

Intimate Partner Violence and HIV Risk Behaviors Among Socially Disadvantaged Chilean Women

Violence Against Women

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Abstract

The objective of this study was to determine if a relationship exists between intimate partner violence (IPV) and HIV risk among socioeconomically disadvantaged Chilean women. A correlational analysis with data from the NIH-funded project, “Testing an HIV/AIDS Prevention Intervention for Chilean Women,” was conducted. Two hundred and sixty-one women were included in this analysis ($n = 261$). Those women who had experienced any type of IPV in the past 3 months had significantly higher risk for HIV than those who had not ($t = -2.016$, $p < .05$). Also a linear trend was found among those women who had experienced more than one type of IPV in the past 3 months and HIV risk.

Keywords

HIV, intimate partner violence, women

Introduction

Global estimates report approximately 33.2 million people live with HIV in the world, with a total of 2.7 million new infections during 2007 (UNAIDS, 2008). When broken down by sex, nearly half of those cases are women, demonstrating an overall growth of HIV among females since HIV’s first diagnosed appearance. There have been 18,552 confirmed

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cases of HIV in Chile, and it is estimated that this number rises to 38,000 when including those cases that have not been reported (CONASIDA, 2005; MINSAL, 2008). Of these, the Chilean Ministry of Health estimates 15% are female and concentrated in the age range of 20 to 39 years old (MINSAL, 2008). Although still a dominantly male phenomenon in Chile, the growth of HIV cases among women is particularly alarming. Between 1986 and 1990, the ratio of males to females living with HIV was 7:1, but more recently dropped to 4:1 (MINSAL, 2006).

In studies conducted in Santiago with Chilean women, results show those women living with HIV had extremely precarious economic situations. This meant that they were living with less than 100,000 Chilean pesos (US\$185) a month (CONASIDA, 2005; Vidal, Carrasco, & Pascal, 2004). The tendency toward the "pauperization" of HIV is evident both globally and in Chile. This means that while women themselves have been shown to be increasingly vulnerable to HIV, women of lower socioeconomic status are disproportionately represented among those currently living with the virus.

The complex dynamic of women's vulnerability to HIV includes biological, social, economic, and even legal issues, all influenced by the cultural context in which they exist. These factors affect the way in which HIV is transmitted, and therefore impact the manner in which prevention programs should be designed and implemented. Evidence shows when prevention strategies are tailored to the needs of women, their risk of contracting HIV decreases (UNAIDS, 2006). UNAIDS also states that while the prevention of HIV with women and girls is a priority, there are far too few evidence-based programs being implemented. The development of appropriate and effective HIV interventions is reliant on the ability to address the modes of transmission most relevant to those women participating and targeting strategies appropriate to their profile of risk. This requires looking not only at the most prevalent modes of transmission, but also at the specific behaviors in which women are participating that place them at risk for HIV.

The link between violence against women and HIV risk is well documented in the literature (Gielen, McDonnel, & O'Campo, 2001; Karamagi, Tumwine, Tylleskar, & Heggenhouge, 2006; Taquette, Ruzany, Meirelles, & Ricardo, 2003; World Health Organization, 2004). Although violence can be carried out by any number of perpetrators, globally and in Chile the most common form of violence against women is abuse by an intimate partner (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006; Heise, Raikes, Watts, & Swi, 1994; Larrain, 2005; SERNAM, 2001). Intimate partner violence (IPV) has varying definitions, but can be broadly defined as any behavior in an intimate relationship which is designed to cause psychological, physical, sexual, or economic harm to the other person (Larrain, 2005). While IPV itself can have deleterious effects on the health of women, it has also been found to increase the risk of contracting HIV. It can do this directly as in the case of forced sexual contact, or indirectly by preventing women from making decisions or having the resources to insure their own integrity (Ferrer, Cianelli, Peragallo, & Cabieses, 2005; World Health Organization, 2004).

It is estimated that globally between 15% and 71% of women have experienced IPV at some point in their lives (Garcia-Moreno et al., 2006). In Chile, it is estimated that anywhere between 40% and 70% of women have experienced some type of violence in their

lives (DESUC, 2006). Until recently, police records did not separate IPV from other types of intrafamilial violence. They also did not separate acts of homicide within the context of domestic violence from others, making it difficult to estimate the true extent of this problem within Chilean society. This, combined with the knowledge that IPV is often under-reported in general, have made it difficult to estimate the impact of IPV on Chilean women. However, in a study conducted in 2001 in the Chilean cities of Santiago, Temuco, and Coquimbo, results found that 47% to 50% of the women interviewed reported having lived through some type of IPV in their lives. Of that number, only 9.8% reported having contacted the police or a legal entity regarding what had happened (Larrain, 2005; SERNAM, 2001).

Recent events in Chile have brought the topic of IPV to the forefront of national interest and attention. In 2005, the government passed a reform of the Law of Domestic Violence (20.066) aimed at establishing more stringent penalties for perpetrators and more protection for victims (Ministerio de Justicia, 2005). The reform demonstrated that a better understanding of IPV in the Chilean setting was a national priority. After the reform, complaints of domestic violence reported to Chilean police increased. In 2003, Chilean police records reported 78,948 charges or complaints related to intrafamilial violence. In 2006, the number increased to 95,829 (Instituto Nacional de Estadísticas, 2006). Despite this, in 2007, 62 women were killed by their intimate partners in Chile, showing an increase from 2006 and demonstrating that continued efforts to intervene in IPV are extremely necessary (SERNAM, 2007).

Interest in HIV and AIDS has also become a national priority in Chile. The Law in the Prevention of the Human Immunodeficiency Virus (19.779) has been in effect since 2001 (Ministerio de Justicia, 2001). This law explicitly states that the prevention, diagnosis, and control of HIV infection are of national interest and the state will arbitrate necessary actions to inform the public as to the most effective methods of prevention of the disease.

It is also possible that a relationship exists between HIV and IPV in Chile. In a study involving Chilean women living with HIV, results showed 77% of those interviewed had lived through some experience of violence in their lives (Vidal et al., 2004). This is slightly higher than the Chilean national average of 40% to 77% (DESUC, 2006). When questioned as to the perpetrator of the abuse, with all three types the majority reported that it was their partner. This is supported by studies conducted in other countries where results demonstrated that women with a history of IPV have higher rates of HIV than those who do not (Campbell, 2002; Dunkle et al., 2004; Woods et al., 2005).

IPV and HIV have risk factors that are influenced by and unique to the culture in which they occur. Although multiple studies have supported the relationship between IPV and HIV risk in women in other parts of the world (Gielen et al., 2001; Karamagi et al., 2006; Taquette et al., 2003; World Health Organization, 2004), it is necessary to evaluate this in the Chilean setting, particularly among socially disadvantaged women, who have been shown to be more vulnerable to this epidemic.

The goal of this study was to identify both the presence of IPV, the presence of HIV risk, and their relationship among socially disadvantaged Chilean women. The identification of

IPV and HIV risk will foster better understanding of its actual presence in Chilean society as well as development of strategies designed to prevent or intervene in IPV and HIV.

Method

Research Design

The current study used a quantitative, correlational design and is a secondary analysis of data collected for the NIH-funded project, "Testing an HIV/AIDS Prevention Intervention for Chilean Women" (National Institutes of Health, 2004). The original research used a mixed methods, quasi-experimental design to adapt, implement, and test the effectiveness of a theory-based HIV intervention for Chilean women. Data collection in the original study was conducted at three moments in time: on entrance into the study (baseline), post-intervention or 6 weeks after baseline (control group), and at 3 months. For the purpose of the current analysis, only data from the baseline interview were used. Further information on the original study is available at www.manoamano.cl.

Setting

The research project was conducted in the communities of La Pintana and Puente Alto in the southeast area of the Metropolitan Region of Santiago, Chile. Currently Santiago has the largest concentration of people living with HIV/AIDS in the country, and both of these communities are among the areas most affected by HIV. La Pintana and Puente Alto contain 25% of Santiago's population and have the highest rates of poverty, delinquency, and illiteracy in the capital (Instituto Nacional de Estadísticas, 2003; SMSSO, 2007). They were invited to participate in the research project because of the high-risk profile they presented and the potential benefits for the community their participation could offer.

Participants

The current sample consists of 261 women. Criteria for inclusion were maintained from the original study and were being a Chilean female, living in the community of La Pintana or Puente Alto, between 18 and 49 years old, and sexually active within 6 months prior to the baseline interview. Because this program had the objective of preventing HIV at the primary, secondary, and tertiary level, and to respect confidentiality of the participants, knowledge of HIV serostatus was not one of the inclusion criteria, and participants were not asked about their HIV status in the questionnaire. IRB approval from the Universidad Católica de Chile was obtained for the study and participants signed and participated in a process of informed consent before entrance into the study. The participants were interviewed between April 2006 and August 2007. Recruitment was done by trained research team members and was carried out in various community spaces in La Pintana and Puente Alto, including waiting rooms of health care clinics, community organizations, community events, and using snowballing strategies, and health care worker referral.

Data Collection

Data collection was done with a face-to face-interview with each participant. Interviewers were trained female members of the research team and followed a standardized protocol. A structured questionnaire was used for the interviews. The average length of an interview was 1 hr.

The questionnaire was developed with a model used in a similar research project a SEPA (Salud/Health, Educacion/Education, Prevencion/Prevention, Autocuidado/Self-care), an HIV prevention program carried out with Latina women in the United States (Peragallo et al., 2005).

Data Analysis

IPV. IPV was measured using a modified version of the Conflict Tactics Scales (CTS). The CTS is one of the most widely used instruments for the identification of IPV and has been used in more than 17 different countries (Straus, 2006). The modified version used in this study has been utilized in other research and found to be comparable in validity to the original long form CTS2 (National Institutes of Health, 1998). For the purpose of this study, IPV was defined as the women's self-report of having experienced an event of physical, psychological, economic, or sexual violence in the 3 months prior to the interview. Measurement was done by dichotomizing the scale into a yes or no answer to all of the questions. An answer of yes to any of the 11 questions in the scale was equivalent to having experienced at least one or more episodes of IPV in the past 3 months. Additionally, the scale was broken down to detect the presence of four specific types of violence: physical, psychological, economic, and sexual. The physical abuse subscale consisted of four items from the CTS, and physical violence was defined as having had something thrown at the participant, having been slapped, punched, hit, kicked, bit, pushed, and/or shoved one or more times by a partner in the past 3 months. The psychological abuse subscale consisted of five items, and this type of violence was defined as having been insulted, sworn at, ignored and/or treated with animosity by a partner one or more times in the past 3 months. Both economic and sexual violence were detected by responding to one item each from the CTS. Economic violence was defined as having been denied money from an intimate partner even though he knew she needed it, one or more times in the past 3 months. Sexual violence was defined as having been forced to have sex with a partner one or more times in the past 3 months. The Kuder-Richardson reliability coefficient of the entire scale was 0.79, and for the subscales of physical and psychological violence it was 0.79 and 0.67, respectively.

HIV risk. Risk behaviors for the acquisition of HIV were assessed using questions related to participation over the past 3 months in the following HIV risk behaviors as described in the literature: (a) using IV drugs and sharing drug needles or syringes; (b) having sexual relations with a partner while the partner or the woman is under the influence of substances; (c) trading sex for drugs or money; (d) having sexual contact without using a condom; (e) having sexual contact with someone whose HIV status is unknown; (f) risk and/or history of a sexually transmitted infection (risk being defined as reporting symptoms of an STI or not

knowing if they had an STI); (g) having more than one sexual partner (Center for Disease Control, 2007; National Institutes of Health, 2005; UNAIDS, 2006).

Questions were dichotomized into yes or no. A response of *yes* was equivalent to having participated in the risk behavior and was given a value of 1. An index was created to measure HIV risk with a minimum value of 0 and a maximum value of 8. Each participant was then given a value, with 0 being *no risk* and 8 being *maximum risk*. On analysis, it was found that no women in the sample reported using IV drugs and/or sharing needles or syringes in the past 3 months. Because of this, the index of HIV risk was adjusted, and the maximum score possible was 7. Participants who had not answered one of the questions from the index were excluded from the calculation and not given a score ($n = 3$).

Results

Sample Characteristics

Consistent with inclusion criteria, all of the 261 women included in the sample were sexually active and living in the communities of La Pintana or Puente Alto. Seventy-two percent (72%) of the participants reported that they were currently living with a partner or spouse. The age range of participants was 18 to 49 years old, and the average age was 33 years old. In terms of religious affiliation, the majority of the women defined themselves as Catholic (58.4%), and the second most cited religion was evangelical (21.1%). Considering level of education, 28.7% of the women had a basic education or less (incomplete or no schooling), 55.2% had some level of secondary education, and 16.1% had some level of postsecondary education or technical training. The average per capita income was 55,419 pesos (US\$100). In terms of employment status, 48.3% of the participants defined themselves as "housewives."

IPV

The most frequently reported type of abuse was psychological, with 84.3% of the women reporting some event of psychological violence within the past 3 months. Overall, 85.1% of the women had experienced some type of violence in the 3 months prior to the interview. The presence of IPV in the sample is summarized in Table 1.

Additionally, analysis was performed to determine how many of the participants had experienced multiple types of IPV. The majority of the sample had experienced only one of the four types of violence (psychological, physical, sexual, or economic). However, 26% had experienced 2 or more types of IPV in the last 3 months (see Table 2).

HIV Risk Factors

The average score for HIV risk in the sample was 2.36 ± 0.76 , with a range of 0 to 7. The most frequently reported risk behaviors were having sexual relations with a partner whose

Table 1. Presence of Intimate Partner Violence

Type of IPV	Yes (%)	No (%)
Psychological violence	84.3	15.7
Economic violence	16.5	83.5
Physical violence	14.9	85.1
Sexual violence	5	95
Any type of IPV	85.1	14.9

Table 2. Presence of Multiple Types of IPV Experienced in the Last 3 months

Quantity of IPV	%
No violence	14.9
1 type of violence	59
2 types of violence	18
3 types of violence	6.5
4 types of violence	1.5

Table 3. Presence of HIV Risk Behaviors

HIV risk behaviors	Yes (%)	No (%)
More than one sexual partner	6.9	93.1
Sexual relations with a partner whose serological status is unknown	95.4	4.6
Unprotected sexual relations with a partner	94.6	5.4
Sexual relations with a partner while drunk or drugged	7.3	92.7
Sexual relations with a partner who is drunk or drugged	17.3	82.7
Trading sexual relations for drugs and/or money	0.4	99.6
Risk of an STD	13.9	86.1

HIV status was unknown (95.4%) and having had sexual relations with a partner without using a condom (95.6%). None of the participants reported having used IV drugs or having shared needles within the past 3 months. Only one woman (0.4 %) reported having traded sex for drugs or money in the past 3 months (see Table 3).

HIV Risk Factors and IPV

To establish a relationship between violence and HIV risk, a *t* test was performed. Results were statistically significant ($p \leq .05$), demonstrating that those women who had experienced IPV in the past 3 months had a higher average HIV risk than those who had not. Additionally, *t* tests were performed with the separate types of IPV (economic, sexual, physical, psychological) to establish if a relationship existed between these and HIV risk. Results revealed

Table 4. T-Tests of Presence of Violence in the Past 3 months and Average HIV Risk

Presence violence in the past 3 months	N	Mean HIV risk	t	df	Sig.
IPV (overall)	219	2.406	2.016	256	0.045
No IPV	39	2.102			
Economic IPV	43	2.6512	-2.417	256	0.016
No economic IPV	215	2.3023			
Physical violence	39	2.8205	-3.364	49 ^a	0.001
No physical violence	219	2.2785			
Psychological violence	217	2.4101	-2.131	56 ^a	0.037
No psychological violence	41	2.0976			
Sexual violence	12	2.9167	-2.281	256	0.023
No sexual violence	246	2.3333			

a. Levene's test demonstrated that variance between groups was not equal, corrected df are reported.

Table 5. Presence of Multiple Types of IPV and HIV Risk

	Sum of squares	df	Mean square	F
Between groups	16.693	4	4.173	5.906*
Within groups	178.783	253	0.707	
Total	195.477	257		

* $p \leq .05$

that those women who had experienced any of the four types of violence in the past 3 months had a higher average HIV risk than those women who had not (see Table 4).

To further examine the relationship between IPV and HIV, women were separated into groups based on how many types of IPV they had experienced in the past 3 months (see Table 2). An analysis of variance (ANOVA) was performed, and results indicated that there were statistically significant differences in HIV risk among the five groups (see Table 5). However, rather than perform post hoc analysis related to determining differences between each separate group, the researcher chose to carry out a trend analysis. This was deemed more appropriate as it would indicate a pattern rather than differences between each separate group. Results of this analysis demonstrated a statistically significant linear trend indicating that HIV risk increased with an increase in types of IPV experienced in the past 3 months ($p \leq 0.05$). The nature of this trend can be seen in Figure 1.

Conclusions

This is one of the first studies in Chile to examine the link between IPV and HIV risk in Chilean women. It is because of this that the results offer interesting and relevant information about these tendencies in Chile, and the women who experience them.

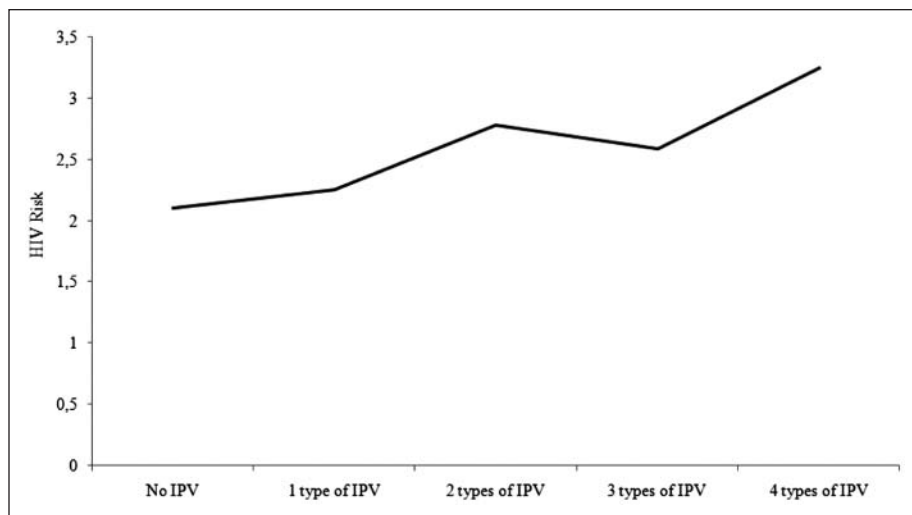


Figure 1. Linear trend of HIV risk with multiple types of IPV

* $p \leq .05$.

The results of this study indicate that experiences of IPV are a frequent occurrence in the lives of the participants. The overall percentage of women who had experienced abuse in the past 3 months was much higher than in other studies conducted in Chile (SERNAM, 2001). This suggests that IPV may be higher in this group than in other groups previously studied. Additionally, 26% of the sample had experienced two or more forms of IPV in the past 3 months. This is also supported by literature reporting that physical abuse is often accompanied by psychological abuse and sexual abuse (CDC, 2008; Garcia-Moreno et al., 2006). It is therefore important that attempts to identify, intervene, and prevent IPV must take into account that women may be simultaneously experiencing more than one type of violence.

Psychological abuse was clearly the most frequent form of violence experienced by the women in the sample. Psychological abuse is often the precursor to, or concurrent with, physical forms of abuse (CDC, 2008; National Coalition against Domestic Violence, 2007). Psychological abuse has mental as well as physical health consequences. Studies show that it is often the most frequent type of abuse among women, but at the same time it is underreported. Psychological abuse in women can lead to lower self-esteem, difficulty concentrating, and increased use of substances (CDC, 2008). Results of this study demonstrated that it was also related to HIV risk. This is supported by literature that states that psychological abuse can lead to poorer physical and mental health outcomes, and specifically in the case of HIV, can increase risk by impairing a woman's ability to make positive decisions with regard to her sexual health (CDC, 2008; Loue, 2001).

In terms of women's risk for acquiring HIV, the most frequent risk behaviors among the sample were related to unprotected sexual contact and sexual relations with a partner whose serological status was unknown. There were few women in the sample with multiple sexual

partners, indicating that these women tended to have monogamous relationships. Risk in this group is most probably related to sexual relations with a stable partner. This is in agreement with current trends reported by the Chilean government (CONASIDA, 2005; MINSAL, 2006). None of the women in the sample had participated in the sharing of needles or syringes, and only one woman reported trading sex for drugs or money. However, 7.3% had been under the influence of a substance while having sexual relations in the past 3 months, and 17.3% had sexual relations with a partner who was under the influence. This demonstrates that although IV drug use may not currently be a phenomenon related to HIV risk among Chilean women, the use of substances needs to be considered when assessing HIV risk in the population.

Although HIV risk was relatively low among the participants, the women in this sample are one of the groups most at risk for acquiring HIV in Chile. The majority of women identified themselves as housewives or "dueñas de casa." In addition to this, half of the participants were living with an income at or just above the Chilean poverty line of 43,712 Chilean pesos per month (US\$90; Hogar de Cristo, Universidad de Diego Portales & Fundación para la superación de la pobreza, 2007). The Chilean government has identified pauperization as one of the tendencies of the HIV epidemic in Chile, and has also noted that housewives are a subgroup of particular vulnerability (MINSAL, 2006). Approximately 41% of those women currently living with HIV in Chile identify themselves as "dueñas de casa." Housewives tend to be economically dependent on their partners, and studies have also found that economic dependence is linked to HIV risk in Chilean women (FLACSO, 2005). These data support the need to work with low-income Chilean women and HIV prevention, as well as demonstrating that the women who participated in this project are among those most at risk for HIV transmission in Chile.

One of the possible explanations for the low reported HIV risk among the participants is related to one of the limits of this study. The questions from the questionnaire used to calculate HIV risk were related to activities in which the women participated, but little is known about the behaviors of their male partners. Information indicates that the risk for HIV that Chilean women experience may not necessarily be related to their behaviors, but to those of their partners. Cianelli (2003) found that although Chilean women recognized their risk for HIV, they also reported that male behaviors and beliefs were a barrier for them in their ability to change.

This raises new questions that need to be explored in the literature, specifically, what is men's role in HIV and IPV prevention among women, and what should it be? Although it is understandable that prevention programs in HIV and IPV tend to focus on women, especially considering the social and biological factors that place them at increasing risk, future interventions in both IPV and HIV risk among Chilean women need to include these behaviors and beliefs of Chilean men. Further exploration of how to include these beliefs and behaviors will be vital in developing effective interventions for the prevention of HIV. Additionally, it is necessary to intervene with Chilean men, and the possibility of conducting interventions with couples should also be explored. These types of interventions have been done in the United States and among Latino populations with mixed results (El-Bassel, White, Gilbert, & Wu, 2003; Harvey, Henderson, Thorburn, & Beckman, 2004). However,

the traditional cultural beliefs present in Chilean society and their effect on Chilean relationship structure may make this type of intervention more effective in this population and should be explored.

Another area for further exploration is looking at IPV among women living with HIV in Chile. Currently, there is only one study available in the literature on this topic (Vidal et al., 2004). Future interventions may offer the possibility of administering HIV tests to the participants for more accurate detection of serostatus among Chilean women. This would offer the possibility of further studying the relationship between HIV risk and IPV to determine if those women living with HIV experience more IPV than those who are not. Alternatively, it is also of interest to better study not only if IPV was related to their contraction of HIV, but also if having HIV may be related to increased experiences of IPV. In either situation, this type of analysis was not possible in the current study, and there is a clear gap in the literature on this topic that requires further study.

This study demonstrates not only that IPV is a frequent phenomenon in the lives of Chilean women in this sample, but that it is related to their risk for HIV. This was true not only for IPV in general, but for all types of IPV. In addition, it also demonstrated that experiencing more than one type of violence was related to increased HIV risk. Despite this, the study is limited by its small sample size and the strength of the statistical analysis. While *t* tests establish a relationship, they cannot account for the strength of the relationship. Future studies may be conducted with larger samples and should further explore the relationship between HIV and the specific types of HIV to determine if one type is more or less related to HIV risk than another. Although psychological abuse was the most frequently reported type of IPV in this sample, all four types of IPV were related to HIV risk. Establishing which type of violence is most related to HIV risk among Chilean women would increase understanding of the types of strategies that should be used when talking with women about violence and HIV risk. Such information would also be valuable in establishing how and to whom HIV interventions should be directed.

This analysis also demonstrates that studies designed for other purposes may be valuable ways of diagnosing IPV. Information on IPV for this study was secondary data collected in the context of an educational intervention to prevent HIV transmission. Because of the stigma surrounding IPV, attempts to detect it in alternative contexts may produce better estimates of the actual frequency of its occurrence.

The development of appropriate and effective HIV interventions is reliant on the ability to address the factors most relevant to those women participating and developing strategies appropriate to their profile of risk. In Chile, the HIV epidemic is considered "incipient" because of the relatively small number of people reported to be living with HIV. However, the rate of new infections, in the general population and among women, has risen steadily over the past 15 years and is expected to continue to rise (MINSAL, 2006). Because of this, the value of exploring HIV risk among Chilean women is incredibly important. This is a critical moment for HIV prevention in Chile and there is particular importance in diagnosing groups who are at risk and intervening before they acquire HIV.

The feminization of HIV is a documented phenomenon both in Chile and internationally. If evidence demonstrates that culturally adapted programs for the prevention of HIV work,

then it is important to consider factors that are relevant to HIV risk in the Chilean setting. IPV clearly plays a role in the complex phenomenon of HIV risk among Chilean women. It is therefore important that governmental and societal organizations continue to improve programs for the detection and prevention of IPV among Chilean women, which will in turn serve to identify and intervene with women who are at an increased risk for HIV.

Declaration of Conflicting Interests

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Bios

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