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History of child sexual abuse among women consuming illicit substances in Mexico City

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Abstract

Introduction: Child sexual abuse (CSA) is a pervasive problem that has been linked to numerous developmental, social, health, and substance use consequences. Nevertheless, the relationship between CSA and the consumption of psychoactive substances has not been adequately studied in Mexico. The present study aims to examine this association between history of CSA and illicit substance use and associated risk behaviors in a sample of young adult women in Mexico City.

Design and Methods: The present study uses a cross-sectional design to examine sexual abuse history among women who use illicit substances. Data collection consisted of a questionnaire administered through face-to-face interviews with 101 women who sought treatment for substance use in Mexico City. A bivariate analysis was used to examine women who experienced sexual abuse and those who did not. Odds ratio and relative risk were estimated.

Results: A total of 101 women were interviewed with an average age of 19.2 years. The average age of onset of drug use was 15.4 years. Among participants, 68% reported having been victims of sexual abuse and rape. The average age of reported sexual abuse was 12.2 years. Participants reported a high rate of polydrug use (32.7%), consuming more than two drugs. Sexual abuse was associated with detention by police for drugs, forced prostitution, and consumption of substances during pregnancy.

Discussion and conclusions: This study found that sexual abuse and rape were highly associated with substance abuse outcomes and associated risk behaviors.

Keywords

Child sexual abuse; consume illicit substances; risk behaviors; substances use

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The authors have no conflict of interest.

Introduction

Child sexual abuse (CSA) is an important and pervasive problem that has been linked to numerous social, health, and developmental consequences for victims. For instance, CSA has been found to impact on the neurocognitive and brain development of children and adolescents, putting stress on susceptible regions of the brain throughout development (Anda et al., 2006; Andersen et al., 2008; Navalta, Polcari, Webster, Boghossian, & Teicher, 2006; Trickett, Noll, Susman, Shenk, & Putnam, 2010). While research has identified differences in outcomes based on severity, age at abuse, and relationship to the perpetrator (Cantón-Cortés & Rosario Cortés, 2015; Díaz-Negrete, Gutiérrez-López, Fernández-Cáceres, & Sánchez-Huesca, 2015; McLean & Gallop, 2003; O'Leary, et al, 2010; Pérez Del Río & Mestre Guardiola, 2013; Schoedl et al., 2010), CSA overall has been documented as a significant *predictor* of deterioration in mental health during adolescence and adulthood (Cantón-Cortés & Rosario Cortés, 2015; Chen et al., 2010; Echeburúa & Corral, 2006; Evrim, 2009; Hillberg, Hamilton-Giachritsis, & Dixon, 2011; Ramos-Lira, Saldívar-Hernández, Medina-Mora, Rojas-Guiot, & Villatoro-Velázquez, 1998). For instance, CSA is associated with an increased risk of anxiety and depression (Fergusson, McLeod, & Horwood, 2013; Maniglio, 2010), self-harm (Noll, Horowitz, Bonanno, Trickett, & Putnam, 2003), suicidal ideation (Chen et al., 2010; Fergusson et al., 2013), posttraumatic stress disorder (PTSD) (Chen et al., 2010; McLean & Gallop, 2003; Schoedl et al., 2010), borderline personality disorder (Ball & Links, 2009; Bandelow et al., 2005; McLean & Gallop, 2003), eating disorders (Smolak & Murnen, 2002; Wilson, 2010), and sleep disorders (Chen et al., 2010; Noll et al., 2006).

Similarly, epidemiological studies have found an increased risk of an array of physical health concerns and risky behaviors among women with a history of CSA, including obesity (Noll, Zeller, Trickett, & Putnam, 2007; Wilson, 2010), autoimmune disorders (Wilson, 2010), unplanned pregnancy (Trickett, Noll, & Putnam, 2011), and sexually transmitted infections (Mosack et al., 2010; Schacht et al., 2010; Springer, Sheridan, Kuo, & Carnes, 2003). A meta-analysis conducted by Irish, Kobayashi, and Delahanty (2010) found that a history of CSA was systematically associated with adverse outcomes in all physical health areas tested, including gastrointestinal, gynecologic, chronic pain, cardiopulmonary, and obesity. Moreover, research has documented the heightened rates of risky sexual behaviors and associated health conditions in adolescence and young adulthood among women who have experienced CSA (Mosack et al., 2010; Schacht et al., 2010; Springer et al., 2003; Trickett et al., 2011).

CSA has also been identified as a risk factor for substance abuse and dependence. Results of a systematic review, for example, found that adolescent and adult women with a history of CSA were twice as likely to develop later substance abuse problems (Simpson & Miller, 2002). Sartor et al. (2013) found that, after controlling for genetics and family influences, CSA was a distinct risk factor for tobacco and marijuana use in adolescent girls. Similarly, adolescent girls with a history of CSA have also been found to have increased rates of polydrug use compared to those who have not been abused (Shin, Hong, & Hazen, 2010). In a multisite study across the United States, CSA was found to be associated with an earlier

initiation of injection drug use among young adult women (Ompad et al., 2005). On the other hand, Kingston and Raghavan (2009) found that CSA was not associated with an earlier age of drug use initiation in adolescents, but further victimization after CSA was associated. Thus, the relationship between CSA and the consumption of psychoactive substances has not been fully understood and requires more research, particularly in distinct risk environments and communities (Pérez Del Róo & Mestre Guardiola, 2013; Rodríguez et al., 2015).

While the impact of childhood sexual abuse is well documented (Chen et al., 2010; Evrim, 2009; Trickett et al., 2011; Wilson, 2010), CSA has been particularly understudied in Mexico (Pérez Del Róo & Mestre Guardiola, 2013; Rodríguez et al., 2015). In 2009, the Organization for Economic Cooperation and Development (OCDE, 2013) and the United Nations Children's Emergency Fund (UNICEF) ranked Mexico first in physical violence, sexual abuse, and homicides of minors 14 years old, which were mainly committed by their parents (UNICEF, 2014). High rates of CSA were recorded in Mexico with 77% of the victims being girls with an average age of 5.7 years and in almost all cases the victim knew the offender: the brother (19%), the stepfather (18%), an uncle (16%), and the father (15%) Dirección General de Prevención del Delito y Participación Ciudadana. (2010). Comparatively, in the United States, approximately 1 in every 10 children has experienced sexual victimization and approximately 15–32% of women reported having been sexually abused in childhood (Pulido et al., 2015). The data on sexual abuse in Mexico are scarce. The currently available data do not reflect the social reality of many victims, and it has not been fully incorporated in research and public policy discourse (Frías & Erviti, 2014). A recent global metaanalysis, for example, found a single study examining sexual abuse from Mexico (Stoltenborgh, Van Ijzendoorn, Euser, & Bakermans-Kranenburg, 2011). Further, the existing epidemiological data of CSA in Mexico are believed to be underreported due to cultural norms that often silence and stigmatize issues related to sex and sexuality (Stoltenborgh et al., 2011). To fill these gaps in the literature, the current work aims to examine the association between history of CSA and illicit substance use and associated risk behaviors in a sample of women in treatment in Mexico City.

Methods

Participants

The present study uses a cross-sectional design to examine sexual abuse history among women who use illicit substances. Participants were recruited from 11 public nongovernmental substance abuse treatment facilities exclusively for women in Mexico City. All women ($n = 160$) were provided the opportunity to participate in the study and enrolled in the study only after providing informed consent. A total sample of 101 women agreed to participate. Data were collected through questionnaires administered in face-to-face interviews by trained personnel.

Measures

Data were collected through a 57-item questionnaire, which consisted of four sections:

- a. Socioeconomic demographics, such as age, income, marital status, place of residence, medical insurance status, employment, and education.
- b. Patterns of substance use, including marijuana, cocaine, crack, inhalants, tranquilizers, and amphetamines. Selfreported lifetime, past year, and past month use was measured for each drug.
- c. Sexual risk, including a history of sexual abuse or rape, prostitution, onset of being sexually active, consensual sexual intercourse, condom use with primary partner, condom use with casual partner, condom use with a partner who paid them, and condom use with partner with whom she paid.
- d. Use of illicit drugs during pregnancy.
- e. Main variables:
 - Sexual abuse: forcing a person to engage in sexual acts without her consent that may include sexual coercion, undue touching, sexual harassment, and child abuse (World Health Organization, 2012).
 - Rape: sexual intercourse, or other forms of sexual penetration, committed by a perpetrator against a victim without her consent (World Health Organization, 2012).

Analysis of data

A descriptive bivariate analysis was performed to examine the sociodemographic differences among women with a history of CSA compared to women with no such history. T-tests and chi-square (χ^2) tests were utilized to compare these groups. Additionally, an ANOVA test was conducted to compare women who have been sexually abused, those who reported being raped, and those who have experienced both. Multivariate models estimated the odds ratio (OR) and relative risk (RR) of each variable. All analyses were conducted in IBM SPSS version 20 software.

Results

Among the sample of 101 participants, the average age was 19.24 (SD = 4.96). Most participants had a basic primary and secondary level education (84.1%), but only 5.9% completed high school. The average age of the onset of drug use was 15.43 years (SD \pm 0.98%) with 32.7% reporting polydrug use in the last month. Almost all women (98.0%) were sexually active with an onset at 14.9 years of age on average. The demographic characteristics of the study sample are summarized in Table 1.

Figure 1 shows that 69 participants (68.3%) reported having been victims of sexual abuse and rape and 32 participants (31.7%) did not report any CSA. Among the sample of women with histories of CSA, 61% reported the abuse before initiation of drug use, with the remaining 39% indicating drug use before experiences of sexual abuse or rape. More specifically, a total of 60 women (59.4%) reported having been raped at an average 12.2 years of age, with only 10.9% of these women being 18 years or older at the time of the

abuse. Results indicated significant differences among female drug users who suffered abuse and rape versus women who did not report any CSA [$t = 6.81$, $g1 = 1$, $p < 0.000$]).

Table 2 presents the prevalence of sociodemographics in relation to abuse and rape. As illustrated, the population has scarce economic resources with 45.5% obtaining income from third parties and 44.6% reporting no employment. In addition, 12.9% reported having an informal job, although 44.6% benefits from some type of health insurance with 27.7% reporting use of public subsidized medical insurance *seguro popular*. Additionally, 36.6% live at the home of their parents or partner.

In relation to the use of substances among women who experienced CSA, 68.3% reported consumption of illicit substances sometime in their lifetime, 64.4% in the last year, and 40.6% in the last month. High rates of polydrug use, which is a consumption of two or more drugs, were also observed. Those who did not present polydrug use at the initiation of drug use were 64.4%. Of those who reported polydrug use, 62.4% used more than two illicit substances in the last year and 47.5% in the last month.

For women with a history of sexual abuse whose main partners were stable, 64.4% used condoms as a method of protection. Likewise, 56.4% of participants with occasional partners also used condoms. Moreover, 28.7% of the women reported a pregnancy during which they did consume illicit substances.

Table 3 presents the main variables associated with sexual abuse and rape. Women with a history of sexual abuse were significantly more likely to access and receive public subsidized medical benefits (*seguro popular*) ($\chi^2 [1] = 4.147$ $P = 0.042$). Abused women were also more likely to receive financial support from their social networks ($\chi^2 [1] = 11.10$ $P = 0.001$). Women who experienced sexual abuse and rape reported significant rates of use of condoms with partners who paid for sex ($\chi^2 [1] = 14.418$ $P = 0.000$; OR = 0.185, 95% CI = 0.075–0.457). In contrast, for those women reporting paying for sex, condom use was less frequently used ($\chi^2 [1] = 5.417$ $P = 0.020$; OR = 0.268, 95% CI = 0.84–0.853).

In regard to substance use and related risk behaviors, women who experienced sexual abuse were significantly more likely to have been detained by the police for consumption of drugs ($\chi^2 [1] = 6.381$ $P = 0.012$) with an OR of 3.133 (95% CI = 1.267–7.743). That is, they were more than three times likely to have been detained by police for drugs than women who did not experience sexual abuse, and women who experienced sexual abuse were significantly more likely to have been forced into prostitution ($\chi^2 [1] = 5.725$ $P = 0.017$) with an OR of 1.552 (95% CI = 1.331–1.809). That is, they were more than 1.5 times likely to have been forced into prostitution than women who did not experience sexual abuse. In addition, abused women reported consuming illicit drugs while pregnant significantly more than women who were not sexually abused ($\chi^2 [1] = 6.825$ $P < 0.01$). Women with a history of sexual abuse were 3.915 times more likely to report this (95% CI = 1.347–11.383). It was found that women with a history of sexual abuse were forced into prostitution (RR = 1.552), arrested by the police for drug consumption (RR = 1.408) and who consumed drugs while pregnant (RR = 1.429).

Discussion and conclusions

Findings from this study begin to provide an epidemiological profile of women with histories of CSA in Mexico. This vulnerable population has been largely overlooked given the scarcity of research in Mexico on this issue. Results from this analysis highlight women's susceptibility for engaging in high-risk behaviors, similar to that which has been found in the United States. For example, we find that those reporting CSA were more likely to have histories of engaging in forced prostitution. This is similar to what researchers in the United States have documented among adult survivors of CSA being reinforced and perpetuated over the life course and expressed in the form of promiscuity or prostitution (Abramovich, 2014). Future research in Mexico will need to look into other factors that contribute to forced prostitution, including labor opportunities, homelessness, and drug dependence (Gómez San Luis & Almanza Avendaño, 2012).

Expanding upon the existing knowledge related to CSA and substance use behaviors, our findings point to women in this Mexican context being more likely to be arrested for drug use and engage in illicit drug use during pregnancy. This supports existing research that documents women's involvement in detrimental drug use patterns and risky behaviors (Simpson & Miller, 2002). One limitation is the lack of information on the type of substance and the period in which it was consumed. Data on consumption of illicit substances during pregnancy are lacking for the majority of low- and middle-income countries, according to the World Health Organization. Research indicates that cannabis is the most common illicit drug worldwide, followed by amphetamine-type stimulants and opioids, and as such, may be more likely to be used by reproductive-aged women (Forray, 2016). In contrast, the most prevalent drugs in this study were inhalants and crack.

Paradoxically, there were several unexpected findings that should be noted. Women with histories of CSA were found to utilize subsidized medical insurance services and obtain financial support from their existing social networks, in comparison to their non-CSA counterparts. These findings may be unique to the Mexico context and may point to a safety net for women who are disproportionately vulnerable to numerous health and social conditions. The above coincides with the data obtained by the Instituto Nacional de Estadística y Geografía (2013) (National Survey of Employment and Social Security) conducted in Mexico that shows that women use the following types of health insurance in order of frequency: popular health insurance, Instituto Mexicano del Seguro Social (IMSS), unaffiliated, Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSSTE), and private institution. Popular health insurance is the program that has the largest number of affiliation (Instituto Nacional de Estadística y Geografía, 2014). In addition, women with histories of CSA reported higher rates of condom use with clients and/or those they pay for sex. These results support data obtained by the Instituto Nacional de Estadística y Geografía (2014) (National Survey of Demographic Dynamics) carried out in Mexico, which indicate that 98.7% of women between 15 and 49 years know at least one method of birth control. Although our study method did not allow us to know this category, the majority of the participants reported having used a condom as a method of protection with their main and occasional partner.

Women with histories of CSA were found to have low socioeconomic status (Essabar, Khalqallah, & Dakhama, 2015), no formal employment but rather part of the informal economy, low levels of education, and living with parents. Findings also reveal higher rates of illicit substance use; they started using drugs at a very young age, inhalants being the substance most frequently reported. Finally, a total of 60 women reported having been raped at an average age of 12.2 years. CSA rates reported in this study were found to be higher, in particular with experiences occurring before initiation of drug use. It is possible that these characteristics increase the vulnerability of women with a history of CSA to drug use.

Within the limitations of this study, it should be noted that the sample is small which can influence the fact that no significant difference would be detected in some comparisons. In addition, the study did not have a control group (which is difficult to obtain in this type of study). This study did not include specific forms of abuse and only included general situations exclusively on physical contact (Ramos-Lira et al., 1998; Ramos-Lira, Saltijeral-Méndez, Romero-Mendoza, Caballero-Gutiérrez, & Martínez-Vélez, 2001). It is important to study the substance use, taking into account characteristics that allow for information about their specific needs to inform a comprehensive treatment program (Castillo Franco & Gutiérrez López, 2008). Research on sexual abuse in Mexico is scarce; there is no public policy of comprehensive care for women who use drugs with histories of CSA, contributing to a public health problem that has not been addressed in Mexico. In conclusion, it is evident from the results that women with a history of sexual abuse were highly associated with substance abuse and risk behaviors. CSA has also been identified as a risk factor for substance abuse.

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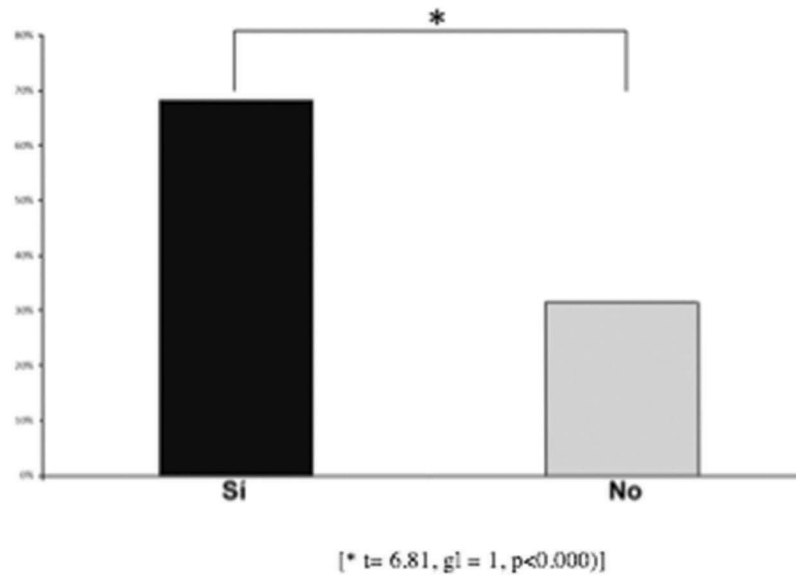
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		Frequency	Percentage
Victim of abuse and rape	Yes	69	68%
	No	32	32%
	Total	101	100.0

Figure 1.

Sample of participants who reported having been victims of sexual abuse and rape. The sample of participants (68%) reported being victims of sexual abuse and rape, and 32 (32%) who did not. The analysis indicates significant differences among users who suffered abuse and rape.

Table 1.Demographic characteristics of sample ($n = 101$).

Characteristics	n	Average	^a S.D. \pm	Range
Age	101	19.24	4.96	(13–43)
School (years)	101	7.86	1.40	(6–16)
Average age of drug use	101	15.43	0.98	(7–43)
Age of crack intake	54	15.78	3.54	(8–26)
Age of marijuana consumption	89	16.60	3.84	(8–23)
Age of onset of inhalation	99	14.20	2.63	(7–43)
Age of onset of cocaine	48	14.27	4.32	(7–41)
Age of onset of amphetamines	30	15.71	4.90	(12–31)
Age of onset of tranquilizers	38	16.03	5.34	(8–42)
Number of drugs used in last year	101	3.03	1.40	(1–6)
Number of drugs used in last month	101	2.02	1.17	(0–6)
Age of onset of sexual activity	99	14.09	2.50	(10–24)
Age of sexual abuse (rape)	60	12.20	5.04	(3–24)
Number of sexual couples	101	3.36	3.71	(0–18)
Occasional couples	101	6.49	7.17	(0–28)
Couples who paid you	101	0.42	1.08	(0–60)
Couples to whom you paid	101	4.45	8.00	(0–9)
Average number of couples	101	4.45	3.20	(0–60)

^aS.D. standard deviation

Table 2.

Prevalence of sociodemographic and consumption of substance drugs variables in relation to abuse, rape, and both. The substance use: 68.32% of the participants reported substance use in their lifetime, 64.36% in the last year, and 40.59% in the last month. As can be seen, most of the participants presented polydrug use.

	Rape			Sexual abuse			Both		
	n	Prevalence	CI 95%	n	Prevalence	CI 95%	n	Prevalence	CI 95%
Age									
18 years old or less	32	31.68	(22.61–40.76)	29	28.71	(19.89–37.54)	39	38.61	(29.12–48.11)
Over 18 years old	28	27.72	(18.99–36.45)	21	20.79	(12.88–28.71)	30	29.70	(20.79–38.61)
Marital status									
Married/ civil Union	13	12.87	(6.34–19.40)	12	11.88	(5.57–18.19)	15	14.85	(7.92–21.79)
Single	46	45.54	(35.83–55.26)	38	37.62	(28.18–47.07)	53	52.48	(42.74–62.21)
Subsidized medical care									
No	22	21.78	(13.73–29.83)	16	15.84	(8.72–22.93)	24	23.76	(15.46–32.06)
Yes	38	37.62	(28.18–47.07)	34	33.66	(24.45–42.88)	45	44.55	(34.86–54.25)
Type of medical care									
IMSS	14	13.86	(7.12–20.60)	8	7.92	(2.65–13.19)	14	13.86	(7.12–20.60)
ISSSTE	1	0.99	(–0.94–2.92)	2	1.98	(–0.74–4.70)	2	1.98	(–0.74–4.70)
Seguro popular	22	21.78	(13.73–29.83)	23	22.77	(14.59–30.95)	28	27.72	(18.99–36.45)
Private	1	0.99	(–0.94–2.92)	1	0.99	(–0.94–2.92)	1	0.99	(–0.94–2.92)
Does not count	22	21.78	(13.73–29.83)	16	15.84	(8.72–22.96)	24	23.76	(15.46–32.06)
Job									
No	40	39.60	(30.07–49.14)	32	31.68	(22.61–40.76)	45	44.55	(34.86–54.25)
Yes	20	19.80	(12.03–27.57)	18	17.82	(10.36–25.29)	24	23.76	(15.46–32.06)
Job type									
Formal Job	3	2.97	(–0.34–6.28)	4	3.96	(0.16–7.76)	3	2.97	(–0.34–6.28)
Informal Job	17	16.83	(9.53–24.13)	14	13.86	(7.12–20.60)	13	12.87	(6.34–19.40)
Economic income by third parties									
No	17	16.83	(9.53–24.13)	20	19.80	(12.03–27.57)	23	22.77	(14.59–30.95)
Yes	43	42.57	(32.93–52.22)	30	29.70	(20.79–38.61)	46	45.54	(35.83–55.26)
Income from illicit activities									
No	52	51.49	(41.74–61.23)	41	40.59	(31.02–50.17)	57	56.44	(46.77–66.11)
Yes	8	7.92	(2.65–13.19)	9	8.91	(3.35–14.47)	12	11.88	(5.57–18.19)
Education									
No education/incompleted	6	5.94	(1.33–10.55)	5	4.95	(0.72–9.18)	6	5.94	(1.33–10.55)
Elementary school	26	25.74	(17.22–34.27)	19	18.81	(11.19–26.43)	28	27.72	(18.99–36.45)
Middle school	23	22.77	(14.59–30.95)	23	22.77	(14.59–30.95)	30	29.70	(20.79–38.61)
High School	4	3.96	(0.16–7.76)	2	1.98	(–0.74–4.70)	4	3.96	(0.16–7.76)
Post-secondary education	1	0.99	(–0.94–2.92)	1	0.99	(–0.94–2.92)	1	0.99	(–0.94–2.92)
Where do you live									
House or independent apartment	8	7.92	(2.65–13.19)	10	9.90	(4.08–15.73)	11	10.89	(4.82–16.97)

	Rape			Sexual abuse			Both		
	<i>n</i>	Prevalence	CI 95%	<i>n</i>	Prevalence	CI 95%	<i>n</i>	Prevalence	CI 95%
Parent or couple home	33	32.67	(23.53–41.82)	25	24.75	(16.34–33.17)	37	36.63	(27.24–46.03)
Shelter or prison	11	10.89	(4.82–16.97)	9	8.91	(3.35–14.47)	11	10.89	(4.82–16.97)
Street	8	7.92	(2.65–13.19)	6	5.94	(1.33–10.55)	10	9.90	(4.08–15.73)
Consumption of illicit substances at some time in life	0	0.00	(0.00–0.00)	0	0.00	(0.00–0.00)	0	0.00	(0.00–0.00)
No	60	59.41	(50.45–69.55)	50	49.50	(40.25–59.75)	69	68.32	(59.98–78.02)
Yes	3	2.97	(–0.34–6.28)	3	2.97	(–0.34–6.28)	4	3.96	(0.16–7.76)
Consumption of illicit substances in the last year	57	56.44	(46.77–66.11)	47	46.53	(36.81–56.26)	65	64.36	(55.02–73.70)
No									
Yes									

Table 3.

Main variables associated with sexual abuse and rape: detained by the police for consumption of drugs, forced into prostitution, and consumed drugs while pregnant.

	Victim of abuse sexual and rape sexual					OR	CI 95%	RR	CI 95%
	Yes %	No %	% Total	Chi-square	P				
Age	38.61	18.81	57.42	$\chi^2 (1) = 0.073$ $P = 0.787$	0.889	(0.380–2.083)	0.964	(0.738–1.258)	
Marital status	29.7	12.87	42.57	-	-	-	-	-	
	15.00	9.00	24.00	$\chi^2 (1) = 0.439$ $P = 0.508$	0.723	(0.277–1.890)	0.896	(0.636–1.264)	
Subsidized Medical Care	53.00	23.00	76.00	-	-	-	-	-	
	23.76	17.82	41.58	$\chi^2 (1) = 4.147$ $P = 0.042$	0.415*	(0.176–0.977)	0.749	(0.556–1.009)	
Employed	44.55	13.86	58.41	-	-	-	-	-	
	44.55	15.84	60.40	$\chi^2 (1) = 2.116$ $P = 0.146$	1.875	(0.800–4.395)	1.230	(0.916–1.650)	
Job type	23.76	15.84	39.60	-	-	-	-	-	
	18.81	12.87	31.68	$\chi^2 (1) = 0.026$ $P = 0.872$	0.887	(0.178–4.325)	0.950	(0.917–1.746)	
Financial Support from Social Network	4.95	2.97	7.92	-	-	-	-	-	
	22.77	21.78	44.55	$\chi^2 (1) = 11.10$ $P = 0.001$	4.400*	(1.790–10.818)	0.622	(0.456–0.849)	
Income from illicit activities	45.54	9.9	55.44	-	-	-	-	-	
	56.44	28.71	85.15	$\chi^2 (1) = 1.111$ $P = 0.292$	2.035	(0.532–7.786)	0.828	(0.617–1.112)	
Education	11.88	2.97	14.85	-	-	-	-	-	
	57.43	26.73	84.16	$\chi^2 (1) = 0.600$ $P = 0.439$	0.430	(0.048–3.858)	0.817	(0.557–1.205)	
Where do you live	4.95	0.99	5.94	-	-	-	-	-	
	20.79	4.95	25.74	$\chi^2 (1) = 2.508$ $P = 0.113$	2.363	(0.800–6.980)	0.792	(0.615–1.020)	
Consumption of illicit substances at some time in life	47.52	26.73	74.26	-	-	-	-	-	
	3.96	1.98	5.94	$\chi^2 (1) = 0.008$	1.083	(0.188–6.244)	1.026	(0.573–1.837)	

	Victim of abuse sexual and rape sexual		No %	Yes %	% Total	Chi-square	OR	CI 95%	RR	CI 95%
	Yes %	No %								
						$P = 0.929$				
Consumption of illicit substances in the last year	Yes	64.36	29.7	94.06	-	-	-	-	-	-
	No	27.72	11.88	39.6	$\chi^2 (1) = 0.087$ $P = 0.768$	0.879	(0.371-2.080)	0.960	(0.734-1.255)	-
Age of onset of crack consumption	Yes	40.59	19.8	60.39	-	-	-	-	-	-
	Under 18 years old	31.68	9.90	41.58	$\chi^2 (1) = 0.441$ $P = 0.507$	1.600	(0.397-6.453)	1.143	(0.740-1.764)	-
Age of onset of marijuana use	Over 18 years old	7.92	3.96	11.88	-	-	-	-	-	-
	Under 18 years old	54.46	24.75	79.21	$\chi^2 (1) = 0.016$ $P = 0.898$	1.100	(0.254-4.757)	1.031	(0.635-1.675)	-
Age of onset of inhalants consumption	Over 18 years old	5.94	2.97	8.91	-	-	-	-	-	-
	Under 18 years old	60.40	25.74	86.14	$\chi^2 (1) = 0.681$ $P = 0.409$	1.676	(0.487-5.768)	1.202	(0.731-1.977)	-
Age of onset of cocaine use	Over 18 years old	6.93	4.95	11.88	-	-	-	-	-	-
	Under 18 years old	29.70	10.89	40.59	$\chi^2 (1) = 0.743$ $P = 0.389$	2.045	(0.393-10.637)	1.280	(0.657-2.497)	-
Age of onset of amphetamine use	Over 18 years old	3.96	2.97	6.93	-	-	-	-	-	-
	Under 18 years old	17.82	4.95	22.77	$\chi^2 (1) = 0.140$ $P = 0.708$	1.440	(0.212-9.782)	1.096	(0.654-1.835)	-
Age of onset of tranquilizers	Over 18 years old	4.95	1.98	6.93	-	-	-	-	-	-
	Under 18 years old	25.74	4.95	30.69	$\chi^2 (1) = 0.588$ $P = 0.443$	2.080	(0.312-13.889)	1.174	(0.174-1.923)	-
Polydrug use at some time in life	Over 18 years old	4.95	1.98	6.93	-	-	-	-	-	-
	No	64.36	28.71	93.07	$\chi^2 (1) = 0.434$ $P = 0.510$	0.595	(0.125-2.830)	0.826	(0.429-1.592)	-
Polydrug use last year	Yes (2 or more)	3.96	2.97	6.93	-	-	-	-	-	-
	No	62.38	26.73	89.11	$\chi^2 (1) = 1.082$ $P = 0.298$	1.944	(0.546-6.921)	1.283	(0.736-2.238)	-
Polydrug use last month	Yes (2 or more)	5.94	4.95	10.89	-	-	-	-	-	-
	No	47.52	19.80	67.33	$\chi^2 (1) = 0.496$ $P = 0.481$	1.371	(0.569-3.308)	1.109	(0.822-1.497)	-
Detention for consumption of illicit drugs	Yes (2 or more)	20.79	11.88	32.67	-	-	-	-	-	-
	No	30.69	22.77	53.46	$\chi^2 (1) = 6.381$ $P = 0.012$	3.133*	(1.267-7.743)	1.408	(1.077-1.842)	-

	Victim of abuse sexual and rape sexual		% Total	Chi-square	OR	CI 95%	RR	CI 95%
	Yes %	No %						
Consensual intercourse	Yes	37.62	46.53	-	-	-	-	-
	No	63.37	92.08	$\chi^2(1) = 0.136$ $P = 0.712$	1.324	(0.296–5.917)	0.908	(0.522–1.580)
Forced to prostitute herself	Yes	4.95	7.92	-	-	-	-	-
	No	57.43	89.11	$\chi^2(1) = 5.725$ $P = 0.017$	1.552**	(1.331–1.809)	1.552**	(1.331–1.809)
The use of condom with the main partner	Yes	10.89	10.89	-	-	-	-	-
	No	3.96	4.95	$\chi^2(1) = 0.332$ $P = 0.565$	1.908	(0.205–17.789)	1.182	(0.746–1.871)
The condom use with the occasional partner	Yes	64.36	95.05	-	-	-	-	-
	No	11.88	18.81	$\chi^2(1) = 0.288$ $P = 0.592$	0.752	(0.265–2.136)	0.909	(0.626–1.318)
Using a condom with the partner who paid you	Yes	56.44	81.19	-	-	-	-	-
	No	17.82	38.61	$\chi^2(1) = 14.418$ $P = 0.000$	0.185*	(0.075–0.457)	0.561*	(0.392–0.803)
Using a condom with the partner you paid	Yes	50.50	61.39	-	-	-	-	-
	No	44.55	72.28	$\chi^2(1) = 5.417$ $P = 0.020$	0.268*	(0.084–0.853)	0.719*	(0.568–0.910)
Consumption of illicit drugs in pregnancy	Yes	23.76	27.72	-	-	-	-	-
	No	39.6	66.33	$\chi^2(1) = 6.825$ $P = 0.009$	3.915*	(1.347–11.383)	1.429*	(1.122–1.818)
Yes	28.71	4.95	33.66	-	-	-	-	-