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Intimate Partner Violence Against Transgender Women: Prevalence and Correlates in Lima, Peru (2016-2018)

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Abstract

Limited data exists on intimate partner violence (IPV) among transgender women (TW), though global trends suggest IPV is associated with HIV risk in this population. We describe the prevalence of verbal, physical, and/or sexual violence as well as participant- and partner-level correlates of IPV among TW in Lima, Peru. Among 389 respondents,15.2% reported IPV with one or more of their last three sexual partners: 9.2% verbal, 8.2% physical, and 2.3% sexual violence. Physical and verbal violence were more common with stable partners (aPR 3.46, 95%CI:1.17–10.25, aPR 2.46, 95%CI:1.14–5.28, respectively). Physical violence was associated with condomless receptive anal intercourse (cRAI) (aPR 2.22, 95%CI:1.19–4.13) and partner alcohol use (aPR 4.38, 95%CI:1.56–12.33) while verbal violence correlated with participant inebriation (aPR 4.86, 95%CI:1.63–14.46). Our results link IPV with stable partnerships, alcohol use, and cRAI, suggesting TW in Peru may benefit from multidimensional IPV prevention strategies to foster supportive relationships and reduce HIV transmission.

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Abstract

Resumen:

Existen datos limitados sobre la violencia de pareja (IPV) entre las mujeres transgénero (TW), aunque las tendencias globales sugieren que la IPV está asociada con el riesgo de VIH en esta población. Describimos la prevalencia de violencia verbal, física y / o sexual, así como factores asociados a IPV a nivel de participantes y parejas entre TW en Lima, Perú. De 389 encuestadas, el 15.2% reportó IPV con una o más de sus últimas tres parejas sexuales: 9.2% por violencia verbal, 8.2% física y 2.3% sexual. La violencia física y verbal fueron más comunes con parejas estables (aPR 3.46, CI 95%: 1.17–10.25, aPR 2.46, CI 95%: 1.14–5.28, respectivamente). La violencia física se asoció con el coito anal receptivo sin condón (cRAI) (aPR 2.22, CI 95%: 1.19–4.13) y el consumo de alcohol por parte de la pareja (aPR 4.38, CI 95%: 1.56–12.33) mientras que la violencia verbal se correlacionó con la embriaguez de los participantes (aPR 4.86, CI 95%: 1.63–14.46). Nuestros resultados vinculan IPV con asociaciones estables, consumo de alcohol y cRAI, lo que sugiere que las TW en Perú puede beneficiarse de estrategias de prevención de IPV multidimensionales para fomentar relaciones de apoyo y reducir la transmisión del VIH.

Keywords

Intimate partner violence (IPV); transgender women (TW); condomless receptive anal intercourse (cRAI); HIV; substance use

Introduction:

Intimate partner violence (IPV) involving transgender women (TW) is an understudied problem, though several reports suggest that TW frequently experience violence inflicted by their sexual partners [1–4]. As defined by the World Health Organization, IPV refers to any behavior within an intimate relationship that causes physical, psychological or sexual harm to those in the relationship [5]. To our knowledge, there are no reports describing the prevalence of IPV or associated factors among TW in Peru, though prior qualitative interviews suggest this group shares the burden of a global epidemic of gender-based violence [6, 7].

IPV against TW is often classified together with gender-based abuse, hate crimes, or general violence, without adequately differentiating the unique characteristics of intimate partner violence [8]. However, selected reports have documented a high frequency of partner-inflicted physical, verbal, and sexual violence against TW in diverse global settings [2, 9–13]. In a 2018 multi-site cohort study, the lifetime prevalence of IPV among TW in the United States was estimated as 52% [1]. A 2018 systematic review on gender-based violence against TW worldwide reported that episodes of sexual and physical violence were most often motivated by cisgender male partners' (incorrect) perceptions of TW's sexual orientation and/or gender identity, suggesting that violence against TW may be linked to a disruption of social boundaries between masculinity and femininity, or between heterosexuality and homosexuality [14].

In addition to direct negative health outcomes, IPV may be indirectly linked with risk factors for HIV transmission. Though not clearly elucidated in TW populations, previous research explains causal links connecting IPV and HIV vulnerability in populations of cis-gender women and men who have sex with men (MSM). Dunkle *et. al.* describe a linkage model with two pathways that connect gender-based violence and HIV risk: 1) direct transmission from an infected perpetrator and 2) long-term increase in vulnerability resulting from experience of violence [15]. Additional research suggests that indirect vulnerabilities influence transmission as studies of cis-gender women show immune dysfunction after experiences of violence, coerced sex due to relationship power inequity, and institutional stigma mediate both HIV and IPV vulnerability [16–19]. Research on MSM populations is more limited. However, HIV and IPV have been linked directly through condomless sex with infected perpetrators and indirectly through lack of confidence in condom negotiation skills and frequency of sex while intoxicated [20–23]. A study of MSM in Peru showed HIV and IPV were associated with both condomless sex and substance use before sex [24]. While these associations may remain significant in TW populations, TW experience unique gender and sexual dynamics in intimate relationships that may uniquely influence IPV risk. Specific information on the prevalence of IPV and its association with HIV risk factors in TW populations is still lacking.

In Peru, machismo, transphobia, and the frequent occurrence of gender-based violence shape local social ecologies of gender, sexuality, and violence [6]. In previous qualitative interviews, TW in Peru described lives defined by limited education, employment, and housing opportunities, as well as by routine police harassment [6]. These multiple levels of marginalization and discrimination (social, economic, interpersonal, and structural), unique to the TW population, were seen to increase TW's risks for violence and other public health problems, as IPV was frequently reported in stable, casual, and transactional sexual encounters [6, 25, 26].

In addition to IPV, the social marginalization experienced by many TW in Peru is associated with increased risk for HIV acquisition and transmission [24]. Surveillance data from 1996–2002 demonstrate the disproportionate impact of HIV infection on TW as the prevalence of HIV among TW in Peru ranged from 33.3–44.8%, compared to 18.0–26.2% among gay-identified men who have sex with men (MSM) [27]. Further, a study published in 2015, reported a 27.8% (35/207) prevalence of HIV infection in Peruvian TW [28]. Overlapping risks for HIV and IPV among TW in Peru have been identified in factors including involvement in transactional sex, use of alcohol or drugs before sex, and condomless receptive anal intercourse (cRAI) [29–31]. While these factors, studied in cis-gender women and MSM populations, are all independently associated with IPV and HIV transmission, previous research has not defined a causal pathway linking these phenomena through TW partnerships. In order to design effective prevention programming that responds to the unique health needs of TW, it is important to address how social and public health problems like IPV and HIV intersect, and how they can be jointly addressed, within the sexual partnerships of TW. We sought to describe the prevalence of IPV, demographic and behavioral characteristics associated with partner violence, and the association of IPV with risk factors for HIV transmission in the sexual partnerships of TW in Lima, Peru.

Methods:

Study Design and Population

We conducted a secondary analysis of data from two concurrent studies of HIV prevention and treatment among TW in Lima, Peru: Féminas (an integration of gender-affirming primary care and peer navigation with HIV prevention and treatment services; Clinicaltrials.gov [Registration Number: NCT03757117]), and TransPrEP (a study of a social network-based PrEP adherence intervention; Clinicaltrials.gov [Registration Number: NCT02710032]). Participants were recruited for Féminas by peers visiting TW-specific socialization venues (e.g., commercial sex work areas, beauty parlors, sporting events, community events), where they approached potential participants and referred them to the study site. TransPrEP used community-based peer recruiters to identify six socially well-connected, HIV-uninfected TW from different social network clusters as seed participants. Each seed participant recruited 2–3 other HIV-uninfected TW from their social network, each of whom was asked to recruit 2–3 HIV-uninfected members of their network until enrolling clusters of 10–15 participants. Participants were enrolled between October 2016 and April 2018.

Eligibility Criteria

For both studies, inclusion criteria included: 18 years of age or older, assigned male sex at birth, and current gender different from their assigned natal sex. Screening for the Féminas study was limited to TW who were unaware of their HIV serostatus or living with HIV but not engaged in HIV treatment. Screening for the TransPrEP study was limited to individuals who had not previously tested positive for HIV. All participants received 40 *Nuevos soles* ($12 USD) compensation for the screening visit.

Procedures

After providing written informed consent, participants completed a baseline computer-assisted self-interview survey in Spanish. For participants who screened for both the Féminas and TransPrEP studies (n=22), only the first survey's responses were included in this analysis. All responses (N=389) from unique participants were included.

Measurements

Both studies asked identical questions about demographics, gender and sexual identity, participation in sex work, and characteristics of and behavior with each of participants' last three sexual partners. Participants were asked to describe the characteristics of their last three sexual partners, including perceived partner gender and sexual identity, relationship status (i.e., stable, casual, anonymous, or transactional), and length of the relationship. Sexual behavior during the last contact with each partner were assessed, including contact-specific sexual practices, condom use, and participant and partner alcohol and drug use before sex. Our analysis specifically addressed two behavioral risk factors for HIV acquisition: cRAI and alcohol use before sex. cRAI was determined through a two-step process asking: 1) If receptive anal intercourse (RAI) occurred during the last contact with a partner; and, 2) If yes, whether a condom was used during RAI. A similar approach was

used to understand whether participants and/or their partners: 1) Used any alcohol before sex; and 2) Whether one or both partners were inebriated during sex. Participants were asked if they had ever experienced three types of IPV with each of their last three sexual partners: verbal ("they intentionally used words to shame and offend me"), physical ("they hit or assaulted me"), and/or sexual violence ("they physically forced me to have sex when I didn't want to").

Statistical analysis

Dichotomous variables describing whether participants had experienced verbal, physical, and/or sexual IPV with any of their three most recent sexual partners were generated. Univariate analyses using Chi-square tests estimated participant, partner, and sexual encounter characteristics associated with physical, sexual, and/or verbal IPV.

GEE was used to assess participant- and partner-level correlates of physical and verbal IPV. Due to the low number of incidents of sexual assault reported (0.77%, 9/1167), frequency of sexual violence was described, but not included in our statistical models. Separate multivariable models were constructed for physical and verbal IPV. Variables included in each adjusted analysis differed based on bivariate results as variables were selected for inclusion using a p-value ≤ 0.05 in crude analysis to determine eligibility. Multivariate models for verbal violence included participant relationship status, partner type, partner and participant alcohol use before sex, while physical violence models include these same variables, as well as cRAI. Models were constructed under the GEE extension with an exchangeable working correlation structure to account for correlations between the last three partners reported by the same participant. Prevalence ratios were calculated and IPV subtypes were regressed as dichotomous outcomes on participant- and partner-level correlates in multivariate analyses. All analyses were conducted using Stata 12.0 (StataCorp, College Town, TX).

Ethics statement

The protocol for TransPrEP was approved by the institutional review boards of UCLA and Asociacion Civil Impacta Salud y Educacion. The protocol for the Féminas trial was approved by Asociacion Civil Impacta Salud y Educacion. Brown University and The Fenway Institute deferred review to the UCLA OHRPP for both trials. Written informed consent was obtained from all participants prior to the initiation of study procedures.

Results:

Table I lists the baseline characteristics and recent experiences of IPV of the 389 participants. Participants were 18–58 years of age (median age: 26) and used terms like *trans*, *femenina*, *mujer*, and *transgenero* to describe their gender identity, and *transgenero*, heterosexual, or homosexual to describe their sexual orientation. Most participants identified themselves as sex workers (62.21%, 242/389) and many reported transactional sex in the last 30 days (48.59%,189/389). One or more types of violence with a recent partner was reported by 15.17% (59/389) of respondents [9.25% (36/389) reported verbal abuse, 8.23% (32/389) physical aggression, and 2.31% (9/389) sexual assault]. TW who reported having a stable

partner reported a greater frequency of IPV overall (21.67% of partnered versus 12.55% unpartnered, p = 0.04) and of verbal abuse specifically (15.00% versus 6.84%, p = 0.03) than participants who did not identify as being in a stable partnership.

Table II lists the characteristics of participants' 1167 most recent sexual partnerships. The majority of relationships were short-term, with 66.30% (787/1176) less than six months in duration. Partners were most frequently described as cis-gender male (91.69%, 1070/1167), heterosexual (41.05%, 479/1167), and *activo* (insertive) sexual role (79.61%, 929/1167). Stable partners comprised 23.22% (242/1167) of all partners reported and were almost universally described as cis-gender male (96.28%; 233/242) and *activo* (89.26%; 216/242). Participants reported engaging in RAI in 82.78% (966/1176) of their last three sexual encounters.

Bivariate and multivariable models assessing the association of participant- and partnership characteristics with physical and/or verbal IPV are reported in Table III. In multivariate analysis, occurrences of both physical and verbal violence were more frequently reported with stable partners [adjusted prevalence ratio (aPR) 3.46, 95% confidence interval (CI): 1.17–10.25, aPR 2.46, 95% CI: 1.14–5.28, respectively]. Physical violence was associated with cRAI (aPR 2.22, 95% CI: 1.19–4.13) and with alcohol use by the partner before last sex (aPR 4.38, 95% CI:1.56–12.33). Verbal violence was associated with stable partners (aPR 1.99, 95%CI: 1.01–3.93) and partnerships where participants reported drinking to excess before last sex (aPR 4.86, 95%CI: 1.63–14.46).

Discussion:

In this cross-sectional study of TW from Lima, Peru, 15% of participants reported experiencing IPV with one or more of their last three sexual partners. Verbal violence was most commonly reported and occurred most often with stable partners and when participants were inebriated. Physical violence was 3.5 times more likely to occur during sexual contacts with stable partners, who were typically cis-gender men who assumed an *activo* sexual role, rather than with casual, anonymous, or commercial partners. cRAI and alcohol use before sex were also associated with physical and verbal IPV, suggesting that IPV may intersect with other risks for HIV transmission in specific partnership contexts. Our findings can inform the development of integrated prevention programming to address IPV, substance use, and HIV in TW populations of Lima, Peru.

Stable or primary partners, rather than casual, anonymous, or commercial contacts, were more frequently reported as the source of physical and verbal IPV in our study population. While prior IPV research in Peru has focused on cis-gender women and MSM populations, their findings are similar to our observations among TW [32–34]. In one study, cis-gender male sex workers more often reported IPV with stable partners compared to casual or transactional partners [34]. In contrast, a 2014 global review of violence against sex workers found that street-based sex workers were the highest risk category for violence [35]. While a majority of our participants engaged in transactional sex, including street-based sex work, commercial sex partnerships were not associated with IPV in our analysis. Possible reasons for the lack of an observed association may include the high prevalence of both commercial

sex and IPV in our sample (such that there is no statistical basis for comparison), or variations in how participants understood IPV in different partnership contexts (such that behavior that is considered routine with a transactional partner may be considered abusive when performed by a romantic partner). Regardless of the reason, our data clearly demonstrate the importance of stable partnerships as a framework for intimate partner abuse among TW in Peru and as a key area for future research.

Stable partnerships may act as a complex nidus of both supportive and harmful behavior for MSM and TW [6, 36, 37]. Previous research shows that partnership status influences violence risk, as cis-gender women that are divorced or separated experience more IPV [38, 39]. Again, this differs from our findings, as TW in stable partnerships reported violence more frequently in our analysis. However, it has been suggested that relationship power imbalance puts women at risk for violence and HIV infection [17, 18, 40, 41]. Therefore, it may be that TW lack power in stable partnerships leading to high HIV and IPV prevalence. In a study of partnership formations and risk for HIV and sexually transmitted infections (STIs), Cambou *et al.* suggested that perceptions of emotional intimacy and commitment in stable partnerships led to a reduced frequency of condom use and increased risk for HIV and STI transmission [36]. Other qualitative research has suggested that stable partnerships provide an important source of gender affirmation for some TW, but also included an account of IPV by a Peruvian TW that equated femininity with submissive victimization in the face of partner aggression [6, 37]. As a result, stable partnerships between TW and cis-gender men in Peru, through their alignment with traditional concepts of masculinity and femininity, provide a double-edged tool that both supports TW in a gender-affirming process of love and commitment while exposing them to the negative effects of misogyny in Peru's *machisto* social context.

Another factor contributing to IPV in our sample was alcohol use by both participants and their partners. Alcohol consumption is often considered part of the social fabric in Lima, with numerous studies documenting the routine nature of problem drinking and demonstrating event-level associations between alcohol use and sexual risk behavior in Peru [42–45]. In cis-gender heterosexual relationships, alcohol use can be a risk factor for IPV due to its disinhibitory effects, and it is reasonable to assume a similar effect exists among TW and their partners [46–48]. In addition, while the literature on relationships of TW is scarce, studies of cis-gender IPV have identified conflict within relationships, control, and jealousy as mediators of alcohol-associated violence by male partners [46, 49]. In the same line of reasoning, it is possible that alcohol use unmasks and weaponizes the suppressed feelings of gender-based stigma and shame voiced by cis-gender male partners of TW in previous qualitative studies [50, 51].

In understanding the association between physical violence and cRAI, a plausible explanation is that condomless intercourse results from forced (receptive) sex on a TW by their abusive (insertive) partner. Substance use and condomless sex are known mediators of HIV and IPV in MSM and cis-gender women populations. A 2015 review demonstrates that cis-gender females who have experienced IPV use condoms less frequently suggesting a history of IPV may reduce one's ability to negotiate condom use [52]. Further, a 2014 review of IPV against MSM correlates IPV with HIV-infection, unprotected anal sex, and

substance use [21]. To understand our findings, it may be more informative to juxtapose this observation with the increased risk of IPV seen in stable partnerships with cis-gender men, and in sexual encounters involving alcohol use. These findings can be collectively interpreted as a unified pathway that links IPV, substance use, and sexual risk behavior in an integrated structure of HIV risk for TW in Peru. Through this lens, substance use can be seen to destabilize the fragile boundaries that underlie some partnerships of TW with cis-gender, heterosexual-identified men, in which dominant heterosexual masculinity is threatened by, but also depends upon, submissive queer femininity, and where romantic partnerships alternate between supportive romantic intimacy and destructive domestic abuse. Within this conceptual framework, our findings allude to a complex constellation of risk factors for IPV, alcohol use, and HIV that highlight the importance of an integrated response to these dynamic threats to the physical, sexual, and emotional health of TW in Peru.

Associations of IPV and HIV risk factors prevail across populations of cis-gender females, MSM, and potentially TW, as indicated by our results. However, unique to TW, a recent qualitative study on TW from four Latin American countries depict early and recurrent gender-based violence in educational environments, when seeking health care, by police, and other state institutions [53]. Devastatingly, 78% TW murdered were reported from Latin American countries and the life expectancy of TW living in Latin America is 30–35 years [54, 55]. Therefore, extreme victimization of TW and unique experience of gender, sexuality, and social exclusion may augment the manifestation of IPV and HIV risk factors.

Our analysis must be considered in the context of several limitations. First, the cross-sectional data does not allow for a temporal relationship to establish causation or outcomes of IPV and, although the sample size was relatively large, our results cannot be generalized due to recruitment strategies used. For example, exclusion of HIV-infected participants from one of the contributing studies limited the number of HIV-infected participants included in this analysis and precluded stratification of results by HIV-infection status. Second, the primary aim of the original studies was not assessment of IPV, so that questions were not specifically tailored to obtain detailed information on IPV or to assess potential socio-behavioral pathways linking IPV with HIV risk. While our findings establish a high prevalence of IPV in participants' last three sexual partnerships, this measure is not comparable to other studies that report lifetime experiences of violence. It does, however, provide essential information on the immediate context of our participants' lives and allows for a better assessment of how experiences of IPV may be associated with other HIV risk factors. Finally, partner-inflicted violence was evaluated from the victim's perspective, which fails to elucidate partner motivations for violence and prevents us from developing a comprehensive, dyadic analysis of how IPV functions in TW's sexual partnerships.

Conclusions:

Our results highlight the connections between IPV, partnership type, alcohol, and condom use in the sexual partnerships of TW in Lima, Peru, suggesting a complex pattern of intersecting risks to the sexual, physical, and emotional health of these women. The interrelationship of risk behaviors seen in our study population suggests that IPV may function as part of a broader context of risk where gender-based violence, substance use,

condomless sex, and interpersonal dynamics negatively structure the partnership formations of some TW. To appropriately address the array of overlapping problems facing these women, multidimensional approaches may be needed to empower TW in developing intimate relationships that are supportive, mutually fulfilling, and gender-affirmative. New research and programming for TW in Lima, Peru has begun to develop this multi-dimensional approach through interventions designed to address the diverse experiences of violence, structural discrimination, social marginalization, and disempowerment of TW in Peru [56]. In addition to these efforts, future research should take a multidisciplinary approach to understanding and addressing how the primary sexual partnerships of TW can act as a nexus for IPV, substance use, and HIV risk that negatively affects the health and well-being of TW throughout Latin America.

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Table I:

Characteristics of TW and recent experiences of intimate partner violence (IPV) in Lima, Peru; 2016–2018.

Participant Characteristic	Total N=389 (100.0)	No IPV n=330 (84.8)	Verbal IPV n=36 (9.2)	Physical IPV n=32 (8.2)	Sexual IPV n= 9 (2.3)
	n (%)	n (%)	n (%)	n (%)	n (%)
Age Median (n=388, 99.7)					
18–26	204 (52.6)	171 (52.0)	18 (50.0)	19 (59.4)	5 (55.6)
27–58	184 (47.4)	158 (48.0)	18 (50.0)	13 (40.6)	4 (44.4)
Education (n=383, 98.4)					
< Secondary	74 (19.3)	64 (19.7)	7 (20.0)	7 (22.6)	3 (33.3)
≥ Secondary	309 (80.7)	261 (80.3)	28 (80.0)	24 (77.4)	6 (66.7)
Employment (n=343, 88.2)					
No Work	74 (21.6)	63 (21.7)	7 (21.2)	6 (22.2)	2 (25.0)
Formal Work	133 (38.8)	113 (39.0)	14 (42.4)	8 (29.6)	3 (37.5)
Informal Work	136 (39.7)	114 (39.3)	12 (36.4)	13 (48.2)	3 (37.5)
Relationship Status (n=383, 98.4)					
Not Partnered	263 (68.7)	**230 (71.0)**	**18 (50.0)**	18 (56.2)	7 (77.8)
Partnered	120 (31.3)	**94 (29.0)**	**18 (50.0)**	14 (43.8)	2 (22.2)
Monthly household income in *Nuevos Soles* (n=243, 62.5)					
<500	110 (45.3)	87 (42.9)	13 (56.5)	12 (57.1)	3 (37.5)
500–1500	88 (36.2)	78 (38.4)	7 (30.4)	5 (23.8)	4 (50.0)
>1500	45 (18.5)	38 (18.7)	3 (13.0)	4 (19.0)	1 (12.5)
Sex Work (n=389, 100)					
History of selling sex ever	242 (62.2)	208 (63.0)	21 (58.3)	20 (62.5)	6 (66.7)
Recent Sex Work (n=389, 100.0)					
Sex work in last 30 days	189 (48.6)	161 (48.8)	16 (44.4)	18 (56.2)	6 (66.7)
Sex Work Recruitment Location (n=389, 100.0)					
Street-based	132 (33.9)	109 (33.0)	13 (36.1)	15 (46.9)	5 (55.6)

Bold text = p-value <0.05.

Table II:

Partnership characteristics associated with recent IPV among TW in Lima, Peru; 2016–2018.

Sexual Encounter Characteristics	Total Partnerships N=1,167 (100.0)	No IPV n=1,085 (93.0)	Verbal IPV n=45 (3.9)	Physical IPV n=41 (3.5)	Sexual IPV n=9 (0.8)
	n (%)	n (%)	n (%)	n (%)	n (%)
Partner Type (n=1,167, 100.0)					
Casual/Anonymous	508 (43.5)	487 (44.9)	11 (24.4)	11 (2.2)	2 (0.4)
Stable	242 (20.7)	203 (18.7)	22 (48.9)	20 (8.3)	4 (1.6)
Transactional	271 (23.2)	255 (23.5)	10 (22.2)	6 (2.2)	3 (1.1)
Other	146 (12.5)	140 (12.9)	2 (4.4)	4 (2.7)	0 (0.0)
Partner Perceived Gender Identity (n=1,167, 100.0)					
Cisgender-Male	1,070 (91.7)	993 (91.5)	43 (95.6)	38 (3.6)	8 (0.8)
Other	97 (8.3)	92 (8.5)	2 (4.4)	3 (3.1)	1 (1.0)
Partner Perceived Sexual Orientation (n=1,167, 100.0)					
Heterosexual	479 (41.0)	448 (41.3)	12 (26.7)	19 (4.0)	5 (1.0)
Homo/Bisexual	496 (42.5)	454 (41.8)	27 (60.0)	19 (3.8)	4 (0.8)
Other	192 (16.4)	183 (16.9)	6 (13.3)	3 (1.6)	0 (0.0)
Partner Role in Sexual Encounter (n=1,167, 100.0)					
Activo	929 (79.6)	865 (79.7)	39 (86.7)	28 (3.0)	6 (0.6)
Pasivo/Moderno	131 (11.2)	116 (10.7)	5 (11.1)	11 (8.4)	3 (2.3)
Other	107 (9.2)	104 (9.6)	1 (2.2)	2 (1.9)	0 (0.0)
cRAI (n=1,167, 100.0)					
Yes	361 (30.9)	325 (30.0)	19 (42.2)	19 (5.3)	3 (0.8)
No	806 (69.1)	760 (70.0)	26 (57.8)	22 (2.7)	6 (0.7)
Partner Alcohol Use Before Sex (n=1,078, 92.4)					
No	829 (76.9)	779 (78.0)	23 (53.5)	25 (64.1)	6 (66.7)
Yes, Not Drunk	160 (14.8)	150 (15.0)	6 (14.0)	9 (23.1)	3 (33.3)
Yes, Drunk	89 (8.2)	70 (7.0)	14 (32.6)	5 (12.8)	0 (0.0)
TW Participant Alcohol Use Before Sex (n=1,086, 93.1)					
No	858 (79.0)	809 (80.3)	23 (54.8)	26 (66.7)	7 (77.8)
Yes, Not Drunk	144 (13.3)	137 (13.6)	2 (4.8)	6 (15.4)	0 (0.0)
Yes, Drunk	84 (7.7)	62 (6.2)	17 (40.5)	7 (18.0)	2 (22.2)

Table III.

Crude and adjusted GEE Analysis of Factors Associated with IPV Among TW in Lima, Peru; 2016–2018.

Characteristic	Verbal IPV (n=45)				Physical IPV (n=41)			
	cPR	95% CI	aPR	95% CI	cPR	95% CI	aPR	95% CI
Participant-Level Characteristic								
TGW Participant Relationship Status								
No Stable Partner	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Stable Partner	**2.74**	**1.39–5.40**	**1.99**	**1.01–3.93**	1.40	0.68–2.88	-	-
Partnership-Level Characteristics								
Partner Type								
Casual/Anonymous	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Stable	**3.41**	**1.70–6.82**	**2.46**	**1.14–5.28**	**3.80**	**1.48–9.73**	**3.46**	**1.17–10.25**
Transactional	1.11	0.43–2.87	1.12	0.46–2.74	0.82	0.26–2.63	0.82	0.28–2.41
Partner Sexual Role								
Activo (Insertive)	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Pasivo (Receptive)/*Moderno* (Versatile)	0.85	0.29–2.51	-	-	**2.46**	**1.25–4.83**	2.61	0.85–8.02
Condomless Receptive Anal Intercourse by Participant								
No cRAI	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
cRAI	1.65	0.93–2.95	-	-	**2.62**	**1.31–5.25**	**2.22**	**1.19–4.13**
Partner Alcohol Use Before Sex								
No	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Yes, Not Drunk	1.44	0.68–3.07	1.59	0.52–4.81	**2.52**	**1.28–4.99**	**4.38**	**1.56–12.33**
Yes, Drunk	**4.82**	**2.35–9.87**	1.24	0.38–4.03	2.46	0.95–6.40	2.40	0.77–7.51
TW Participant Alcohol Use Before Sex								
No	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Yes, Not Drunk	0.57	0.16–2.10	0.22	0.03–1.53	1.43	0.61–3.35	0.54	0.16–1.87
Yes, Drunk	**6.79**	**3.53–13.05**	**4.86**	**1.63–14.46**	**2.85**	**1.12–7.26**	0.80	0.21–3.01

Bold text = p-value <0.05