Alcohol consumption, illicit substances, and intimate partner violence in a sample of batterers in psychological treatment

Consumo de alcohol, sustancias ilegales y violencia hacia la pareja en una muestra de maltratadores en tratamiento psicológico

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Abstract

The purpose of this study is to analyze the alcohol and illicit substance consumption characteristics in a sample of 572 batterers in treatment by court order. The results indicate that the prevalence of alcohol consumption in the past year was 89.3%, whereas within illicit substances, the prevalences were higher for cannabis (27.8%), followed by cocaine (20.3%). In order to analyze the possible effect of consumption on levels of perpetration and victimization of partneraggression, the sample was divided into 4 groups: nonconsumers (16.3%), alcohol consumers (58.6%), illicit drug consumers (3.5%), and consumers of alcohol and illicit drugs (21.7%), finding that the groups of nonconsumers and alcohol consumers presented the lowest level of perpetration of psychological, physical, and sexual aggression and of victimization of psychological and physical aggression, whereas the group of consumers of alcohol and illicit drugs presented the highest levels. The results reveal the need to assess substance consumption when designing intervention protocols with batterers. Key words: batterers, intimate partner violence, alcohol use, alcohol abuse, substance use

Resumen

Este estudio tiene como objetivo analizar las características de consumo de alcohol y sustancias ilegales en una muestra de 572 maltratadores en tratamiento por orden judicial. Los resultados indican que la prevalencia de consumo de alcohol en el último año fue de 89,3%, mientras que dentro de las sustancias ilegales las prevalencias más altas fueron para cannabis (27,8%) seguido de cocaína (20,3%). Con el objetivo de analizar el posible efecto del consumo sobre los niveles de perpetración y victimización de agresiones hacia la pareja, se dividió la muestra en 4 grupos: no consumidores (16,3%), consumidores de alcohol (58,6%), consumidores de drogas ilegales (3,5%) y consumidores de alcohol y drogas ilegales (21,7%), encontrándose que el grupo de los no consumidores y el de los consumidores de alcohol son los que presentan los niveles más bajos en perpetración de agresiones psicológicas, físicas y sexuales y victimización de agresiones psicológicas y físicas, mientras que el grupo de consumidores de alcohol e ilegales es el que presenta los niveles más elevados. Los resultados hallados ponen de manifiesto la necesidad de evaluar el consumo de sustancias a la hora de diseñar protocolos de intervención con maltratadores.

Palabras clave: maltratadores, violencia en las relaciones de pareja, consumo de alcohol, abuso de alcohol, consumo de sustancias.

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se of psychoactive substances is a serious risk factor for intimate partner violence (Castillo-Carniglia, Pizarro, Luengo, & Soto-Brandt, 2014; Catalá-Miñana, Lila, & Oliver, 2013; El-Bassel, Gilbert, Wu, Go, & Hill, 2005; Moore & Stuart, 2004; Stuart, Temple, & Moore, 2007); however, our knowledge of which specific substances are most clearly associated with such violence remains quite limited. Langenderfer (2013) carried out a meta-analysis with 8 studies on intimate partner violence and use of alcohol, concluding that rates of perpetration of violent acts by men on their partners ranged from 4% to 78.1% (Cunradi, 2009; Hove, Parkhill, Neighbors, McConchie, & Fossos, 2010; Lipsky & Caetano, 2011; McKinney, Caetano, Ramisetty-Mikler, & Nelson, 2009; Rhodes et al., 2009; Taft, Schumm, Orazem, Meis, & Pinto, 2010), while of those men who reported having been violent towards their partners, between 9% and 59.7% reported having got drunk (5 or more alcoholic drinks) (Cunradi, 2009; Lipsky & Caetano, 2011; McKinney et al., 2009), and between and 17.8% and 50% said they had sometimes drunk excessively (Lipsky & Caetano, 2011; Rhodes et al., 2009). Finally, Langenderfer (2013) points out that alcohol problems correlate to a statistically significant degree with intimate partner violence (Hove et al., 2010).

In another meta-analysis, Foran and O'Leary (2008) analyzed 47 studies on the relation between alcohol use and abuse and intimate partner violence, concluding that the effect size of this relation was .23, a result consistent with the effect size of .24 found in a previous meta-analysis by Stith, Smith, Penn, Ward and Tritt (2004), and in the same line as the .22 found by Lipsey, Wilson,

Cohen and Derzon (1997). These results indicate a significant but moderate relation between alcohol use and intimate partner violence (Bushman & Cooper, 1990; Pernanen, 1991).

As regards the use of other substances, the association between the use of illicit drugs and intimate partner violence has been less widely studied. Some research indicates that men who assault their partners report more frequent use of cannabis and cocaine, compared to non-violent men (Chermack, Fuller, & Blow, 2000), whilst other research (Walton, Chermack, & Blow, 2002) found that those men who after receiving treatment for substance use continued to mistreat their partners reported greater consumption of cannabis than those who reported not having repeated such assaults since the treatment. In a similar line, other studies with men in treatment for drug use concluded that the use of cannabis, cocaine and stimulants, as well as the consequences of such use, predicted the perpetration of intimate partner violence (Chermack et al., 2000; Murphy, O'Farrell, Fals-Stewart, & Feehan, 2001). Moore et al. (2008), for their part, carried out a meta-analysis with 96 studies that analyzed intimate partner violence and use of drugs, finding that cocaine was the substance that presented the greatest effect size in relation to aggressive behaviour; in fact, cocaine was the illicit substance associated with the commission of most psychological, physical and sexual violence, whist marijuana use was related to intimate partner psychological violence but not physical violence.

However, few studies have analyzed the relation between illicit substance use and intimate partner violence in samples of batterers in treatment. One of these is that carried out by Brown, Werk, Caplan and Seraganian (1999), who found in a sample of batterers undergoing therapy that those who used drugs presented higher levels of psychological violence, compared to non-consumers, but no significant differences as far as levels of physical aggression were concerned. On the other hand, Moore and Stuart (2004), with a sample of 151 batterers in treatment by court order, concluded that, after controlling the possible effect of alcohol use, the consumption of illicit drugs continued to be a clear predictor of perpetration and victimization for psychological, physical and sexual violence, as well as actual harm.

As regards victimization, it would seem that this is also related to alcohol use, even though the results are not altogether consistent (Breiding, Black, & Ryan, 2008; Coker et al., 2002; El-Bassel et al., 2005; Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997; Testa, Livingston, & Leonard, 2003). Coker et al. (2002) found, in a sample of couples in the US, that in the case of women victimization was associated with alcohol abuse and use of analgesics, but not with illicit substances, whilst in men victimization was associated with use of analgesics and other drugs, but not with alcohol abuse. More recently, Smith, Homish, Leonard and Cornelius (2012) analyzed the relation between intimate partner violence and use of alcohol, cannabis, cocaine and opiates, using data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) (2004-2005) (Grant & Kaplan, 2005), concluding that alcohol and cocaine use were more closely associated with the perpetration of intimate partner violence, whilst cannabis and opiates use were more closely associated with victimization.

Although these results indicate that the use of illicit substances is related to the perpetration of intimate partner violence and to victimization, it would be interesting to explore whether this relation is still found after controlling for the effects of alcohol, as Moore and Stuart (2004) concluded. If illicit substance use has an independent effect on levels of aggression towards one's partner, the implications would be highly relevant to interventions with this type of population, first of all highlighting the importance of assessing the use of these other substances, not only of alcohol, and second, making pos-

sible the adaptation of psychological intervention programmes – in case of need – to the presence of problems of use and abuse of different substances. In fact, those mean who achieve stable sobriety show significant reductions in levels of intimate partner violence and are less likely to be violent again, compared to those who relapse (O'Farrell, Fals-Stewart, Murphy, & Murphy, 2003; O'Farrell & Murphy, 1995). Moreover, an important fact to take into account is that those batterers in therapy who are drug users, especially those with more serious problems and higher levels of use, are more likely to drop out of therapy and/or to strike again after the treatment programme has finished, by comparison with those that do not present drug-use problems (Bennett, Goodman, & Dutton, 2000; Gordon & Moriarty, 2003). These data permit us to conclude that the efficacy of psychological intervention programmes with batterers will also depend on the presence of substance use and on the work carried out in relation to this problem.

Taking into account these implications at a clinical level, the aim of the present work is to analyze, first of all, the characteristics of use in a sample of batterers referred by court order to psychological treatment, and secondly, to ascertain whether those who use drugs or alcohol, or both, present higher levels of intimate partner violence and of victimization, compared to non-users.

Method

This study was approved by the Deontological Committee of the Psychology Faculty at the Universidad Complutense of Madrid, on 30th May 2009. Likewise, written informed consent was obtained from all participants, all of them being informed of the aims of the research, as well the procedure to be followed and the estimated duration of the treatment.

Participants

Participants in the study were men from the Madrid Autonomous Region (Comunidad de Madrid) that had been sentenced to less than two years' prison for intimate partner violence, the sentence having been substituted by a programme of psychological treatment, as set down in Section IV of Law1/2004, on Measures of Comprehensive Protection against Gender Violence, which in its article 35 on the substitution of sentences states that: "In cases in which the detainee has been sentenced for an offence related to gender violence,..., the Judge or Court shall in addition oblige him to attend specific programmes of re-education and psychological treatment...".

The total sample was made up of 572 men aged between 18 and (mean 38.61 years; SD = 10.49). As regards marital status, 32.2% (n = 184) were married or registered civil partners, 35.3% (n = 202) were single, and 32.5% (n

= 186) were widowed, separated or divorced). Regarding educational level, 40.9% (n = 234) had only primary education, 40.6% (n = 232) secondary education, and 18.5% (n = 106) university education. By occupation, 18.5% (n = 106) fell into the category of managers or directors/businessmen/public administration employees, 16.8% (n = 96) into that of unemployed/pensioners, and 64.7% (n = 370) into that of construction workers/catering and bar or restaurant sector workers/industrial workers. As far as nationality is concerned, more than half (58.4% (n = 334) were Spanish, 34.1% (n = 195) were from South American countries, and 7.5% (n = 43) were of other nationalities. Finally, the majority (87.2%, n = 499) had been sentenced for physical aggression, and 12.8% (n = 73) for offences of a psychological nature.

Procedure

The pre-treatment assessment phase was carried out individually, with two therapists trained in the application of the assessment protocol. Each participant received between four and eight 60-minute sessions, which included the following activities:

- a. In the first session the therapist explained the conditions and objectives of the research and obtained the informed consent.
- b.Collection of socio-demographic data and analysis of the offence for which the person had been required to take the psychological treatment programme.
- c. Application of the scales described in the *Measures* section, reading the instructions aloud to the patient, doing the first item of each instrument as an example, and resolving any doubts arising. All the questionnaires were self-administered, and all the questions referred to violence against the partner for which they had been sentenced, who was not necessarily the partner they at the time of the assessment
- d.During the assessment phase work was done on treatment adherence, increasing motivation levels, and highlighting the benefits of the treatment programme, which include seeing justice done, getting to know more about one's form of relating to women, and learning about the function of aggression in intimate partner relationships.

Measures

Socio-demographic data was collected by means of an interview, and information related to the offence through the analysis of the judicial records. In addition, the following instruments were applied.

Severity and frequency of the intimate partner violence were measured by means of the Revised Conflict Tactics Scale-CTS2 (Straus, Hamby, Boney-McCoy, & Sugarman, 1996, Spanish adaptation by Loinaz, Eche-

burúa, Ortiz-Tallo, & Amor, 2012). This scale consists of 78 items, 39 of which assess perpetration and the other 39 victimization, by asking about what occurred over the last year of the relationship with the partner who pressed charges. There are 5 scales: negotiation, psychological violence, physical violence, sexual coercion and actual harm, and the instrument shows a reliability of between .79 and .95 (Straus et al., 1996). Cronbach's *alpha* in the present study was .81 for perpetration and .86 for victimization.

To evaluate use of alcohol and illicit substances, we used the EuropASI (Kokkevi & Hartgers, 1995; McLellan et al., 1992; Spanish adaptation by Bobes, González, Sáiz, & Bousoño, 1996), which collects information in relatively brief fashion on the possible use of multiple substances. Data is gathered by means of a semi-structured interview, and this instrument is highly advantageous for clinical practice, as it allows the detection of possible use-related problems, analyzing multiple substances, frequency of use, and so on. For each of the substances analyzed information is obtained on the number of months the substance was used that year and of days it was used in the last month (in both cases referring to the period of the intimate partner relationship in which the relevant violence took place). As regards the psychometric properties of the instrument, the data show high levels of reliability and validity (Ravndal, Vaglum, & Lauritzen, 2005; Roa, 1995). Cronbach's alpha in this study was .75 for the set of questions referring to use in the last month and the last year.

Statistical analyses

All the statistical analyses were carried out using the SPSS 15.0 statistics package. First of all, we calculated the reliability indices of the scales used in the study by means of Cronbach's alpha. Secondly, we calculated the percentages of prevalence of use of all the substances evaluated. We then formed 4 groups according to use of alcohol and illegal drugs (non-users, alcohol users, illicit substance users and users of both alcohol and illicit substances), with the aim of analyzing whether these 4 groups differed with regard to levels of perpetration and victimization. To this end we performed, first, an ANOVA with post-hoc (Bonferroni) comparisons to detect significant differences between the 4 groups in the age variable and a Pearson Chi-squared test for qualitative variables, specifically the socio-demographic variables (educational level, occupation, marital status, nationality) and the offence for which the participant was sentenced. Lastly, we performed another ANOVA with post-hoc (Bonferroni) comparisons to determine whether among these 4 groups there were significant differences in perpetration and victimization, without taking into account the possible effect of age.

Results

Prevalences of use and comparison with a community sample

The first objective of this study was to examine in a sample of 572 batterers the characteristics of use of alcohol and illicit substances. To this end we used two measures, prevalence of use in the last year and prevalence of use in the last month.

The results show that 89.3% of the sample had used alcohol in the last year, while 72.4% had done so in the last month. As regards use of alcohol in large quantities, 44.2% of the sample had consumed large amounts of alcohol in the last year, while 19.8% had done so in the last month. As for the rest of the rest of the substances, prevalences of use are shown in Table 1; as it can be seen, the highest, in both the last year and the last month, are for cannabis (year 27.8%; month 14.2%), followed by cocaine (year 20.3%; month 10%).

On the other hand, comparing the prevalences of use of the sample of batterers in this study with those of men from the community in Spain (Delegación del Gobierno para el Plan Nacional sobre Drogas, 2012), it is observed that for all substances the sample of abusers presents higher prevalences of consumption, both in the last year and the last month, except in the case of alcohol and heroin in the last month, where prevalences for the sample of batterers and that of community men are similar (see Table 1).

Relation between substance use and perpetration and victimization

The second objective of this study was to explore whether there are differences in the levels of perpetration

Table 1
Prevalences of use of different psychoactive substances in the sample of batterers in this study and in men in the general Spanish community

	Batterers in	the study	Spanish population		
PSYCHOACTIVE SUBSTANCE	Last year	Last month	Last year	Last month	
Alcohol	89,3 %	72,4 %	83,2 %	73,2 %	
Alcohol (large quantities)	44,2 %	19,8 %	25,9 %	20,7 %	
Heroin	7,7 %	0 %	0,2 %	0,1 %	
Hypnosedatives	9,3 %	7 %	7,6 %	5,2 %	
Cocaine	20,3 %	10 %	3,6 %	1,8 %	
Amphetamines	8,6 %	5,2 %	0,9 %	0,4 %	
Cannabis	27,8 %	14,2 %	13,6 %	10,2 %	
Hallucinogens	7,7 %	5,4 %	0,6 %	0,2 %	
Inhalants	6,6 %	0 %	0,1 %	0 %	

and victimization, as regards intimate partner violence, between on the one hand, those abusers who use alcohol, illicit substances or both, and on the other, those who do not consume any substances. To this end, participants were divided into 4 groups: non-users, that is, those who had not used any substances in the last year (16.3%); alcohol users – those that had used only alcohol in the last year (58.6%); illicit substance users – those that had in the last year of the relation in question used some illicit substance from among those listed in Table 1 (other than alcohol (3.5%); and users of both alcohol and any other substance the relevant period (one year) (21.7%).

Analyzing the socio-demographic characteristics of the 4 groups, it can be seen that there are no statistically significant differences regarding occupation and type of violence involved in the offence; on the other hand significant differences were indeed found for the marital status variable ($\chi 2(6) = 26.48$, p = .000), the proportion of married men being significantly higher in the alcohol users and significantly lower in the group that uses both illicit drugs and alcohol), whilst the proportion of single men is significantly lower in the group of alcohol users and significantly higher in the group that uses both (see Table 2).

Table 2 Distribution of socio-demographic variables by user group

	Non-users (N = 93) (1)	Alcohol users (N = 335) (2)	Illicit substances (N = 20) (3)	Alcohol plus illicit substances (N = 124) (4)	<i>F</i> _{(3,568} / / 2 Bonferroni	
AGE (years)	41 ± 10,37	39,07 ± 10,86	35,15 ± 6,37	36,12 ± 9,49	4,99 (p = ,002) 1 > 4 (p = ,004) 2 > 4 (p = ,042)	
Spaniards R.C. = C.R.	57 % (R.C. = -0,3)	52,2 % (R.C. = -3,5)	70 % (R.C. = -1,1)	74,2 % (R.C. = 4)		
South Americans	30,1 % (R.C. = -0,9)	41,8 % (R.C. = 4,6)	20 % (R.C. = -1,4)	18,5 % (R.C. = -4,1)	29,01° (p = ,000)	
Other nationalities	12,9 % (R.C. = 2,2)	6 % (R.C. = -1,7)	10 % (R.C. = 0,4)	7,3 % (R.C. = -0,1)		
Primary Education	45,2 % (R.C. = 0,9)	34,9 % (R.C. = -3,5)	55 % (R.C. = 1,3)	51,6 % (R.C.= 2,7)		
Secondary Education	35,5 % (R.C. = -1,1)	45,7 % (R.C. = 3)	25 % (R.C. = -1,4)	33,1 % (R.C.= -1,9)	14,33 ° (p = ,026)	
University education	19,4 % (R.C. = 0,2)	19,4 % (R.C. = 0,6)	20 % (R.C. = 0,2)	15,3 % (R.C. = -1)		
Managers or directors/ businessmen/public administration employees	16,1 % (R.C. = -0,7)	19,1 % (R.C. = 0,4)	15 % (R.C. = -0.4)	19,4 % (R.C. = 0,3)		
Unemployed/pensioners	10,8 % (R.C. = -1,7)	17,9 % (R.C. = 0,9)	25 % (R.C. = 1)	16,9 % (R.C. = 0,1)	4,86° (p = ,562)	
Construction workers/ catering and bar or restaurant sector workers/ industrial workers	73,1 % (R.C. = 1,9)	63 % (R.C. = -1)	60 % (R.C. = -0,4)	63,7 % (R.C. = -0,3)		
Married or registered civil partners	37,6 % (R.C. = 1,2)	36,1 % (R.C. = 2,4)	25 % (R.C. = -0,7)	18,5 % (R.C. = -3,7)		
Single	28 % (R.C. = -1,6)	30,1 % (R.C. = -3,1)	50 % (R.C. = 1,4)	52,4 % (R.C. = 4,5)	26,48 a (p = ,000)	
Widowed, separated or divorced	34,4 % (R.C. = 0,4)	33,7 % (R.C. = 0,7)	25 % (R.C. = 0,7)	29 % (R.C. = -0,9)		
Physical offence	89,2 % 87,2 % (R.C. = 0,6) (R.C. = 0,4)		70 % (R.C. = -2,4)	87,1 % (R.C. = -0,1)	5701	
Psychological offence	10,8 % (R.C. = -0,6)	12,2 % (R.C. = -0,4)	30 % (R.C. = 2,4)	12,9 % (R.C. = 0,1)	5,76 b (p = ,124)	

Note. The data correspond to mean \pm standard deviation (SD), except in those cases in which they refer to percentages. C.R. = corrected residuals.

 $^{^{}a}df = 6; ^{b}df = 3.$

Differences between the 4 groups were also found for educational level ($\chi 2(6) = 14.33$, p = .026), where the proportion of those with primary education was significantly lower in the alcohol-only group, and significantly higher in the group that used both alcohol and illegal drugs, whilst the proportion of those with secondary education was significantly higher in the group that used only alcohol (see Table 2).

With regard to nationality ($\chi 2(6) = 29.01$, p = .000) the proportion of Spaniards is significantly lower in the group of alcohol users and significantly higher in the "users of both" group, while the proportion of South Americans is significantly higher in the alcohol users and significantly lower in the group that uses both alcohol and illicit drugs (see Table 2).

Finally, in relation to age, statistically significant differences were also found according to user group (F (3,568) = 4.99, p = 002), the mean ages of non-users and of alcohol-only users being significantly higher than that of the group that used both alcohol and illicit drugs (see Table 2).

To analyze whether the 4 groups differed in levels of perpetration and victimization, we performed an analysis of covariance (ANCOVA) controlling the effect of the age variable. As shown in Table 3, there were statistically significant differences between groups on the scales of perpetration of psychological violence (F (3,567) = 9.19, p = .000) physical violence (F (3,567) = 6.64, p = .000) and sexual coercion (F (3,567) = 11.24, p = .000). Specifically, the group of illicit substance users and the group that used both illicit substances and alcohol were those with significantly higher means in psychological and sexual violence compared to non-users and the alcohol-only group; as for physical violence, it was the group that consumed both alcohol and illicit drugs that presented higher levels of violence compared to non-users and alcohol-only users (see Table 3).

On analyzing the results for victimization, statistically significant differences were observed on the scales of psychological violence (F (3,567) = 7.75, p = .000) and physical violence (F (3,567) = 7.59, p = .000). Specifically, non-users and alcohol-only users reported experiencing significantly fewer physical assaults by their partners, compared to the users of both alcohol and illicit drugs, whilst the non-users and alcohol users also reported fewer cases of psychological violence compared to the illicit drugs and "both" groups (see Table 3).

Table 3

Comparison of levels of intimate partner violence and victimization in users and non-users of psychoactive substances

	Non-users (N = 93) (1)	Alcohol users (N = 335) (2)	Illicit substances (N = 20) (3)	Alcohol plus illicit substances (N = 124) (4)		
Variable	M (± SD)	M (± SD)	M (± SD)	M (± SD)	F _(3, 567)	Bonferroni
CTS2 – Perpetration						
Psychological violence	16,12 ± 22,82	15,95 ± 23,71	39,95 ± 41,55	25,27 ± 26,84	9,19 (p = ,000)	1 < 3 (p = ,001) 2 < 3 (p = ,000) 2 < 4 (p = ,003)
Physical violence	2,95 ± 5,44	3,94 ± 9,53	7,51 ± 9,21	7,78 ± 11,65	6,64 (p = ,000)	1 < 4 (<i>p</i> = ,001) 2 < 4 (<i>p</i> = ,001)
Sexual coercion	0,58 ± 2,77	1,93 ± 7,48	5,19 ± 7,62	5,41 ± 7,29	11,24 (p = ,000)	1 < 3 (p = ,043) 1 < 4 (p = ,000) 2 < 4 (p = ,000)
Harm	1,96 ± 7,77	1,42 ± 4,88	1,32 ± 2,79	1,56 ± 4	0,27 (p = ,847)	
CTS2 – Victimization						
Psychological violence	17,40 ± 23,97	24,99 ± 31,12	40,87 ± 41,91	36,28 ± 37,21	7,75 (p = ,000)	1 < 3 (p = ,019) 1 < 4 (p = ,000) 2 < 4 (p = ,005)
Physical violence	6,59 ± 17,05	8,23 ± 18,35	16,71 ± 14,75	18,03 ± 31,63	7,59 (p = ,000)	1 < 4 (p = ,001) 2 < 4 (p = ,000)
Sexual coercion	0,70 ± 3,13	1,67 ± 8,61	1,24 ± 5,57	2,81 ± 11,11	1,12 (p = ,342)	
Harm	0,83 ± 1,57	1,64 ± 4,40	1,29 ± 2,46	1,36 ± 3,48	1,13 (p = ,338)	

Note. The data correspond to mean ± standard deviation (SD).

CTS2 = Revised Conflict Tactics Scale.

Discussion

The results of this study allow us to conclude, first of all, that there are high levels of psychoactive substance use among batterers. Comparing the prevalences of consumption in the last year in this sample with those of men the general Spanish community (Delegación del Gobierno para el Plan Nacional sobre Drogas, 2012), the sample of batterers presents higher prevalences of use in the last year for all the substances analyzed. These data are in line with those of numerous previous studies linking both alcohol use (Klostermann & Fals-Stewart, 2006; Langenderfer, 2013; Smith et al., 2012) and use of illegal drugs (Moore & Stuart, 2004; Moore et al., 2008; Smith et al., 2012) with intimate partner violence.

The prevalences of use found in this research are similar to those found by Moore and Stuart (2004), who analyzed drug use in the last year in a sample of batterers in treatment, except in relation to cannabis use, which was 53% in the last year, compared to 27.8% in the present study - though other studies refer to prevalence rates for cannabis use in the last year ranging from 32% to 88% (Brown et al., 1999; Logan, Walker, & Leukefeld, 2001; Roberts, 1987; Stuart & Holtzworth-Munroe, 1996). For the rest of substances, Moore and Stuart (2004) obtained 23.8% for cocaine in the last year, versus to 20.3% in the present study; hallucinogens 14.6% versus 7.7%; amphetamines 6.6% versus 8.6%; hypnosedatives 11.3% versus 9.3%; and heroin 7.9% versus 7.7%. Finally, in relation to the use of alcohol in large quantities, prevalence in the last month in this study was 19.8%, versus the 17.8% (prevalence of abusive alcohol consumption in the last month) found by Lipsky and Caetano (2011) and the 17% (prevalence of alcohol abuse in the last month) obtained by Cunradi (2009). The prevalence of alcohol use in large quantities in the past year in this study was 44.2%, compared to the 59.7% found in the study by McKinney et al. (2009). These data are similar to those of other international studies, and highlight the importance of alcohol and drug use in the perpetration of violent behaviour in intimate partner relationships, as indicated by several studies included in recent meta-analyses (Foran & O 'Leary, 2008; Stith et al., 2004), which conclude that the probability of assault is 8-11 times higher on days that alcohol and drugs are consumed compared to days on which they are not consumed (Fals-Stewart, 2003).

On comparing the levels of perpetration and victimization 4 groups of perpetrators (non-users, alcohol users, illegal drug users and users of both alcohol and illegal drugs), the results indicate that of the 4 groups, that presenting the highest levels of violence (perpetration and victimization) is that made up of users of both illegal drugs and alcohol, and this result is in line with those of other research that found higher levels of per-

petration and victimization of aggression in batterers that use illegal drugs (Moore & Stuart., 2004; Moore et al., 2008; Smith et al., 2012).

The most important distinguishing aspect of the present research is that both the consumption of illegal drugs and their use in conjunction with alcohol significantly increase the probability of committing acts of psychological violence, physical violence and sexual coercion in the intimate partner relationship, compared to the cases of non-users or alcohol-only users. As regards victimization, the results are in the same line, and it is users of illegal drugs together with alcohol who are most likely to be victims of psychological and physical violence from their partners. Men belonging to these two groups are largely younger and unmarried and maintain more unstable relationships. The use of illegal drugs affects one's lifestyle and conception of what an intimate partner relationship means, which from the results appears to be different from that of the first two groups.

Furthermore, the results suggest that alcohol consumption alone has no significant effect on aggression, and also that men in this group are the most numerous, are older and married – similarly to the case of nonusers. These data suggest that alcohol use appears to be quite normalized (alcohol is of course mostly easily accessible) and that it is well integrated in our culture and patterns of socio-interpersonal relations, and that this is in contrast to the cases of the other two use patterns (illicit substances/alcohol plus illicit substances) and to the situations in other countries (Bloomfield, Stockwell, Gmel, & Rehn, 2003).

From an applied point of view, the data from this study imply that, with regard to treatment, it is important to analyze substance use in detail. In the case of confirming that there is use of either illicit drugs alone or illicit drugs plus alcohol, it would be necessary to develop an alternative treatment programme or refer the case to specialized help services. On the other hand, if there is only alcohol use within parameters in line with those of the community population, it will be a case of applying, as part of treatment programmes for batterers, specific modules with the aim of raising participants' awareness about the potential effects of alcohol on violent behaviours, as well addressing possible mistaken expectations about alcohol use, providing realistic information on alcohol and its effects, and finally, motivating participants to undergo specific treatment for alcohol use, in case of need.

Looking to future research, in addition to analyzing the effect of use of specific substances on levels of violence and victimization in situations of intimate partner relationships, it would be interesting to carry out longitudinal analyses on substance use and its effect on the efficacy of interventions and levels of reoccurrence.

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Conflicts of interests

The authors declare that there are no conflicts of interests.

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