Treatment effectiveness of intimate partner violence perpetration among patients in a drug-addiction programme

Running head: Treatment of partner violence and addiction

Javier Fernández-Montalvo1, Alfonso Arteaga1, and José J. López-Goñi1
1Departamento de Psicología y Pedagogía.
Universidad Pública de Navarra
31006 Pamplona
Spain

Research support: This project was supported by a grant (code PSI2009-08500) from the "Ministerio de Ciencia e Innovación" of the Spanish Government.

Acknowledgements: The authors would like to thank the "Proyecto Hombre de Navarra" programme staff for their help in assessing the clinical sample.

Author Note

Correspondence concerning this article should be addressed to: Javier Fernández-Montalvo, Departamento de Psicología y Pedagogía, Universidad Pública de Navarra, 31006 Pamplona (Spain). Phone: 0034 948169830. Email: fernandez.montalvo@unavarra.es

© American Psychological Association, 2019. This paper is not the copy of record and may not exactly replicate the authoritative document published in the APA journal. Please do not copy or cite without author's permission. The final article is available, upon publication, at: https://psycnet.apa.org/doi/10.1037/vio0000184

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

Title: Treatment effectiveness of intimate partner violence perpetration among patients in a drug-addiction programme

Abstract: Objective: To evaluate the treatment effectiveness of an integrated intervention compared to addiction treatment as usual (TAU) in reducing intimate partner violence perpetration (IPV-P) among patients in a drug-addiction intervention programme. Method: A parallel, randomized, controlled trial was carried out with repeated measures of assessment (pre-treatment, post-treatment and 6-month follow-up). A sample of 227 consecutive patients was assessed, and 70 patients with IPV-P were selected to participate in the study and then divided into two groups: treatment (n = 34) and control (n = 36). The treatment group participated in an integrated intervention programme for addiction and IPV-P, and the control group received the TAU without intervention for IPV-P. Treatment success was defined as the complete absence of IPV-P episodes, both physical and psychological. Results: At the follow-up, the patients in the treatment group showed an IPV-P success rate (60.7%) that was significantly higher ($X^2 = 3.85$; $p < .05$) than that of the patients in the control group (31.6%). Moreover, both groups achieved statistically significant improvements in associated variables. Conclusions: The presence of IPV-P should be assessed in drug addiction treatment programmes. The combined treatment for addiction and IPV-P seems to be effective.

Keywords: Drug addiction; domestic violence; assessment; treatment; effectiveness.

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

1. INTRODUCTION

The relationship between the consumption of alcohol and other drugs and intimate partner violence perpetration (IPV-P) is well documented. High rates of IPV-P have been found in drug-addicted patients (Arteaga, Fernández-Montalvo, & López-Goñi, 2015; Arteaga, López-Goñi, & Fernández-Montalvo, 2015; Chermack et al., 2008; Moore et al., 2008; Observatorio Europeo de las Drogas y Toxicomanías, 2004; Stuart et al., 2009; Taft et al., 2010). Between 30% and 60% of patients in treatment for substance dependence present with IPV-P in the year prior to treatment onset (Easton, Swan, & Sinha, 2000; Gilchrist et al., 2015; Kraanen, Vedel, Scholing, & Emmelkamp, 2013). These rates are significantly higher than those obtained in studies carried out in the general population (Devries et al., 2013; European Union Agency for Fundamental Rights, 2014). Some studies comparing drug-addicted patients seeking treatment with and without histories of IPV-P have reported important differences. Specifically, drug-addicted patients with IPV-P show a more severe profile, with more associated psychopathological symptoms, higher levels of anger, greater drug and alcohol consumption, and more maladjustment problems (Arteaga, Fernández-Montalvo, et al., 2015; Arteaga, López-Goñi, et al., 2015; Chermack et al., 2008; Taft et al., 2010). Therefore, the presence of IPV-P becomes a relevant variable that needs to be assessed in drug addiction treatment programmes.

Some studies have analysed the effects of addiction treatment programmes on IPV-P reduction (Murphy & Ting, 2010; Wilson, Graham, & Taft, 2014). The results revealed that these programmes achieve a significant decrease in IPV-P rates (from 24% to 51%), although they did not specifically intervene in this area (Maiden, 1997; O'Farrell, Murphy, Stephan, Fals-Stewart, & Murphy, 2004; O'Farrell, Van Hutton, &

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

Murphy, 1999; Schumm, O'Farrell, Murphy, & Fals-Stewart, 2009; Stuart et al., 2003). However, treatments focused only on substance dependence may be insufficient for effective intervention of IPV-P mainly in those cases in which there is not a direct relationship between substance abuse and IPV-P (Klostermann, Kelley, Mignone, Pusateri, & Fals-Stewart, 2010).

Although there is a lack of evidence for the effectiveness of the most common treatments provided for perpetrators of IPV (Babcock, Green, & Robie, 2004; Feder & Wilson, 2005; Stover, Meadows, & Kaufman, 2009), treatment approaches that simultaneously address problems with substance abuse and IPV-P yield the lowest recidivism rates (Stover, 2009). Hence, it has become especially important to develop specific interventions to conjointly treat addiction and IPV-P.

To date, only a few IPV-P treatment programmes have been developed in the context of addiction treatment. One of the pioneer programmes is Dade County's Integrated Domestic Violence Model (Goldkamp, Weiland, Collins, & White, 1996). The results of this programme have shown that patients who received a combined intervention (n = 210) targeted at both problems (addiction and IPV-P) presented a lower rate of recidivism (reinvolvement in the criminal and civil justice systems) in IPV-P than those (n = 140) who received the IPV-P treatment in other clinical settings that differed from the addiction treatment centre.

Yale's Substance Abuse Treatment Unit's Substance Abuse-Domestic Violence Programme (SATU-SADV) is a cognitive behavioural intervention aimed at treating addiction and IPV-P. The treatment consists of 12 ninety-minute sessions. The initial results of the programme showed a significant reduction in drug use, levels of anger, and IPV-P (Easton & Sinha, 2002). In a more recent study with a sample of 75 patients

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

with alcohol problems and associated IPV-P, the effectiveness of this programme (n = 38) was compared to that of an intervention that targeted only alcoholism (n = 37) (Easton et al., 2007). According to the results of the Conflict Tactic Scale-2 (CTS-2) and significant collateral informants, the combined intervention resulted in significantly lower alcohol consumption and a greater reduction in the IPV-P rate than the specific intervention for addiction. However, these results referred to only the prior 30 days. In a third study of the same group, the authors analysed the anger expression in these same patients (Oberleitner, Mandel, & Easton, 2013). The results showed a significant reduction in the rates of IPV-P and alcohol consumption. Moreover, the level of pre-treatment anger was a predictor of worse treatment outcomes.

Finally, in a study conducted in the Netherlands (Kraanen et al., 2013), two treatment modalities of 16 sessions each were compared in a sample of 52 addicted patients with IPV-P. An integrated treatment for substance addiction and IPV-P was administered to one group (n = 27). The other group (n = 25) received a cognitive-behavioural therapy for substance addiction treatment, including only one session that addressed IPV-P. In both treatment conditions, a significant improvement in drug use and IPV-P was observed, with no differences between them in the CTS-2. Although the authors concluded that from an efficiency standpoint, the choice treatment would include a unique additional specific session for IPV-P, this study presents some limitations, given the brevity of the IPV-P intervention in the second group (only one session) and the lack of long-term follow-up.

Overall, these studies showed that combined interventions for IPV-P and substance dependence in addiction treatment centres achieve a reduction in the probability of patients committing a new violent act. However, although these results

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

are encouraging, they should be interpreted with caution, as only a few studies have been conducted to date. In summary, it is necessary to develop more studies in this field in order to provide more empirical support for the effectiveness of the combined treatment (Crane & Easton, 2017).

Consequently, the main purpose of this study was to assess the effectiveness of a treatment for physical and/or sexual IPV-P among patients in a drug addiction intervention programme. Specifically, a combined treatment programme for addiction and IPV-P was compared to addiction treatment as usual (TAU). The main hypotheses of this study were that patients receiving the combined intervention for both addiction and IPV-P would achieve 1) a reduced rate of IPV-P recidivism and, 2) as was found in previous studies about IPV (e.g., Echeburúa, Fernández-Montalvo, & Amor, 2006), greater improvement in psychopathological, personality and maladjustment variables.

The specific contribution of this study is that it provides empirical support for the combined treatment of IPV-P in addicted patients by applying conjointly two treatment programmes that have been effective separately: 1) a well-structured and manualized cognitive-behavioural treatment programme (Echeburúa & Fernández-Montalvo, 1998) that has been effective in the treatment of IPV in other contexts (e.g., prisons, outpatient, and immigrants) (Echauri, Fernández-Montalvo, Martínez, & Azcárate, 2013; Echeburúa et al., 2006; Fernández-Montalvo, Echauri, Martínez, Azcárate, & López-Goñi, 2015), and 2) a cognitive-behavioural psychological treatment, which has been effective in the treatment of addictions (Fernández-Montalvo & López-Goñi, 2010; Fernández-Montalvo, López-Goñi, Illescas, Landa, & Lorea, 2008). The main differences with previous studies are that this IPV-P treatment is not a court-referred programme, is carried out in a different cultural context (Spain), includes

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

more treatment sessions, and is open for both male and female with addiction and IPV-P problems.

METHODS

The protocol for this study was approved by the ethics committees of the Universidad Pública de Navarra (PI:002/09) and of the Fundación Proyecto Hombre de Navarra (code PHN2008-01). Written informed consent was provided by all participants.

1.1. Participants

The initial sample consisted of 227 consecutive patients voluntarily seeking treatment for addiction in the *Proyecto Hombre de Navarra* addiction treatment programme (Spain) from May 2010 to December 2012. This programme, which offers two modalities of intervention (outpatient and therapeutic community), is public and cares for patients from all over the region. The main avenue of treatment access is through the family's or patient's request. These patients are representative of Spanish patients with addiction problems. Every single patient who consecutively attended the clinical centre during the selected period was considered for study inclusion, independent of the setting assigned by the therapeutic team (inpatient or outpatient).

The study admission criteria included the following: a) meeting the diagnostic criteria for substance dependence disorder according to the DSM-IV-TR (American Psychiatric Association, 2000), b) presenting lifetime IPV-P, c) being between 18 and 65 years old, d) receiving treatment for drug addiction, and e) giving consent to participate in the study. The exclusion criteria included the following: a) the existence of serious mental illness advising against participation in the study, b) a statement by

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

professionals advising the researchers not to interview the patient given his or her stage in the treatment process, and c) a lack of knowledge of the Spanish language. However, no patient met any of one of these exclusion criteria, and therefore, not one was excluded.

This study considered a patient as presenting lifetime physical and/or sexual IPV-P if he or she met one of the following criteria: 1) acknowledgement of being an aggressor of IPV by the patient (met by 24 patients), 2) any positive score on the specific scales of the Revised Conflicts Tactics Scale-2 (CTS-2) (*i.e.*, severe physical aggression, severe sexual coercion, minor injuries, severe injuries, or item 15 of minor sexual coercion: *I made my partner have sex without a condom*) (52 patients), 3) having been found guilty in the past for a crime of IPV-P (15 patients), 4) having a restraining order based on IPV-P (16 patients), and 5) the existence of IPV-P reported by the therapeutic team responsible for the drug addiction treatment (56 patients). In cases of doubt, this last criterion prevailed (this was the case in 8 participants). Information about criteria 3 and 4 was provided by the legal service of the addiction treatment programme. These five criteria were assessed for every patient, and 49 cases simultaneously met more than one criterion.

Following the abovementioned admission and exclusion criteria, 138 people (60.8%) who did not present lifetime IPV-P were excluded from the study, and 19 (8.4%) refused to participate. No differences in any of the variables studied during pre-treatment were found between those who refused and those who participated. Therefore, a total of 70 (30.8% of the total) subjects were studied (Figure 1). Of these subjects, 58.6% were men (n = 41), and 41.4% were women (n = 29).

PLACE FIGURE 1 HERE

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

The average age of the subjects was 35.7 years (*SD* = 7.8). The socioeconomic levels were middle to lower-middle class. The main substances that motivated treatment were cocaine and other stimulants (43.9% of the sample), alcohol (36.3%), heroin (7.6%), cannabis (4.5%), and hallucinogens (3%). Most of the subjects were single (62.7%) or divorced (22.4%). Concerning their education level, 49.1% had only primary studies, 38.6% had secondary studies, and 12.3% had a university degree. Regarding the type of IPV perpetrated, all participants were involved in some type of psychological aggression, 83.8% in physical aggression, and 38.2% in sexual assault.

1.2. Instruments

All of the instruments were selected based on the clinical relevance shown in previous studies about IPV-P in Spain (Echeburúa, Fernández-Montalvo, & Amor, 2003; Fernandez-Montalvo, Echeburua, & Amor, 2005).

The Revised Conflicts Tactics Scale-2 (CTS-2) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996), which consists of 78 items, measures the degree to which people commit and/or suffer from IPV, as well as the use of negotiation to resolve partner conflicts. This scale consists of five subscales: a) reasoning/negotiation; b) physical aggression; c) psychological abuse; d) sexual coercion; and e) injuries (i.e., "used a knife or gun on my partner"). In this study, the last four subscales, which are related to violent behaviours and are simultaneously subdivided into minor and major violent behaviours, were used. The "ever prevalence score", with dichotomous responses (0, absent; 1, present), was calculated and indicated whether the behaviours that compose the scale had ever occurred. The internal consistency ranges from .83 to .84. Cronbach's alpha for the current sample was .946.

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

The Inventory of Distorted Thoughts about the Use of Violence (IDT-V) (Echeburúa & Fernández-Montalvo, 1998) consists of a list of 16 items aimed at detecting irrational thoughts related to the use of violence as an acceptable way to resolve conflicts (i.e., "If a child hits your child, he/she should respond in the same way", "Slapping is sometimes necessary"). A four-point Likert scale, from 1 (strongly disagree) to 4 (strongly agree), was used. The results range from 16 to 64. The higher the score is, the more distorted the thoughts at that moment. Cronbach's alpha for the current sample was .740.

The European Addiction Severity Index (EuropASI; Kokkevi and Hartgers, 1995) is the European version of the Addiction Severity Index (ASI; McLellan, Luborsky, Woody, & O'Brien, 1980). This interview assesses the current patient's treatment needs based on seven different areas: a) general medical condition, b) employment and financial situations, c) alcohol consumption, d) use of other drugs, e) legal problems, f) family and social relationships, and g) psychological state (i.e., "how many days in the past 30 have you experienced alcohol problems/drug problems?"). The score for each area ranged from 0 (no problem) to 9 (extreme problem). The short-term test–retest reliabilities of the ASI severity ratings have been reported to be greater than or equal to .92 for all domains. Cronbach's alpha for the current sample was .741.

The Symptom Checklist (SCL-90-R) (Derogatis, 1992) is a self-administered questionnaire for general psychopathological assessment. This questionnaire consists of 90 items and uses a five-point Likert scale from 0 (nothing) to 4 (extremely). The questionnaire aims to reflect the current symptoms of psychological distress (i.e., "how much were you bothered during the past week, including today, by headaches?"). The Symptom Checklist consists of nine primary symptom dimensions: somatisation,

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Additionally, this questionnaire offers three global indices that reflect the level of overall severity of the subject: the Global Severity Index (GSI), which reflects the overall symptom severity; the Positive Symptom Distress Index (PSDI), which indicates symptom intensity; and the Positive Symptom Total (PST), which includes the number of items answered with a score other than 0. In this study, the percentiles of each dimension were considered. The internal consistency ranges from .70 to .90. Cronbach's alpha for the current sample was .944.

The State-Trait Anger Expression Inventory (STAXI) (Spielberger, 1988) consists of 10 items related to state anger (the intensity of the emotion of anger in a particular situation) (i.e., "I feel like hitting someone") and another 10 that refer to trait anger (an individual's disposition to feel anger) (i.e., "I have an irritable character"). Scores range from 10 to 40 on each scale. The higher the score is, the greater the anger. In the Spanish version, the test-retest reliability is .71, and the internal consistency ranges from .82 to .89. Cronbach's alpha for the current sample was .846.

The Barratt Impulsiveness Scale (BIS-10) (Barratt, 1985) aims to assess the current degree of impulsivity of the subjects. This scale consists of 33 items scored from 0 to 4 on a five-point Likert scale. The total scale score ranges from 0 to 132. The higher the score is, the greater the impulsivity. The internal consistency is .84. Cronbach's alpha for the current sample was .849.

The Maladjustment Scale (Echeburúa, Corral, & Fernández-Montalvo, 2000) reflects the degree to which different areas of daily life are currently affected: labour, social, spare time, partner, family and general. This scale consists of six items ranging from 0 (nothing) to 5 (extremely) on a six-point Likert scale (i.e., "due to my current

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

problems, my family relationships have been affected"). The total scale range is 0-30. The higher the score is, the higher the level of maladjustment. The internal consistency is .94. Cronbach's alpha for the current sample was .882.

1.3. Treatment modalities

Addiction treatment as usual (TAU). This treatment consists of a cognitive-behavioural intervention with two different modalities (outpatient and inpatient treatment) aimed toward abstinence. The main therapeutic techniques are related to stimulus control and in vivo exposure, as well as to relapse prevention. During the first 6 months of the outpatient modality, the treatment includes weekly sessions (45-60 minutes); during the next 6 months, the sessions are biweekly. During the treatment, urine analyses are carried out periodically to verify substance abstinence. Successful programme completion typically requires approximately 12 months and is achieved when a patient completes all of the therapeutic sessions and achieves substance abstinence. Both outpatient and inpatient modalities have been effective in the treatment of addiction (Fernández-Montalvo & López-Goñi, 2010; Fernández-Montalvo et al., 2008).

IPV-P treatment. The IPV-P intervention is a broad treatment programme that is based on a cognitive-behavioural model and is composed of 20 ninety-minute weekly group sessions. This specific intervention was provided at the same time as TAU. Each group was composed of 3-5 participants of the same gender. The programme includes the modification of cognitive and behavioural deficits related to IPV-P. In the first part of the intervention, motivational aspects, such as the acceptance of responsibility for the violence and motivation for therapy, are taken into account. The second part includes the treatment of psychopathological symptoms that are usually associated with IPV-P. This part focuses on empathy and skills training, anger management and the

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

modification of cognitive distortions related to IPV-P. Finally, the programme includes a specific intervention for IPV-P relapse prevention that identifies high-risk situations for violent behaviour and teaches patients adequate coping strategies that provide an alternative to violence. This structure is based on the intervention programme developed by Echeburúa and Fernández-Montalvo (1998), and it has been effective in the treatment of IPV-P in different contexts (Echauri et al., 2013; Echeburúa & Fernández-Montalvo, 2009; Echeburúa et al., 2006; Fernández-Montalvo et al., 2015). A summary of the specific components of the treatment programme is provided in Table 1.

PLACE TABLE 1 HERE

1.4. Experimental design

A parallel, randomized, controlled clinical trial, using an experimental design (with one treatment group and one control group) with repeated measures (pre-treatment, post-treatment and 6-month follow-up) was conducted. Both groups were assessed at the same time points. The treatment group received the TAU + IPV-P treatments conjointly (with the characteristics described in the previous section). Patients who belonged to the IPV-P treatment group received the specific intervention for IPV as an additional component of their global treatment for addiction. This global treatment (TAU + IPV-P) was cohesive, as both interventions were based on a cognitive-behavioural model, and therapists gave a consistent and complementary treatment for both conditions in the same treatment programme. The control group received only the TAU. The treatment lasted the same amount of time in both groups (12 months), with more sessions (20 additional IPV-P sessions) in the treatment group.

1.5. Procedure

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

All patients were interviewed and treated by clinical psychologists with ten or more years of experience in assessing and treating addictions. The assessment of the sample was carried out in two sessions prior to the beginning of treatment for addiction. Self-report measures were administered with the presence and support of the interviewers. The sessions occurred once per week, and the time interval between sessions was the same for each participant.

After the clinical sample was assessed, the research team randomly assigned patients to one of two groups using a table of random numbers: the treatment group (n = 34) or the control group (n = 36). No significant differences between groups were observed in the type of treatment (inpatient/outpatient; $X^2 = 1.1$; $p = .285$) or in the substance of consumption (alcohol/cocaine/others; $X^2 = 5.1$; $p = .076$). On the other hand, most of the sample (82.9%) perpetrated IPV during the year prior to seeking treatment. Only 12 cases (17.1%) reported distal IPV-P, without any significant differences between groups ($X^2 = 0.3$; $p = .599$).

In this study, two levels of therapeutic change were considered during the 6-month follow-up period: success and failure. Regarding IPV-P, treatment success was defined as the complete absence of physical, sexual and/or psychological IPV-P episodes. Treatment failure was defined as recidivism with episodes of physical, sexual and/or psychological IPV-P. Regarding drug addiction, treatment success was defined as both substance abstinence and the completion of the therapeutic programme. Treatment failure was considered when one or both requirements were not achieved. The therapeutic team received direct information from both the patient and the patient's family at the three assessment times via specific interviews.

1.6. Data Analysis

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

An intention to treat analysis was carried out and included all randomized subjects in the groups to which they were allocated, with no deviations from randomized allocation being observed. Moreover, the distribution of missing data was studied, and no significant differences were found between subjects with and without available data in each of the variables studied during the pre-treatment. Therefore, the pairwise deletion method was selected; this method involves analysing the available cases in each variable. Descriptive analyses were performed for all variables. In the bivariate analyses between patients with and without a history of IPV-P, a χ^2 or Student's *t* test for independent samples was used, depending on the nature of the variables analysed. A multivariate analysis of variance (MANOVA) test, which included the post-treatment and follow-up measurements as the dependent variables and the group (treatment and control) as the independent variable (factor), was carried out in order to determine if there were differences between the groups. Effect sizes (Cohen's *d*) for all of the analyses were provided (Cohen, 1988). Repeated measures ANOVA analyses with Bonferroni adjustment were carried out to evaluate changes in the continuous variables. Moreover, two logistic regression analyses (forward stepwise entry method) were conducted to determine which factors were the most important for differentiating between the presence and absence of IPV-P and between addiction treatment success and failure at the 6-month follow-up. The variable entry criterion was set to 0.05 and the variable retention criterion to 0.10. Moreover, the Hosmer-Lemeshow test was used to assess the goodness of fit of these models. A difference of $p < .05$ was considered significant. All statistical analyses were performed using SPSS (version 23.0) software.

2. RESULTS

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

2.1. Rate of retention during the study

The total number of dropouts in all phases of the study was 23 (32.9% of the sample), with a dropout rate significantly higher in the control group (n = 17; 47.2%) than in the treatment group (n = 6; 17.7%). The rate of completers in all phases of the study is shown in Table 2.

PLACE TABLE 2 HERE

2.2. Rates of success and failure

2.2.1. Rate of success and failure regarding IPV-P

At the 6-month follow-up, patients in the treatment group showed a rate of success of 60.7% (n = 17), which was significantly higher (X^2 = 3.85; p = .049) than that of the patients in the control group (31.6%; n = 6).

2.2.2. Rate of success and failure regarding alcohol and other drug consumption

At the 6-month follow-up, patients in the treatment group showed a rate of success of 67.6% (n = 23). In the control group, the rate of success regarding the addiction problem was 58.3% (n = 21). No significant differences between the groups were found (X^2 = 0.65; p = .420).

2.2.3. Combined rate of success and failure in both conditions

The combined rate of success and failure in both conditions studied (drug consumption and IPV-P) resulted in four different categories: 1) success in both conditions (treatment group: n = 15, 57.7%; control group: n = 3, 16.7%), 2) success in IPV-P and failure in addiction (treatment group: n = 2, 7.7%; control group: n = 3, 16.7%), 3) failure in IPV-P and success in addiction (treatment group: n = 3, 11.5%; control group: n = 8, 44.4%), and 4) failure in both conditions (treatment group: n = 6,

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

23.1%; control group: n = 4, 22.2%). The χ^2 test was not carried out due to the small number of cases that were expected in some cells.

2.3. Results of consumption, psychopathological, personality and maladjustment variables

The results of MANOVA for the treatment and control groups did not reveal any differences between them [Wilk's Lambda = .914; F (18, 13) = 0.914; p = .579] in the selected dependent variables: consumption, psychopathological, personality and maladjustment measurements in the post-treatment and in the follow-up.

Although no statistically significant differences in MANOVA were found, comparisons between groups in all the variables at the different times of assessment were carried out, including the effect size values (Table 3).

PLACE TABLE 3 HERE

Both groups were homogenous in all variables at the three evaluation times (pre-treatment, post-treatment and 6-month follow-up), with no significant differences between them in terms of the variables studied.

The ANOVA results for repeated measurements of the studied variables are presented in Table 4. These data showed that the treatment group achieved statistically significant improvement in some variables: psychopathological positive symptoms (PST), trait anger (STAXI-Trait), impulsivity (BIS-10) and maladjustment. The control group also achieved several significant improvements: psychopathological global severity (GSI), impulsivity (BIS-10) and maladjustment.

PLACE TABLE 4 HERE

Regarding the consumption variables, paired sample t-tests were carried out due to the lack of a post-treatment assessment. The repeated measures analysis of the

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

severity of alcohol consumption showed a significant difference between the pre-treatment and the follow-up severity in the treatment group ($t = 5.5$; $p < .001$) but not in the control group ($t = 1.9$; $p = .101$). In the case of drug consumption, the repeated measures analysis showed significant differences in the severity between the pre-treatment and the follow-up in both the treatment group ($t = 5.5$; $p < .001$) and the control group ($t = 3.7$; $p = .007$).

2.4. Prediction of treatment results

The results of the logistic regression analyses showed that having received the IPV-P treatment was the main variable related to the absence of IPV-P at the 6-month follow-up. This variable correctly classified 65.9% of cases (Table 5).

PLACE TABLE 5 HERE

On the other hand, in regard to the addiction treatment results, the main variables related to treatment success were gender (being male), age (being younger), higher STAXI-State scores and lower SCL-90-R PST scores. These variables correctly classified 82.1% of cases.

DISCUSSION

In this paper, the effectiveness of a treatment for IPV-P among patients in a drug-addiction intervention programme was tested. This study is the first to investigate patients in Spain with these characteristics. In the international context, only a few studies about the effectiveness of treatment programmes for drug-addicted patients who commit violence against their partners have been presented to the scientific community (Easton et al., 2007; Easton & Sinha, 2002; Goldkamp et al., 1996; Kraanen et al., 2013; Oberleitner et al., 2013).

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

The results of the current study indicate the usefulness of the integrated intervention programme that was developed to eliminate IPV-P. Specifically, regarding the first hypothesis of the study, the rate of success (complete absence of physical, sexual and/or psychological IPV-P episodes) obtained with the treatment programme was significantly higher than that obtained without any specific treatment intervention for IPV-P. Furthermore, in this study, having received IPV-P treatment predicted treatment success in IPV-P. As far as the second hypothesis of the study is concerned, both groups were homogeneous in the evolution of the psychopathological, personality and maladjustment variables.

On the other hand, both groups were also homogeneous in the rate of success/failure in the addiction condition. Although the integrated intervention achieved a higher rate of success, no statistically significant differences between the groups were found. Nevertheless, these data support the development of a combined treatment for both violence and addiction in an integrated intervention programme. Specifically, 57.7% of the patients in the experimental group achieved success in both conditions simultaneously versus 16.7% in the control group.

In this study, patients who did not receive specific treatment for IPV-P also showed an improvement in the rate of IPV-P. As has been found in other previous studies (Maiden, 1997; Murphy & Ting, 2010; O'Farrell et al., 1999; O´Farrell, Murphy, Stephan, Fals-Stewart, & Murphy, 2004; Schumm et al., 2009; Stuart et al., 2003), TAU also leads to a decrease in IPV-P, although this rate is lower than that obtained when receiving an additional intervention specific for IPV-P. For example, in the current study, only 16.7% of the patients from the control group had success in both conditions.

Research Limitations

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

This study had several limitations. First, it would be interesting to have enrolled a larger sample, which would have enabled the exploration of the association between other variables and the results obtained (for example, the influence of the type of substance consumed on the treatment results). Second, a larger female sample would allow a specific study on gender differences in the treatment results. Third, the potential spurious effects introduced by the different treatment dose received by both groups should be considered when interpreting the results. Fourth, in this study, a 6-month follow-up was conducted. A longer follow-up period would make it possible to explore whether the results obtained remained the same over a longer period, as highlighted by Wilson et al. (2014). Finally, the sample of this study was composed of patients receiving treatment in a specific treatment programme in Spain and may thus create a bias that prevents us from generalizing the results to all patients with drug addiction problems. Moreover, in this study, the groups were composed of 3-5 patients, which is unusual in other contexts. Therefore, the results of this study, although positive, must be verified by further studies.

Research Implications

This study provides new support for the combined treatment of addiction and IPV-P in specialized treatment addiction centres. Future studies should replicate these results with larger samples. Consequently, gender differences in this type of treatment programme could be considered, as it has been previously suggested by different authors (Bair-Merritt et al., 2010; Dowd & Leisring, 2008). The sample in this study does not allow solid conclusions to be drawn in this field.

On the other hand, the therapeutic results of this study were conceptualized as "success" and "failure". Future research should also adopt a quantitative perspective,

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

which could contemplate a wider variability in the results obtained between and across groups.

Clinical and Policy Implications

To date, three intervention models for drug-addicted patients with IPV-P have been conducted: serial (the intervention for the addiction precedes the IPV-P treatment), parallel (both interventions are provided simultaneously but in different clinical settings) and integrated (both conditions are treated conjointly in the same clinical service). Each of these models has advantages and disadvantages. The first two types of programmes can be difficult to develop because only a few patients in treatment for addiction agree to participate in programmes for IPV-P outside of their clinical setting, and those who do agree present higher rates of treatment dropout (Klostermann et al., 2010). Therefore, it seems more appropriate for addiction treatment programmes to incorporate interventions that address IPV-P. Moreover, treating both phenomena together in the same clinical setting without using external services for IPV-P makes it more difficult for patients to drop out of treatment (Bennett, 2008).

In this sense, programmes that include the integrated treatment of both phenomena have been shown to be effective (Easton et al., 2007; Easton & Sinha, 2002; Goldkamp et al., 1996; Kraanen et al., 2013; Oberleitner et al., 2013). Specifically, these studies show significant reductions in the rate of IPV-P in patients who participate in these types of integrated programmes. These reductions are greater than those observed when only addiction, but not IPV-P, is addressed. The results obtained in our study also support the effectiveness of the integrated treatment. Therefore, treatment programmes for drug addiction may be a suitable context for identifying and treating IPV-P. This topic is of great interest because of the number of IPV perpetrators who

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

enter addiction treatment programmes. Thus, it is clearly necessary to continue developing studies along this line.

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

REFERENCES

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders (4th Ed. Rev.)*. Washington, D.C.: APA.

Arteaga, A., Fernández-Montalvo, J., & López-Goñi, J. J. (2015). Prevalence and differential profile of patients with drug addiction problems who commit intimate partner violence. *American Journal on Addictions, 24*(8), 756-764. doi:10.1111/ajad.12302

Arteaga, A., López-Goñi, J. J., & Fernández-Montalvo, J. (2015). Differential profiles of drug-addicted patients according to gender and the perpetration of intimate partner violence. *Drug and Alcohol Dependence, 155*, 183-189. doi:10.1016/j.drugalcdep.2015.07.018

Babcock, J. C., Green, C. E., & Robie, C. (2004). Does batterers' treatment work? A meta-analytic review of domestic violence treatment. *Clinical Psychology Review, 23*(8), 1023–1053. http://dx.doi.org/10.1016/j.cpr.2002.07.001

Bair-Merritt, M. H., Crowne, S. S., Thompson, D. A., Sibinga, E., Trent, M., & Campbell, J. (2010). Why do women use intimate partner violence? A systematic review of women's motivations. *Trauma Violence & Abuse, 11*(4), 178-189. doi:10.1177/1524838010379003

Barratt, E. S. (1985). Impulsiveness subtraits: Arousal and information procesing. In J. T. Spence & C. E. Itard (Eds.), *Motivation, Emotion and Personality*. North Holland: Elsevier.

Bennett, L. W. (2008). Substance abuse by men in partner abuse intervention programs: Current issues and promising trends. *Violence and Victims, 23*(2), 236-248. doi:10.1891/0886-6708.23.2.236

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

Chermack, S. T., Murray, R. L., Walton, M. A., Booth, B. A., Wryobeck, J., & Blow, F. C. (2008). Partner aggression among men and women in substance use disorder treatment: Correlates of psychological and physical aggression and injury. *Drug and Alcohol Dependence, 98*(1-2), 35-44. doi:10.1016/j.drugalcdep.2008.04.010

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Crane, C. A., & Easton, C. J. (2017). Integrated treatment options for male perpetrators of intimate partner violence. *Drug and Alcohol Review, 36*(1), 24-33. doi:10.1111/dar.12496

Derogatis, L. R. (1992). *The SCL-90-R*. Baltimore: Clinical Psychometric Research.

Devries, K. M., Mak, J. Y. T., Garcia-Moreno, C., Petzold, M., Child, J. C., Falder, G., . . . Watts, C. H. (2013). The global prevalence of intimate partner violence against women. *Science, 340*(6140), 1527-1528. doi:10.1126/science.1240937

Dowd, L., & Leisring, P. A. (2008). A framework for treating partner aggressive women. *Violence and Victims, 23*(2), 249-263. doi:10.1891/0886-6708.23.2.249

Easton, C. J., Mandel, D. L., Hunkele, K. A., Nich, C., Rounsaville, B. J., & Carroll, K. M. (2007). A cognitive behavioral therapy for alcohol-dependent domestic violence offenders: An integrated substance abuse-domestic violence treatment approach (SADV). *The American Journal on Addictions, 16*, 24-31.

Easton, C. J., & Sinha, R. (2002). Treating the addicted male batterer: Promising directions for dual-focused programming. In C. Wekerle & A. Wall (Eds.), *The violence and addiction equation: Theoretical and clinical issues in substance abuse and relationship violence* (pp. 275-292). New York: Brunner-Routledge.

Easton, C. J., Swan, S., & Sinha, R. (2000). Prevalence of family violence entering substance abuse treatment. *Journal of Substance Abuse Treatment, 18*(1), 23-28.

Echauri, J.A., Fernández-Montalvo, J., Martínez, M., & Azcárate, J.M. (2013). Effectiveness of a treatment programme for immigrants who committed gender-based violence against their partners. *Psicothema, 25*(1), 49-54. doi:10.7334/psicothema2012.75

Echeburúa, E., Corral, P., & Fernández-Montalvo, J. (2000). Escala de Inadaptación (EI): propiedades psicométricas en contextos clínicos. *Análisis y Modificación de Conducta, 26*(107), 325-340.

Echeburúa, E., & Fernández-Montalvo, J. (1998). Hombres maltratadores. In E. Echeburúa & P. Corral (Eds.), *Manual de violencia familiar* (pp. 73-175). Madrid: Siglo XXI.

Echeburúa, E., & Fernández-Montalvo, J. (2009). Evaluación de un programa de tratamiento en prisión de hombres condenados por violencia grave contra la pareja. *International Journal of Clinical and Health Psychology, 9*(1), 5-20.

Echeburúa, E., Fernández-Montalvo, J., & Amor, P. J. (2003). Psychopathological profile of men convicted of gender violence: A study in the prisons of Spain. *Journal of Interpersonal Violence, 18*, 798-812.

Echeburúa, E., Fernández-Montalvo, J., & Amor, P. J. (2006). Psychological treatment of men convicted of gender violence: A pilot study in Spanish prisons. *International Journal of Offender Therapy and Comparative Criminology, 50*(1), 57-70.

European Union Agency for Fundamental Rights. (2014). *Violence against women: An EU-wide survey*. Luxembourg: Publication Office of the European Union.

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

Feder, L., & Wilson, D. B. (2005). A meta-analytic review of court-mandated batterer intervention programs: Can courts affect abusers' behavior? *Journal of Experimental Criminology, 1*, 239–262. doi:10.1007/s11292-005-1179-0

Fernández-Montalvo, J., Echauri, J.A., Martínez, M., Azcárate, J.M., & López-Goñi, J.J. (2015). Impact of a court-referred psychological treatment program for intimate partner batterer men with suspended sentences. *Violence and Victims, 30*(1), 3-15. doi:10.1891/0886-6708.VV-D-13-00026

Fernandez-Montalvo, J., Echeburua, E., & Amor, P. (2005). Aggressors against women in prison and in the community: An exploratory study of a differential profile. *International Journal of Offender Therapy and Comparative Criminology, 49*(2), 158-167. doi:10.1177/0306624X04269005

Fernández-Montalvo, J., & López-Goñi, J. J. (2010). Comparison of completers and dropouts in psychological treatment for cocaine addiction. *Addiction Research & Theory, 18*(4), 433-441. doi:10.3109/16066350903324826

Fernández-Montalvo, J., López-Goñi, J. J., Illescas, C., Landa, N., & Lorea, I. (2008). Evaluation of a therapeutic community treatment program: A long-term follow-up study in Spain. *Substance Use & Misuse, 43*(10), 1362-1377.

Gilchrist, G., Blazquez, A., Segura, L., Geldschlager, H., Valls, E., Colom, J., & Torrens, M. (2015). Factors associated with physical or sexual intimate partner violence perpetration by men attending substance misuse treatment in Catalunya: A mixed methods study. *Criminal Behaviour and Mental Health, 25*(4), 239-257. doi:10.1002/cbm.1958

Goldkamp, J. S., Weiland, D., Collins, M., & White, M. (1996). *The role of drugs and alcohol abuse in domestic violence and its treatment: Dade County's Domestic*

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

Violence Court Experiment. Executive Summary of a Crime and Justice Research Institute Study: National Institute of Justice.

Klostermann, K., Kelley, M. L., Mignone, T., Pusateri, L., & Fals-Stewart, W. (2010). Partner violence and substance abuse: Treatment interventions. *Aggression and Violent Behaviour, 15*, 162-166.

Kokkevi, A., & Hartgers, C. (1995). European adaptation of a multidimensional assessment instrument for drug and alcohol dependence. *European Addiction Research, 1*, 208-210.

Kraanen, F. L., Vedel, E., Scholing, A., & Emmelkamp, P. M. G. (2013). The comparative effectiveness of integrated treatment for substance abuse and partner violence (I-StoP) and substance abuse treatment alone: A randomized controlled trial. *BMC Psychiatry, 13*. doi:10.1186/1471-244x-13-189

Maiden, R. (1997). Alcohol dependence and domestic violence: Incidence and treatment implications. *Alcoholism Treatment Quarterly, 15*, 31-50.

McLellan, A. T., Luborsky, L., Woody, G. E., & O´Brien, C. P. (1980). An improved diagnostic evaluation instrument for substance abuse patients: The Addiction Severity Index. *The Journal of Nervous and Mental Disease*(168), 26-33.

Moore, T. M., Stuart, G. L., Meehan, J. C., Rhatigan, D. L., Hellmuth, J. C., & Keen, S. M. (2008). Drug abuse and aggression between intimate partners: A meta-analytic review. *Clinical Psychology Review, 28*(2), 247-274.

Murphy, C. M., & Ting, L. (2010). The effects of treatment for substance use problems on intimate partner violence: A review of empirical data. *Aggression and Violent Behavior, 15*(5), 325-333.

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

O'Farrell, T. J., Murphy, C. M., Stephan, S. H., Fals-Stewart, W., & Murphy, M. (2004). Partner violence before and after couples-based alcoholism treatment for male alcoholic patients: The role of treatment involvement and abstinence. *Journal of Consulting and Clinical Psychology, 72*(2), 202-217.

O'Farrell, T. J., Van Hutton, V., & Murphy, C. M. (1999). Domestic violence after alcoholism treatment: A two-year longitudinal study. *Journal of Studies on Alcohol, 60*, 317-321.

Oberleitner, L. M. S., Mandel, D. L., & Easton, C. J. (2013). Treatment of co-occurring alcohol dependence and perpetration of intimate partner violence: The role of anger expression. *Journal of Substance Abuse Treatment, 45*(3), 313-318. doi:10.1016/j.jsat.2013.03.001

Observatorio Europeo de las Drogas y Toxicomanías. (2004). *Informe Anual 2003*. Luxemburgo: Oficina de Publicaciones Oficiales de las Comunidades Europeas.

O´Farrell, T. J., Murphy, C. M., Stephan, S. H., Fals-Stewart, W., & Murphy, M. (2004). Partner violence before and after couples-based alcoholism treatment for male alcoholic patients: The role of treatment involvement and abstinence. *Journal of Consulting and Clinical Psychology, 72*(2), 202-217.

Schumm, J. A., O'Farrell, T. J., Murphy, C. M., & Fals-Stewart, W. (2009). Partner violence before and after couples-based alcoholism treatment for female alcoholic patients. *Journal of Consulting and Clinical Psychology, 77*(6), 1136-1146. doi:10.1037/a0017389

Spielberger, C. D. (1988). *State-Trait Anger Expression Inventory*. Orlando, FL: Psychological Assessment Resources.

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

Stover, C. S., Meadows, A. L., & Kaufman, J. (2009). Interventions for intimate partner violence: Review and implications for evidence-based practice. *Professional Psychology: Research and Practice, 40*(3), 223–233. http://dx.doi.org/10.1037/a0012718

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*(3), 283-316. doi:10.1177/019251396017003001

Stuart, G. L., O'Farrell, T. J., Leonard, K., Moore, T. M., Temple, J. R., Ramsey, S. E., . . . Monti, P. M. (2009). Examining the interface between substance misuse and intimate partner violence. *Substance Abuse: Research and Treatment, 3*, 25-29.

Stuart, G. L., Ramsey, S. E., Moore, T. M., Kahler, C. W., Farrell, L. E., Recupero, P. R., & Brown, R. A. (2003). Reductions in marital violence following treatment for alcohol dependence. *Journal of Interpersonal Violence, 18*(10), 1113-1131.

Taft, C. T., O'Farrell, T. J., Doron-LaMarca, S., Panuzio, J., Suvak, M. K., Gagnon, D. R., & Murphy, C. M. (2010). Longitudinal risk factors for intimate partner violence among men in treatment for alcohol use disorders. *Journal of Consulting and Clinical Psychology, 78*(6), 924-935. doi:10.1037/a0021093

Wilson, I. M., Graham, K., & Taft, A. (2014). Alcohol interventions, alcohol policy and intimate partner violence: a systematic review. *Bmc Public Health, 14*, 11. doi:10.1186/1471-2458-14-881

Table 1
Summary of the IPV intervention programme

Sessions	Motivational aspects	Therapeutic techniques
1	Acceptance of one's own responsibility Motivation for therapy Advantages of group treatment Acceptance of the basic principles of therapy	Motivational interview
	Psychopathological aspects	**Therapeutic techniques**
2-3	Empathy deficits and emotional illiteracy	Exercises to develop empathy (videotapes, autobiographical stories, testimonials, etc.) and techniques for emotional expression
4-6	Cognitive distortions related to women's inferiority and to the use of violence as an acceptable way of solving conflicts	Education about gender equality (in only male patients) Cognitive restructuring
7-8	Uncontrolled anger	Explanation of the cycle of violence and of the process of escalation of anger Time out Cognitive distraction Self-instruction training
9	Anxiety/stress	Relaxation
10	Depressive symptoms	Cognitive restructuring Development of hobbies
11	Pathological jealousy	Cognitive restructuring Satiation
12-14	Assertiveness and communication deficits	Assertiveness and communication skills training
15	Problem solving deficits	Problem solving training
16	Dissatisfaction with sexual relationships	Education about sexuality
	IPV-P relapse prevention	**Therapeutic techniques**
17-18	Self-esteem deficits	Cognitive restructuring Establishment of positive goals
19-20	Relapse	Identification of high-risk situations for relapse Teaching of coping strategies Development of a positive lifestyle

Source: Echeburúa and Fernández-Montalvo (1998)

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

Table 2
Rate of retention during the study

	Total		**Treatment group**		**Control group**			
	N	**(%)**	**n**	**(%)**	**n**	**(%)**	***X²* (*d.f.*)**	***p***
Pre-treatment	70	(100%)	34	(100%)	36	(100%)	--	--
Post-treatment	61	(87.1%)	32	(94.1%)	29	(80.6%)	2.87 (1)	.090
6-month follow-up	47	(67.1%)	28	(82.3%)	19	(52.8%)	6.93 (1)	.008

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

Table 3

Comparison of psychopathological, personality and maladjustment variables between groups

	Total sample			Treatment group			Control group							
	N	**Mean**	**(SD)**	**n**	**Mean**	**(SD)**	**n**	**Mean**	**(SD)**	***t***	***(d.f.)***	***p***	***d***	***1 - β***
EuropASI-alcohol (0-9)*														
Pre-treatment	66	4.5	(2.8)	32	5.0	(2.2)	34	4.1	(2.1)	1.7	(64)	.088	0.32	.51
Follow-up	47	2.7	(2.3)	28	2.8	(2.5)	19	2.4	(1.7)	0.4	(45)	.658	0.17	.12
EuropASI-drugs (0-9)*														
Pre-treatment	66	4.8	(1.9)	32	4.5	(2.1)	34	5.1	(1.7)	1.2	(64)	.227	0.32	.35
Follow-up	47	1.9	(2.5)	28	2.1	(2.7)	19	1.5	(1.8)	0.5	(45)	.603	0.26	.15
IDT-V (16-64)														
Pre-treatment	70	31.6	(6.5)	34	31.7	(6.8)	36	31.4	(6.3)	0.2	(68)	.839	0.05	.07
Post-treatment	61	30.1	(6.0)	32	30.0	(6.0)	29	30.3	(6.2)	0.2	(59)	.843	0.05	.07
Follow-up	47	29.6	(5.9)	28	29.6	(5.5)	19	29.5	(6.7)	0.1	(45)	.948	0.02	.06
SCL-90-R-GSI (0-100)														
Pre-treatment	63	76.1	(27.8)	34	72.4	(30.1)	29	80.0	(25.0)	1.0	(61)	.306	0.27	.28
Post-treatment	61	62.6	(31.4)	32	58.3	(31.2)	29	67.3	(31.4)	1.1	(59)	.267	0.29	.30
Follow-up	47	58.1	(37.3)	28	54.5	(38.7)	19	63.4	(35.4)	0.8	(45)	.429	0.24	.20
SCL-90-R-PSDI (0-100)														
Pre-treatment	63	53.9	(31.0)	34	48.5	(29.6)	29	60.3	(31.9)	1.5	(61)	.134	0.38	.44
Post-treatment	61	44.7	(31.0)	32	42.4	(29.3)	29	47.2	(33.1)	0.6	(59)	.548	0.15	.15
Follow-up	47	39.8	(32.3)	28	41.6	(32.4)	19	37.2	(32.8)	0.5	(45)	.651	0.14	.12
SCL-90-R-PST (0-100)														
Pre-treatment	63	78.9	(25.7)	34	76.0	(28.7)	29	82.4	(21.7)	1.0	(61)	.327	0.25	.25
Post-treatment	61	67.7	(30.2)	32	62.7	(31.1)	29	73.2	(28.6)	1.4	(59)	.176	0.35	.39
Follow-up	47	63.1	(35.7)	28	57.8	(37.5)	19	70.9	(32.3)	1.2	(45)	.220	0.37	.34
STAXI-State (10-40)														
Pre-treatment	68	15.2	(6.4)	33	14.5	(6.5)	35	15.8	(6.3)	0.8	(66)	.403	0.20	.21
Post-treatment	61	12.8	(4.7)	32	11.9	(3.0)	29	13.8	(6.0)	1.5	(40.3)**	.122	0.40	.47
Follow-up	47	12.9	(5.6)	28	12.4	(5.2)	19	13.7	(6.2)	0.8	(45)	.424	0.23	.23
STAXI-Trait (10-40)														
Pre-treatment	70	22.0	(5.8)	34	21.5	(5.8)	36	22.4	(5.9)	0.7	(68)	.490	0.15	.19
Post-treatment	57	19.4	(5.5)	30	18.8	(4.4)	27	20.1	(6.6)	0.9	(40.3)**	.378	0.24	.22
Follow-up	47	18.2	(5.6)	28	17.7	(4.8)	19	18.9	(6.6)	0.7	(45)	.477	0.21	.17
BIS-10 (0-132)														
Pre-treatment	70	61.1	(18.3)	34	58.6	(17.5)	36	63.4	(18.9)	1.1	(68)	.275	0.26	.29
Post-treatment	61	54.8	(15.8)	32	51.2	(13.7)	29	58.7	(17.3)	1.9	(59)	.065	0.47	.58
Follow-up	47	50.1	(17.7)	28	49.0	(19.1)	19	51.7	(15.7)	0.5	(45)	.611	0.15	.13
Maladjustment (0-30)														
Pre-treatment	70	21.0	(6.6)	34	21.6	(6.2)	36	20.5	(7.0)	0.7	(68)	.481	0.17	.17
Post-treatment	61	14.5	(7.8)	32	14.6	(7.7)	29	14.3	(8.1)	0.1	(59)	.915	0.04	.07
Follow-up	47	11.2	(8.2)	28	10.1	(8.5)	19	12.7	(7.7)	1.1	(45)	.285	0.32	.28

* EuropASI is only administered by the clinical centre during the pre-treatment and follow-up assessments.

** Variance between groups was not homogeneous. Student's t for not homogeneous variance was calculated.

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

IDT-V: Inventory of Distorted Thoughts about the Use of Violence; SCL-90-R: Symptom Checklist; GSI: Global Severity Index; PSDI: Positive Symptom Distress Index; PST: Positive Symptom Total; STAXI: State-Trait Anger Expression Inventory; BIS-10: Barratt Impulsiveness Scale

Table 4

Results of the repeated-measures ANOVA (pre, post and 6-month follow-up) and the effect size

		ANOVA				Effect Size (*d*)			
	n	***F***	***p***	**Post hoc**	***p***	**Pre-Post**	**Pre-Follow**	**Post-Follow**	***1 - β***
IDT-V									
Treatment group	28	3.30	.053	--	--	0.26	0.32	0.07	.670
Control group	18	0.04	.961	--	--	0.17	0.29	0.13	.055
SCL-90-R – GSI									
Treatment group	28	3.58	.042	--	--	0.51	0.64	0.12	.661
Control group	16	3.91	.045	Pre > Follow	.033	0.46	0.60	0.12	.606
SCL-90-R – PSDI									
Treatment group	28	0.42	.659	--	--	0.20	0.22	0.03	.118
Control group	16	3.66	.053	--	--	0.42	0.74	0.32	.576
SCL-90-R - PST									
Treatment group	28	4.97	.015	Pre > Follow	.023	0.52	0.71	0.16	.763
Control group	16	2.86	.091	--	--	0.36	0.45	0.08	.470
STAXI-State									
Treatment group	27	2.70	.087	--	--	0.41	0.33	0.11	.486
Control group	17	2.06	.161	--	--	0.31	0.33	0.02	.358
STAXI-Trait									
Treatment group	26	5.49	.011	Pre > Post	.018	0.47	0.65	0.20	.802
				Pre > Follow	.009				
Control group	16	0.43	.657	--	--	0.40	0.60	0.22	.107
BIS-10									
Treatment group	28	7.79	.002	Pre > Post	.007	0.40	0.52	0.14	.925
				Pre > Follow	.002				
Control group	18	9.43	.002	Pre > Follow	.003	0.26	0.64	0.44	.951
				Post > Follow	.020				
Maladjustment									
Treatment group	28	24.57	.000	Pre > Post	.000	1.06	1.74	0.58	1.00
				Pre > Follow	.000				
Control group	18	11.94	.001	Pre > Post	.001	0.94	1.18	0.21	.983
				Pre > Follow	.002				

IDT-V: Inventory of Distorted Thoughts about the Use of Violence; SCL-90-R: Symptom Checklist; GSI: Global Severity Index; PSDI: Positive Symptom Distress Index; PST: Positive Symptom Total; STAXI: State-Trait Anger Expression Inventory; BIS-10: Barratt Impulsiveness Scale

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184

Table 5
*Logistic regression analyses**

	Dependent variable = IPV-P; 0 = Absence; 1 = Presence		
	Variables	**Odds Ratio**	**95% Confidence Interval**
	Group (treatment group)	0.265	(0.074 – 0.943)
	Constant	2.000	
Adjusted R^2	.128		
Correctly classified	65.9% (Total)	73.9% (Absence IPV perpetration)	57.1% (Presence IPV perpetration)
	Dependent variable = Drug abuse treatment; 0 = Failure; 1 = Success		
	Variables	**Odds Ratio**	**95% Confidence Interval**
	Sex (male)	5.6	(1.075 – 29.459)
	Age	0.8	(0.723 – 0.938)
	STAXI-State	1.2	(1.027 – 1.342)
	SCL-90-R - PST	0.9	(0.895 – 0.979)
	Constant	21541	
Adjusted R^2	.494		
Correctly classified	82.1% (Total)	61.1% (Failure)	92.1% (Success)

* All studied variables (sociodemographic, consumption, psychopathological, personality, maladjustment, and treatment) are included in the models

SCL-90-R: Symptom Checklist; PST: Positive Symptom Total; STAXI: State-Trait Anger Expression Inventory

Fernández-Montalvo, J., Arteaga, A., & López-Goñi, J. J. (2019). Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. *Psychology of Violence, 9*(2), 156-166, doi:10.1037/vio0000184