A	N/A	N/A	2	4.76%	3	8.57%	N/A	N/A	
	In Bars	N/A	N/A	N/A	N/A	5	11.90%	6	17.14%	N/A	N/A	
	Other location	N/A	N/A	N/A	N/A	8	19.05%	7	20.00%	N/A	N/A	

[a] missing data from sample; [++]included as covariate for aOR models; [++] Not mutually exclusive; N/A not applicable; NTS: never transactional sex; FTS: former transactional sex; RTS: recent transactional sex; Pr(|T| > |t|): significant level from one-sample t-test; Pr:: significance level from chi-square test; significant at $p < .05$*, $p < .01$**, and $p < .001$***

Prevalence of Lifetime IPV and nIPV by History of Transactional Sex

Consistent differences emerged with respect to exposure of each type of IPV and nIPV based on prior engagement in transactional sex. Women who reported NTS had the lowest total lifetime prevalence of any exposure to IPV and nIPV, and, in most cases, also reported the lowest lifetime prevalence of each subtype of IPV and nIPV (see Tables 2 and 3). Chi-square analyses indicated significant differences between women who reported NTS and FTS for lifetime sexual IPV ($p < 0.01$). Additionally, comparing women who reported NTS and RTS, analyses indicated women who reported RTS were significantly more likely to report lifetime physical ($p < 0.05$), sexual ($p < 0.001$), emotional ($p < 0.01$), and any lifetime IPV ($p < 0.01$). Additionally, women who reported RTS were significantly more likely to report lifetime emotional violence than women who reported FTS ($p < 0.05$). No other significant differences were observed. (See Table 2).

Examining differences between groups for lifetime nIPV, we observed similar trends. Women who reported FTS were significantly more likely to report lifetime sexual nIPV compared to women who reported NTS ($p < 0.001$). Women who reported RTS were significantly more likely to report lifetime deprivation of resources ($p < 0.05$), physical violence ($p < 0.05$), sexual violence ($p < 0.001$), and emotional violence ($p < 0.001$) compared to women who reported NTS. Additionally, our analyses indicated women who reported RTS were significantly more likely to report lifetime sexual ($p < 0.001$) and emotional violence ($p < 0.01$) than women who reported FTS. No other significant differences were observed. (See Table 3.)

Prevalence of Past Three-Month IPV and nIPV by History of Transactional Sex

Examining recent, past three-month IPV by history of transactional sex yielded somewhat similar results to that of our lifetime analyses. Although we observed no differences between women who reported NTS and FTS, women who reported RTS were significantly more likely than women who reported NTS to report recent physical ($p < 0.05$), sexual ($p < 0.001$), emotional ($p < 0.01$), and any IPV ($p < 0.01$). Similarly, women who reported RTS were significantly more likely to report sexual ($p < 0.01$), emotional ($p < 0.01$), and any IPV ($p < 0.01$), compared to women who reported FTS. (See Table 2.)

Analyses of past three-month nIPV and history of transactional sex yielded different patterns compared to our analyses of recent nIPV and recent and lifetime IPV. Women who reported FTS were significantly more likely to report both physical ($p < 0.05$) and sexual ($p < 0.001$) nIPV in the

Table 2 Lifetime and three-month prevalence of Intimate Partner Violence (IPV) among a sample of substance-involved women Kyrgyzstan, by transactional sex history

	full sample ($N=213$)		never transactional sex (n = 105)		former transactional sex ($n=65$)		recent transactional sex ($n=43$)		NTS & FTS	NTS & RTS	FTS & RTS
	n	%	*n*	%	*n*	%	*n*	%			
Type	Ever/Lifetime								Pr		
injurious	110	51.64%	55	52.38%	34	52.31%	21	48.84%			
deprivation	52	24.41%	23	21.90%	16	24.62%	13	30.23%			
physical	187	87.79%	87	82.86%	58	89.23%	32	74.42%		*	
sexual	155	72.77%	65	61.90%	53	81.54%	37	86.05%	**	**	
emotional	186	87.32%	86	81.90%	57	87.69%	43	100.00%		**	*
any	200	93.90%	95	90.48%	62	95.38%	43	100.00%		*	
	Past three-months										
injurious	75	35.21%	35	33.33%	25	38.46%	15	34.88%			
deprivation	31	14.55%	17	16.19%	6	9.23%	8	18.60%			
physical	113	53.05%	52	49.52%	32	49.23%	29	67.44%		*	
sexual	103	48.36%	42	40.00%	30	46.15%	31	72.09%		***	**
emotional	125	58.69%	57	54.29%	34	52.31%	34	79.07%		**	**
any	163	76.53%	77	73.33%	46	70.77%	40	93.02%		**	**

[a] missing data from sample; NTS: never transactional sex; FTS: former transactional sex; RTS: recent transactional sex; Pr.: significance level from chi-square test; significant at $p<.05$*, $p<.01$**, and $p<.001$***

Table 3 Lifetime and three-month prevalence of Non-Intimate Partner Violence (nIPV) among a sample of substance-involved women in Kyrgyzstan, by history of transactional sex

	full sample ($N=213$)		Never (engaged in) transactional sex ($n=105$)		Former transactional sex ($n=65$)		Recent transactional sex ($n=43$)		NTS & FTS	NTS & RTS	FTS & RTS
	n	%	*n*	%	*n*	%	*n*	%			
Type	Ever/Lifetime								Pr		
injurious	67	31.46%	28	26.67%	21	32.31%	18	41.86%			
deprivation	29	13.62%	9	8.57%	11	16.92%	9	20.93%		*	
physical	187	87.79%	87	82.86%	58	89.23%	42	97.67%		*	
sexual	114	53.52%	34	32.38%	42	64.62%	38	88.37%	***	***	**
emotional	144	67.61%	60	57.14%	46	70.77%	38	88.37%		***	*
any	203	95.31%	98	93.33%	62	95.38%	43	100.00%			
	Past three-months										
injurious[a]	26	12.38%	7	6.73%	7	10.77%	12	28.57%		***	*
deprivation[a]	14	6.60%	3	2.86%	3	4.62%	8	19.05%		**	*
physical[a]	67	31.90%	19	18.27%	23	35.38%	25	60.98%	*	***	*
sexual	64	30.05%	12	11.43%	22	33.85%	30	69.77%	***	***	***
emotional	120	56.34%	55	52.38%	33	50.77%	32	74.42%		*	*
any	141	66.20%	63	60.00%	42	64.62%	36	83.72%		**	*

[a] missing data from sample; NTS: never transactional sex; FTS: former transactional sex; RTS: recent transactional sex; Pr.: significance level from chi-square test; significant at $p<.05$*, $p<.01$**, and $p<.001$***

past three months than women who reported NTS. Further, analyses indicated that women who reported RTS were significantly more likely to report *all types* of nIPV in the past three months compared to *both* women who reported NTS and FTS (see Table 3).

Multivariate Analyses of Past Three-Month IPV and nIPV by History of Transactional Sex

Table 4 presents findings from our multivariate analyses examining recent (past three-month) IPV and nIPV by

Table 4 Adjusted odds ratios of violence exposure within the past three-months among a sample of substance-involved women in Kyrgyzstan by history of transactional sex ($N=213$)

Adjusted OR (95%CI)		injurious aOR	deprivation aOR	physical aOR	sexual aOR	emotional aOR	any aOR
IPV		$N=213$	$N=213$	$N=213$	$N=213$	$N=213$	$N=213$
Transactional sex experience (Ref. NTS)	former transactional sex	1.05	0.59	0.76	1.10	0.74	0.61
	recent transactional sex	1.13	1.35	2.29*	4.55***	3.74***	4.29**
Transactional sex experience (Ref. FTS)	recent transactional sex	1.07	2.30	3.02**	4.14***	5.08***	7.04***
nIPV		n=210	n=190	n=210	N=213	N=213	N=213
Transactional sex experience (Ref. NTS)	former transactional sex	2.29	2.67	2.46**	3.82***	0.81	1.20
	recent transactional sex	8.51***	14.70***	7.01***	19.65***	2.75**	3.22**
Transactional sex experience (Ref FTS)	recent transactional sex	3.71**	5.50**	2.85**	5.15***	3.39**	2.70*

All analyses adjusted for other confounders (age, marital status, ethnicity, education level, food insecurity, lifetime and past 90-day arrest history, and past 90-day illicit drug use); aOR; adjusted odds ratio; Ref.: Reference category; NTS: never transactional sex; FTS: former transactional sex; RTS: recent transactional sex; Pr(|T|>|t|): significant level from one-sample t-test; Pr.: significance level from chi-square test; significant at $p<.05$*, $p<.01$**, and $p<.001$***

history of transactional sex. Analyses indicated fairly similar patterns to that of the bivariate analyses for any recent IPV and nIPV. We found no significant differences for any recent IPV or sub-type of recent IPV between women who reported NTS and FTS ($p>0.05$). However, women who reported RTS were significantly more likely to report several types of IPV than both women who reported NTS and FTS. Indeed, women who reported RTS were significantly more likely to report physical (a$OR=2.29$, $p<0.01$), sexual (a$OR=4.55$, $p<0.001$), emotional (a$OR=5.08$, $p<0.001$), and any type of IPV (a$OR=7.04$, $p<0.001$), compared to women who reported NTS. Similarly, we found that women who reported RTS were significantly more likely to report physical (a$OR=3.02$, $p<0.01$), sexual (a$OR=4.14$, $p<0.001$), emotional (a$OR=5.08$, $p<0.001$), and any IPV (a$OR=7.04$, $p<0.001$) compared to FTS.

Examining recent nIPV and history of transactional sex indicated that women who reported FTS were significantly more likely to report physical (a$OR=2.46$, $p<0.001$) and sexual nIPV (a$OR=3.82$, $p<0.001$) compared to women who reported NTS. Comparing women who reported RTS vs. NTS indicated very high odds of nIPV across all types: women who reported RTS were significantly more likely to report elevated odds of injurious (a$OR=8.51$, $p<0.001$), deprivation (a$OR=14.70$, $p<0.001$), physical (a$OR=7.01$, $p<0.001$), sexual (a$OR=19.65$, $p<0.001$), emotional (a$OR=2.75$, $p<0.001$), and any recent nIPV (a$OR=3.22$, $p<0.001$). We also found that women who reported RTS were significantly more likely to report injurious (a$OR=3.71$, $p<0.001$), deprivation (a$OR=5.50$, $p<0.01$), physical (a$OR=2.85$, $p<0.01$), sexual (a$OR=5.15$, $p<0.001$), emotional (a$OR=3.39$, $p<0.01$), and any recent nIPV (a$OR=2.70$, $p<0.05$) compared to women who reported FTS.

Discussion

In this paper, we examined the relationship between recent, former, and no lifetime history of transactional sex and the multiplicity of violence perpetrated by intimate and non-intimate partners, among a sample of high-risk women enrolled into a pilot GBV intervention study in Kyrgyzstan. Overall, our findings first highlighted the ubiquity of violence among socially marginalized populations of women. Across the total sample, over 90% of participants reported some lifetime experience of IPV. Similarly, over 90% of participants reported having experienced violence from someone *other* than an intimate partner, such as clients, pimps, family members, and/or police, in their lifetime. Past three-month prevalence of IPV exceeded 75% and the prevalence of nIPV approached 70%, indicating extremely high rates of recent exposure to violence and its associated potential harms. Estimates from this study are substantially higher than global prevalence of IPV and nIPV among the general population (García-Moreno et al., 2013), and are somewhat elevated in comparison to prior studies conducted among women that are substance-involved and/or who engage in transactional sex in other settings (Carlson et al., 2012; Deering et al., 2014; Jiwatram-Negron & El-Bassel, 2019; Ulibarri et al., 2010, 2015). Applying an intersectional lens, one possible explanation for the elevated prevalence of violence may be linked to structural forces such as the social stigma associated with drug use and transactional sex in Central Asia, where women may be seen as violating traditional gender norms/roles combined with poor enforcement of laws that are meant to protect women from violence (Alexandrova et al., 2005; Kirtadze et al., 2013; Moldosheva, 2008).

Findings from this study also showed that women who reported recent transactional sex were significantly more

likely report recent IPV and nIPV compared to both women who reported never having engaged in transactional sex and women who reported formerly engaging in transactional sex. While extant literature has found higher rates of lifetime or recent violence against women who report current transactional sex as compared to women who report no lifetime engagement in transactional sex, little prior research has compared women comparative risks among who report recent and former transactional sex. Multivariate analyses demonstrated a four to seven-fold higher odds of reporting recent IPV among women who reported recently engaging in transactional sex compared to women who reported former engagement in transactional sex and no history of transactional sex, and roughly two to three times higher odds of recent nIPV.

For the specific types of IPV and nIPV examined, risk of recent violence among women who reported former engagement in transactional sex was at a similar level of risk as women who reported never having engaged in transactional sex, suggesting that risks may diminish after exit from transactional sex or during periods where women may not be actively engaging in transactional sex. However, risk of recent physical and sexual nIPV remained significantly higher among women who reported former engagement in transactional sex compared to women who reported never having engaged in transactional sex, indicating long-term elevation of risk of physical and sexual violence from non-intimate partners, even after 'exiting' (whether temporarily or permanently) from transactional sex. This may indicate that these women continue to participate in the same social networks or physical risk environments that exposed them to potential non-intimate partner perpetrators of violence, even after 'exiting' from transactional sex, or that they continue to be subject to anti-sex work stigma and violence despite no longer selling sex. More research is needed to improve our understanding of the specific perpetrators that pose ongoing risks in order to guide violence prevention interventions for women who have formerly engaged in transactional sex, and to understand why increases in risk of physical and sexual non-partner violence persist. Examining broader social, legal, economic environmental factors may also help in understanding the observed patterns.

Implications for Interventions

Our findings that suggest that women who report recent engagement in transactional sex are at highest risk of GBV from intimate and non-intimate partners supports more recent literature describing the dual burden of violence among women who engage in transactional sex, outside of the course of transactional sex, and warrants further attention through prevention and intervention efforts. To date, the majority of interventions have not included risk mitigation and safety planning vis a vis intimate partner perpetrated violence (Awungafac et al., 2017; Shahmanesh et al., 2008). However, our data suggest that there are broader patterns of violence that are commonplace and additional perpetrators that require attention.

Interventions should account for macro-level factors that constrain women's choices and ability to keep themselves safe from violence. In our own sample, nearly half of the participants reported food insecurity and approximately 70% reported having children. High levels of poverty and gender inequality in Kyrgyzstan, including higher levels of unemployment and lack of job training for women compared to men, may frame women's decisions to engage in transactional sex out of necessity for survival. Further, a review paper by Grittner and Walsh (2020) among other research (Argento et al., 2011; El-Bassel et al., 2014; Shannon et al., 2015) has shown that the stigmatized nature of drugs and transactional sex within the larger context contributes to micro-level challenges such as partners and others who feel entitled to use violence or coerce women into engaging in transactional sex. These are not individual-level factors, but risks driven by meso and macrolevel forces often underexamined and unaddressed in interventions.

Pre-existing poor enforcement of protections against violence against women in the region, combined with the added stigma of engagement in stigmatized behaviors likely enable and exacerbate violence against marginalized women from a wide range of actors (Moldosheva, 2008; National Statistical Committee of the Kyrgyz Republic & UNICEF, 2019; Sex Workers' Rights Advocacy Network, 2009). For example, studies have shown that women who use substances and/or who are seeking HIV testing in the region face stigma and discrimination from health care providers, among others, in systems that are supposed to provide universal rather than selective support (Smolak & El-Bassel, 2013; Terlikbayeva et al., 2013). In response, women who engage in transactional sex may be even more fearful of engaging in services let alone reporting violence to the police. This contributes to an environment that enables violence to persist and thrive, destabilizing any potential progress.

Additionally, the fact that violence prevalence differs from similar studies in other contexts suggest the need to further explore the context-specific social, economic, and structural drivers that prop up the ongoing oppression of marginalized populations of women; doing so may help to uncover effective strategies in this particular context. Expanded research across vulnerable populations of women may also reveal common drivers that could be targeted across settings towards the development of interventions across the ecosystem and reduce violence. The drivers of violence are likely not uniform across settings, but could provide insight into possible mechanisms. Thus, although the findings of this paper do not explain the reasons for the

heightened prevalence of violence, the results do support calls to action to invest further in research to understand violence and efforts to redress violence, especially among vulnerable sub-groups (García-Moreno et al., 2015). Further, findings underscore the potential need for more integrated attention to GBV and substance use across various practice settings, including harm reduction organizations. In some settings, such as Central Asia, where patriarchal systems are more rigid, or where ethnic tensions are present, intervention responses may require coordination of care across systems that attune to these drivers whereas, in other settings, additional or different drivers may require further attention and integration. Intersectional research may reveal potential responses that are relevant across settings and those that need tailoring by context.

Our findings suggest that risk of violence does shift over time and that threats of violence are more imminent during periods of active engagement in transactional sex. Thus, recency of transactional sex is centrally important to take into account during intervention efforts. Dual safety planning for IPV and nIPV becomes essential given the profound risks. Further, examining recent nIPV, we found a significant increased risk of all subtypes of violence among women who reported recent transactional sex compared to women who reported formerly engaging in transactional sex and never having engaged in transactional sex, including deprivation and injurious violence. These findings are particularly important for two reasons: 1) it suggests exposure to multiple manifestations of severe violence, and 2) it suggests a need to reexamine our existing measures and understanding of the degree to which, and ways in which violence is enacted from a range of perpetrators as deprivation of resources has not previously been studied among women who engage in transactional sex. Current interventions may be neglecting key facets of violence that induce harm and long-term injury on the body. For a population with high risk of HIV, this also carries serious implications for success through the HIV continuum of care. For example, the literature on food insecurity and HIV has indicated negative HIV related outcomes among food insecure populations (Anema et al., 2009; Spinelli et al., 2017); it is possible that deprivation of resources through perpetrated violence may similarly lead to poor HIV outcomes.

Examining sexual violence risks in particular, we also found that the odds of sexual violence was extremely high. Sexual violence serves as a direct transmission route for HIV and other STIs. Women who engage in transactional sex may not be able to negotiate safely and women often receive higher pay for unprotected sex. Working to safeguard women actively engaged in transactional sex is needed. Strategies should extend beyond the individual woman herself and engage partners and clients/pimps, and the police, as the broader research suggest greater efficacy and success when other actors are included in interventions. Women's safety should not be contingent on her own actions given the power imbalances which make it unrealistic for women to ensure their own safety. Instead, couples-based and community-based efforts may be needed. Further, strengthening legal responses to violence without additional harm is a necessary and essential component.

Limitations

This paper has several limitations. First, this study relies on cross-sectional data, which limits conclusions on directionality. It is certainly possible that experiencing IPV or nIPV triggered or preceded engagement in sex work. Longitudinal data collection among larger samples of women who engage in transactional sex may further elucidate patterns of risk from both intimate and non-intimate partners. Second, this paper relies on data from baseline data collected from a pilot intervention study where participants were recruited through convenience sampling, which limits generalizability of our findings. Third, although our sample size was sufficient, future research with even larger sample sizes is needed to properly estimate the prevalence of GBV among women who engage in transactional sex, compared to similarly vulnerable women in this context to appropriately tease out the relationship between transactional sex and GBV. It would be additionally important to examine the association between number of clients and GBV risk associations. Fourth, the study mainly relied on self-reported data, and although participants were informed of their confidentiality, social acceptability bias may still have affected the accuracy of the results. Similarly, the use of self-reported data may have been affected by recall bias. Finally, limited data were collected about perpetrators, which limited our capacity to detail prevalence of violence by different non-intimate partners such as police vs. community members vs. clients.

Conclusions

Findings from this paper support emerging literature that women who engage in transactional sex are exposed to not only a range of severe abuses by clients and others, but by intimate partners as well. Moreover, the findings critically highlight that GBV risks among women shift over time in accordance with engagement in transactional sex. In addition to more expansive research examining IPV and nIPV among women with different histories and engagement in transactional sex, interventions should address the elevated risk of IPV and nIPV among women who may engage in transactional sex by considering couple-based strategies for this group. Specifically, there is a need to strengthen GBV responses in general, as well as specifically for this population given their elevated vulnerability. Partnering with a

wider array of harm reduction organizations, domestic violence shelters, support services for women who engage in transactional sex, and supporting the strengthening of legal protections for women are essential next steps. Further, integration of cross-cutting service provision and risk are essential if we are to respond to ubiquity of violence against women who engage in transactional sex in Kyrgyzstan. Finally, findings from this paper suggest the need to more closely examine and address the role structural and economic determinants of health, including stigma and food and economic insecurity. Decriminalization along with systems to ensure protections, and potential unionizing efforts may also prove helpful to addressing the high prevalence of GBV.

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