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# Intimate partner violence and alcohol consumption

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## ABSTRACT

**OBJECTIVE:** To estimate the prevalence of intimate partner violence and alcohol consumption during episodes of violence.

**METHODS:** Cross-sectional study with a multi-stage probability sample, representative of the Brazilian population. Sample was comprised of 1,445 men and women, married or cohabitating, interviewed between November 2005 and April 2006. Interviews were conducted in the interviewees' homes, using a standardized closed questionnaire. Rates of prevalence of intimate partner violence were estimated and chi-square tests were used to assess gender differences in this prevalence.

**RESULTS:** General prevalence of intimate partner violence was 10.7% in men and 14.6% in women. Men consumed alcohol in 38.1% of cases and women in 9.2%. As regards perception of alcohol consumption by intimate partner, men reported their female partners consumed alcohol in 30.8% of episodes of violence, while women reported that their male partners consumed it in 44.6% of episodes.

**CONCLUSIONS:** Women were more frequently involved in mild and serious episodes of violence (perpetration, victimization or both) than men. The fact that episodes of violence reported were four times more frequent in intoxicated men enables the assumption that prevention of intimate partner violence may be promoted by public policies aimed at reducing alcohol consumption.

**DESCRIPTORS:** Violence Against Women. Spouse Abuse. Domestic Violence. Alcohol Drinking. Epidemiologic Studies.

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## INTRODUCTION

Intimate partner violence (IPV) is considered a public health problem worldwide. Most of the research in this area has been conducted in developed countries, especially in the United States (USA), where several population studies have been performed in the last two decades. In the 1985 National Family Violence Survey,<sup>23</sup> 16% of American couples had experienced one or more types of IPV in the 12 months preceding the interviews. The majority of aggressions were considered mild violence (slapping and shoving, for example). However, about one third of episodes reported were serious (beating, choking, hitting with an object, forced sex, threat with or use of a knife or firearm). The same study concluded that the index of male partner violence against females was similar to that of female partners against males, as observed in 1975 and confirmed by other studies.<sup>1,23</sup> Even though women perpetrate as much violence as their male partners in terms of frequency, they are more likely to suffer serious injuries.<sup>25</sup> A study performed in the United States revealed that about 20% of trauma-related visits to an emergency department and 25% of homicides in women involved IPV.<sup>19</sup> In the United States, IPV estimates based on data from the National Longitudinal Survey, conducted in 1995, showed that the 12-month IPV index among couples varies between 17% and 39%, with indices of male violence against women and female violence against men corresponding to 13,6% and 18,2%, respectively.<sup>22</sup>

Previous research has also established a consistent positive association between male and female problems related to alcohol or alcohol dependence and IPV.<sup>14,18</sup> Some studies have showed time associations between alcohol and IPV so that conditional probabilities of perpetration of male violence against women were nine times higher when men drank, compared to days without alcohol consumption. Probabilities were also 19 times higher on days of high alcohol consumption than those on days without consumption.<sup>5</sup> Studies with the general population indicate that a great number of individuals are under the influence of alcohol when violence occurs; in addition, individuals with excessive consumption (heavy drinkers), those with uncontrolled alcohol consumption and those who report alcohol-related problems are more likely to be involved in violent relationships than others who do not drink or do so moderately. As an example, of all couples who reported mild IPV perpetrated by males, 34% of men and 16.1% of women involved had mentioned alcohol-related problems in the preceding 12 months.<sup>8</sup>

Previous studies show that individuals with alcohol-related problems are more likely to report IPV than those without these problems, regardless of whether violence was perpetrated by a man or a woman.<sup>3</sup> By estimating the association between the amount of alcohol consumed and IPV episodes, a recent study revealed that all perpetrations of male violence against women and of women against men increase significantly with a frequency of consumption of five or more drinks per episode.<sup>6</sup> In general, during IPV episodes, men had consumed alcohol between 6% and 57% of episodes and women between 10% and 27% of episodes, according to results from another study.<sup>21</sup>

Despite strong scientific evidence that alcohol consumption is associated with higher risk of IPV, there were no national population studies in Brazil that have investigated this association until now. Among the few studies on IPV published in this country, the majority are based on violence against women, such as IPV reports from emergency data of local hospitals and acts of violence committed by male partner during pregnancy.<sup>9,17</sup> In a recent study performed by the World Health Organization (WHO), 24,097 women were interviewed in ten countries, cities and rural areas, including Brazil (1,172 women in the largest city, São Paulo, Southeastern Brazil, and 1,473 in the Zona da Mata – state of Pernambuco, a poor rural area in Northeastern Brazil). Results show a prevalence throughout life of physical violence by intimate partners in 40% of cases in the city of São Paulo and 37% in the Zona da Mata. This study also found indices of combined physical and sexual violence between 29% and 37% in São Paulo and Zona da Mata, respectively.<sup>13</sup> In a recent cross-sectional population study, performed in 15 Brazilian state capitals and the Federal District, 6,760 women aged more than 15 years were interviewed, with prevalences of male partner violence against women and female partners against men of 21.5% and 12.9%, respectively.<sup>20</sup>

The objective of the present study was to estimate the prevalence of intimate partner violence and the prevalence of alcohol consumption during episodes of this type of violence.

## METHODS

This was a cross-sectional study whose participants (N=1,445) were included in the *I Levantamento Nacional sobre Padrões de Consumo de Álcool no Brasil* (1<sup>st</sup> National Survey on Alcohol Consumption Patterns in Brazil).<sup>a</sup> Data from this survey used multi-stage random cluster sampling to select 3,007 individuals of both

<sup>a</sup> This first survey was conducted by the Unidade de Estudos de Álcool e Outras Drogas (UNIAD) da Universidade Federal de São Paulo (São Paulo University Center for Studies on Alcohol and Other Drugs), between November 2005 and April 2006, in the entire country and including the rural and urban population.

sexes and aged 14 years or older, who represent the domestic Brazilian population. The sampling process involved three stages: First stage: selection of 143 cities, using the method of probability proportional to size; Second stage: selection of two census tracts for each city, except for the 14 largest cities selected, totaling 325 census tracts, also based on probability proportional to size; and Third stage: nine households were selected from each census tract by simple random sampling, followed by the selection of a family member to be interviewed, using the nearest next birthday as criterion of inclusion.

Household interviews were conducted, using a standardized closed questionnaire, which lasted one hour and was applied by qualified interviewers. Global sample was comprised of 2,522 interviewees, aged 17 years or older, in addition to 485 adolescents (aged from 14 to 17 years).

For the present study, only information about men (n=631) and women (n=814), married or cohabitating with someone in a conjugal relationship, was selected from this universe, using a "skipping" technique illustrated in the questionnaire. All 1,445 individuals answered 18 questions of the original questionnaire<sup>a</sup> about the occurrence of different types of violent behavior in the previous 12 months. All questions were adapted from the Conflict Tactics Scale form R.<sup>24</sup>

Men and women answered questions about mild violence (throwing an object; shoving, grabbing or shaking; slapping) and serious violence (hurting with kicks or bites; hitting or attempting to hit with an object; burning or scalding; forcing partner to have sexual intercourse; threatening with a knife or firearm; assaulting or attempting to assault with a knife or firearm). First, interviewees were asked whether they had already perpetrated any of these acts against their partners (perpetration); next, whether their partners had perpetrated these acts against them (victimization). Based on the responses, a variable of four levels was created: 1) participants were categorized into "mutual violence" if they answered "yes" to both perpetration and victimization; 2) "only perpetration" if they answered "yes" to perpetration of any item exclusively; 3) "only victim" if they answered "yes" to victimization, but did not perpetrate any acts; and 4) "without violence" if they were not involved in any episodes of violence (neither perpetration nor victimization). Researchers considered the presence of any type of violence (perpetration, victimization or both) for the "any IPV" variable and created a dichotomy (1=yes, if any type of violence was present; and 0=no, if no type of violence was present), using the four categories above. Consumption of alcoholic beverages during the episode was assessed

after a positive report of IPV, with the repetition of the question about whether individual or his/her partner were drinking during the episode of IPV.

The final response rate of the overall sample was 66.4%.

In the statistical analysis, IPV prevalence rates were estimated and  $\chi^2$  tests were used to assess gender differences in the prevalence of IPV. Considering multi-stage cluster sampling, data were weighted to correct the probability of selection in the sample and the effects of non-response in this probability. Analyses were made using the SPSS Complex Samples 13.0.

This study was approved by the Research Ethics Committee of the *Universidade Federal de São Paulo* (CEP 1672/04). All participants signed an informed consent form and were reminded of the confidential nature of the study before the interview. All individuals aged below 18 years obtained their parents' authorization to participate. Interview was conducted in a place in the home where privacy was assured.

## RESULTS

Table 1 shows the general indices of violence and prevalence of different types of acts perpetrated by women and men. Women reported a significantly higher rate of any type of IPV in general (perpetration, victimization or both) than men ( $\chi^2=4.76$ ,  $df=1$ ,  $p<0.05$ ).

The most frequent type of mild violence perpetrated by men (7.4%) and women (9.3%) was "shoving, grabbing or shaking". The most common type of violence reported in episodes of victimization was "slapping". In general, acts of serious violence had a lower prevalence than that of acts of mild violence. The most frequent type of violence perpetrated by both sexes or reported in episodes of victimization was "hitting with an object". About 2% of men and 5% of women reported having hit their partner with an object. In addition, about 3% of men and 2% of women reported having been hit by their partner with an object (victimization). Fewer men reported mutual violence, when compared to women (5.3% and 6.3%, respectively). "Only perpetration" was reported by about 4% of men and 6% of women and "only victimization" by 1.5% of men and 2.6% of women.

Approximately four out of every ten men and one out of every ten women interviewed reported alcohol consumption during episode of IPV ( $\chi^2=19.38$ ,  $df=1$ ,  $p<0.001$ ). Men reported similar indices of alcohol consumption for "mutual violence" and "only perpetration". Although the prevalence of male perpetration with alcohol consumption was higher than 15%, women only reported about

<sup>a</sup> The original questionnaire can be consulted online at: [www.uniad.org.br](http://www.uniad.org.br).

**Table 1.** Prevalence of intimate partner violence in the preceding 12 months. Brazil, 2005-2006.

Variable	Male IPV n=631		Female IPV n=814		$\chi^2$ (df)
Any type of IPV (including mutual violence, only perpetration and only victimization)	10,7		14,6		4,76(1)*
Mild/serious acts	Perpetration	Victimization	Perpetration	Victimization	
Mild acts					
Throwing an object	2.2	3.4	6.0	2.7	
Shoving, grabbing or shaking	7.4	4.1	9.3	6.3	
Slapping	3.2	4.2	6.0	3.9	
Serious acts					
Kicking or biting	0.9	1.4	2.2	1.2	
Assaulting with an object	1.6	2.9	5.5	2.2	
Burning	0.0	0.1	0.0	0.1	
Forced sex	0.8	0.3	0.6	1.2	
Threatening with a knife	0.4	1.5	1.2	0.9	
Using a knife/firearm	0.2	0.9	0.2	0.3	
Type of violence					
Mutual	5.3		6.3		
Only perpetration	3.9		5.7		
Only victimization	1.5		2.6		
Without violence	89.3		85.4		

Obs: Indices are recorded in weighted percentages, while "n" are non-weighted.

\*p<0.05.

1%-2% of prevalence of episodes of "mutual violence" and "only perpetration". Both men and women reported prevalence of about 5% of "only victimization" and episodes of alcohol consumption (Table 2).

Almost half of the women and a third of the men reported that their partner drank during the episode of IPV ( $\chi^2=3.73$ ,  $df=1$ ,  $p<0.05$ ). Women also reported indices of "only perpetration" and "mutual violence" almost two times higher than those of men. On the other hand, men reported indices of "victimization" 1.5 times higher than those of women (Table 2).

## DISCUSSION

IPV prevalence indices found are lower than those from certain specific population studies performed in the United States and from one recent study on urban population in Brazil.<sup>2,20</sup> "Shoving, grabbing or shaking" and "hitting with an object" were the most prevalent forms of IPV, among mild and serious acts of violence. Women were involved in more episodes of mild and serious violence than men (although men were usually more violent than women). This may have resulted from the fact that men underreport perpetration of violence more frequently than women.<sup>4</sup> In contrast, women may be afraid of retaliation if they reveal experiences of victimization, which may also lead to underreporting. The fact that women usually stay in a conjugal

relationship out of fear of retaliation results in factors such as economic and social difficulties, emotional dependence, stigmatization and impunity not being considered a priority.<sup>16</sup>

In addition, IPV underreporting is due to the fact that certain types of violence depend on the interviewee's good memory (ability/capacity) and the act of violence being significant and easily remembered. Even the concept of what aggression means can vary. For example, an act of shoving or slapping experienced by a man and which does not have any consequences may not be remembered. On the other hand, women tend to remember episodes of violence more frequently, because of the physical and psychological repercussion they may have. Studies reveal that women, even when starting an episode of IPV, do so more frequently in self-defense situations, whereas men use violence with the purpose of intimidating their partner and show authority. Nonetheless, when this occurs, the woman is considered a perpetrator or involved in an act of mutual aggression, because the Conflict Tactics Scale does not assess the factors that trigger violence, but rather the individuals who started it and the type of episode.<sup>15</sup>

Thus, the record of an episode of IPV by the Conflict Tactics Scale is based on the assumption that the couple is having a conflict or serious argument which can be perceived as an act of violence, even when there is physical contact classified as "mild".

**Table 2.** Frequency of alcohol consumption by intimate partner during episodes of violence in the last 12 months. Brazil, 2005-2006.

Variable	IPV and alcohol consumption by interviewee			IPV and alcohol consumption by partner		
	Male consumption (n=73)	Female consumption (n=132)	$\chi^2$ (df)	Female consumption reported by men (n=73)	Male consumption reported by women (n=132)	$\chi^2$ (df)
Any type of IPV	38.1	9.2	19.38**	30.8	44.6	3.73(1)*
Type of IPV						
Mutual	16.3	2.2		5.9	20.6	
Perpetration	16.3	1.4		9.0	14.0	
Victimization	5.5	5.6		15.9	10.0	
No alcohol consumption	61.9	90.8		69.2	55.4	

Obs: Indices are recorded in weighted percentages, while "n" are non-weighted.

\*p<0.05.

\*\*p<0.001.

This first study on IPV and alcohol consumption performed in Brazil and using multi-stage cluster sampling enables analyses to be generalized to the Brazilian population. The fact that interviews are conducted face-to-face is equally important, once they can reduce underreporting of intimate partner violence, when compared to interviews conducted using self-administered questionnaires.<sup>3</sup>

However, the procedure of interviewing one intimate partner per household can lead to underreporting of IPV and thus be considered a limitation to this study. Reports of both partners would probably result in more valid estimates of conjugal violence.<sup>3</sup>

In this study, reports of intoxicated men during episodes of IPV were about four times more frequent than those of women. The gender difference in alcohol consumption during these episodes may reflect alcohol consumption rates, which are usually higher in men.

Based on the understanding that IPV is closely associated with alcohol consumption, certain actions can be adopted in health services and public policies, in addition to those already existing to fight violence against women in particular, such as the *Lei Maria da Penha* (Maria da Penha Law) of 2006.

In health services, both in outpatient primary health care and hospital emergencies, there is the need for specific scanning instruments and protocols combined with continuous training of health professionals, not only for victims of domestic violence, but also for alcoholic patients and/or their partner. This intervention can be adapted to the specific characteristics of each community. In more structured communities and larger urban areas, integration with health services specialized in mental health must be promoted. In smaller communities and rural areas, support should be sought from both primary health care centers/local authorities in the spheres of health and justice

and non-governmental organizations, in an attempt to change socio-cultural norms that enable the early intervention of IPV and alcohol abuse.<sup>12</sup>

As regards public policies, the pioneer example of the city of Diadema, Southeastern Brazil, should be extended to the state and federal spheres. With the implementation of a new municipal law in 2002, establishing the restriction of purchase of alcoholic beverages after 11:00pm, a significant reduction in the rates of violence against women was observed in the two years following this intervention, compared to the two previous years. Although the study does not scientifically prove the association between reduction in alcohol consumption and violence against women and IPV, there is strong evidence for this.<sup>10</sup>

Thus, it is possible to assume that IPV prevention may be promoted by public policies aimed at reducing alcohol consumption. This consumption is associated with factors such as the low cost of alcoholic beverages and advertising. "*Aguardente de cana*" or "*cachaça*" (distilled alcoholic beverage made from sugarcane) and beer are examples of beverages accessible to the majority of social classes in Brazil. Their low cost results in greater access to the population and, consequently, higher consumption. Studies show that increased taxation of alcoholic beverages by the State is a simple and effective strategy to reduce the purchase of these beverages, but its implementation is met with strong resistance from the alcohol industry. In contrast, advertising influences alcohol consumption according to factors such as the public's exposure to, recalling and appreciation of advertisements. Thus, the more an individual remembers and appreciates an advertisement, the greater their chances of consuming alcohol in the future.<sup>7</sup>

As a result, understanding that a reduction in alcohol consumption can help to decrease violence in general and IPV in particular is important to further emphasize

the need to adopt public policies that promote restriction in times of purchase of alcoholic beverages, higher taxation and restriction in advertisements, especially on television.

In conclusion, the present study emphasizes the need for urgent measures to prevent conjugal violence and alcohol consumption during episodes of violence.

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