

Therapeutic progression in abused women following a drug-addiction treatment  
program

Short title: Abused women in drug-addiction treatment

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## Abstract

This study explored the prevalence of victims of abuse and the therapeutic progression among women who sought treatment for drug addiction. A sample of 180 addicted Spanish women was assessed. Information was collected on the patients' lifetime history of abuse (psychological, physical and/or sexual), socio-demographic factors, consumption variables and psychological symptoms. Of the total sample, 74.4% ( $n = 134$ ) of the addicted women had been victims of abuse. Psychological abuse affected 66.1% ( $n = 119$ ) of the patients, followed by physical abuse (51.7%;  $n = 93$ ) and sexual abuse (31.7%;  $n = 57$ ). Compared with patients who had not been abused, the addicted women with histories of victimisation scored significantly higher on several EuropASI and psychological variables. Specifically, physical abuse and sexual abuse were related to higher levels of severity of addiction. Regarding therapeutic progression, the highest rate of dropout was observed among victims of sexual abuse (63.5%;  $n = 33$ ), followed by victims of physical abuse (48.9%;  $n = 23$ ). Multivariate analysis showed that medical and family areas of the EuropASI, as well as violence problems and suicide ideation, were the main variables related to physical and/or sexual abuse. Moreover, women without abuse and with fewer family problems presented the higher probability of treatment completion. The implications of these results for further research and clinical practice are discussed.

Keywords: drug addiction; lifetime abuse; women; treatment progression; dropout.

## **Introduction**

Previous research has shown that a significant proportion of addicted patients who seek treatment for their addictions have histories of victimisation (Fernández-Montalvo, López-Goñi, & Arteaga, 2012; Schneider, Cronkite, & Timko, 2008). This problem especially affects addicted women, whose rates of lifetime abuse (psychological, physical and sexual) are significantly higher than those observed in men (Fernández-Montalvo, López-Goñi & Arteaga, 2015; Sacks, McKendrick & Banks, 2008).

These figures about abused women in addiction are worrisome. Some studies have shown greater consumption at the beginning of treatment (Clark, Masson, Delucchi, Hall, & Sees, 2001) and higher rates of relapse during treatment (Farley, Golding, Young, Mulligan, & Minkoff, 2004) among patients who present lifelong histories of abuse. Although some programs have been developed with women with posttraumatic stress disorder and addiction in an integrated manner (Searcy & Lipps, 2012; Patitz, Anderson & Najavits, 2015), little is known about the specific clinical characteristics and the therapeutic progression of addicted women with histories of abuse in a general addiction treatment program.

Therefore, the main objectives of this study were to establish the prevalence rate of lifetime abuse in addicted women who undergo treatment, to distinguish between the profiles of those women who did and those who did not present with histories of abuse, and to determine the relationship between having a history of abuse and completing treatment.

## **Method**

The protocol for this study was approved by the ethics committees of the Universidad Pública de Navarra and Fundación Proyecto Hombre de Navarra.

## **Participants**

The sample consisted of 180 addicted women who entered treatment at the “Fundación Proyecto Hombre de Navarra” (Pamplona, Spain) between 2008 and 2013. This is a cognitive-behavioural intervention with two different modalities (outpatient and inpatient treatment) aimed at abstinence, which has been shown to be effective in the treatment of addictions (Fernández-Montalvo & Lopez-Goñi, 2010; Fernández-Montalvo, López-Goñi, Illescas, Landa, & Lorea, 2008). These programs were not oriented to cope with abuse and trauma experiences.

The inclusion criteria for this study were that the women had to a) meet the diagnostic criteria of substance dependence according to the DSM-IV-TR (American Psychiatric Association, 2000), b) be between 18 and 65 years old, c) receive treatment in the “Proyecto Hombre” treatment program, d) give their informed consent to participate in the study, and e) complete the two assessment sessions.

The mean age of the individuals included in the study was 37.5 years ( $SD = 8.5$ ) and the mean socioeconomic level was middle to lower-middle class. A majority of the participants were unmarried or divorced (69.7%). The main substances that motivated treatment were alcohol (60.2%) and cocaine (28.6%), followed by other substances (e.g., heroin, cannabis, amphetamine) in smaller numbers (11.2%).

## **Assessment Measures**

The EuropASI (Kokkevi and Hartgers, 1995) is the European version of the Addiction Severity Index (McLellan, Luborsky, Woody, & O’Brien, 1980). This tool assesses the need for treatment in addicted patients, and the Interviewer Severity Rates (ISRs) obtained are directly related to the severity of consumption (López-Goñi, Fernández-Montalvo, & Arteaga, 2012; López-Goñi et al., 2010). 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 (McLellan et al., 1985). The alpha coefficient for the current sample was .70.

Moreover, in this study, some items of the EuropASI were used to obtain specific information about the presence of psychopathological problems in the sample (Psychiatric scale: items 3-10).

### **Procedure**

The assessment of the sample was performed in two sessions before beginning the treatment. All patients were interviewed by clinical psychologists who had ten or more years of experience in treating addictions and in applying the EuropASI. Sessions occurred once a week for two weeks; the time interval between sessions was the same for each participant (one week). After the assessment sessions, patients began the standard treatment of “Proyecto Hombre” for addiction.

Detailed tracking of each patient's progress was maintained to assess whether the subject completed the treatment by obtaining a therapeutic discharge or whether the subject dropped out of the treatment prior to the conclusion of the program.

### **Data Analysis**

Descriptive analyses were conducted for all variables. Comparisons between the groups were performed using  $X^2$  or ANOVA statistics depending on the nature of the variables studied. Several logistic regression analyses (forward method) were conducted to determine which specific factors were more relevant in differentiating between the groups studied and between treatment completers and dropouts. A difference of  $p < .05$  was considered to be significant. Statistical analyses were carried out using SPSS (version 15.0 for Windows).

## **Results**

### **Prevalence of Lifetime Abuse in Addicted Women who Underwent Treatment**

According to the EuropASI assault items, 74.4% ( $n = 134$ ) from the current sample of addicted women had been victims of some type of abuse over the course of their lifetimes. A large proportion of the women had experienced psychological abuse (e.g., insults, humiliations, shouting, threats), constituting 66.1% ( $n = 119$ ) of the total sample. In most cases, psychological abuse was combined with physical and/or sexual abuse. Physical abuse was the second-most frequent type of abuse reported, affecting 51.7% ( $n = 93$ ) of the women in the sample. Finally, sexual abuse affected 31.7% ( $n = 57$ ).

### **Comparisons between Groups Depending on the Type of Abuse Experienced**

Four groups, depending on the main type of abuse suffered, were established to compare all the variables studied: without abuse ( $n = 46$ ), psychological abuse ( $n = 24$ ), physical abuse (with or without psychological abuse;  $n = 53$ ) and sexual abuse (with or without psychological and/or physical abuse;  $n = 57$ ). Membership in groups was mutually exclusive.

**Comparison of socio-demographic and consumption variables.** The only significant difference on socio-demographic variables was found in the rate of women who were divorced ( $X^2 = 17.5$ ;  $p < .05$ ). Specifically, 29.8% of women who had suffered any type of abuse, versus 4.5% of women without abuse, were divorced. This rate specifically affected victims of sexual abuse (36.8% of the sample were divorced), followed by victims of physical abuse (26.4%) and psychological abuse (20.8%).

Regarding consumption variables, the only difference between groups was observed in the rate of drug overdose ( $X^2 = 13.8$ ;  $p < .001$ ). Whereas no woman had suffered an overdose in the case of addicts without abuse, 25% of victims of sexual abuse, 13.2% of physical abuse, and 8.7% of psychological abuse had overdosed on drugs at some time.

### **Comparison of drug addiction severity and psychopathological variables.**

Women with physical and sexual abuse had significantly higher scores on almost all of the variables studied (Table 1). The mean scores for the group with sexual abuse showed a significantly greater need for treatment to resolve their problems in 6 out of the 7 areas studied. In the case of the group with physical abuse, the need for treatment was significantly higher in 4 out of the 7 areas.

*PLACE TABLE 1 HERE*

Regarding psychopathological symptoms, women who had suffered any type of abuse showed higher rates of symptoms, especially in the case of physical and sexual abuse, with statistically significant differences between groups.

**Comparison of the rate of treatment dropout.** The global rate of treatment dropout was 46.8%. There were statistically significant differences between groups (Table 1). The highest rate of dropout was obtained in victims of sexual abuse (63.5%), followed by victims of physical abuse (48.9%).

### **Multivariate Analysis**

Once it was established that the groups with higher levels of severity were those with physical and sexual abuse, several logistic regression analyses were performed to determine which specific factors were most relevant in differentiating between patients with and without physical and/or sexual abuse, as well as the factors related to completion and dropout (Table 2). All variables related to Severity of Addiction and Psychological Maladjustment were included in these analyses.

*PLACE TABLE 2 HERE*

The results showed that medical and family areas of the EuropASI (from a severity-of-addiction perspective) and violence problems and suicide ideation (from a psychological point of view) were the main variables related to physical and/or sexual

abuse. Moreover, women without abuse and with fewer family problems had higher probabilities of treatment completion.

### **Discussion**

The results from this study showed a high prevalence of having been victims of abuse among addicted women who underwent treatment. Three out of four women in the sample had suffered any type of abuse. The most frequent type of abuse reported was psychological, followed by physical abuse and sexual abuse. These figures complement the results found in previous studies, which showed higher rates of abuse in women than in men (Fernández-Montalvo et al., 2015; Sacks et al., 2008; Schneider et al., 2008).

Moreover, in this study, physical and sexual abuse were related to higher levels of severity of addiction in the addicted women of the sample, as well as to a worst therapeutic progression. As a matter of fact, women with physical and/or sexual abuse presented with higher rates of treatment dropout. These results support those obtained in previous studies in which the history of abuse is related to treatment dropout (Claus & Kindleberger, 2002; Fernández-Montalvo et al., 2015); and contradict the results from studies of addicted youth who have suffered childhood abuse, who showed a greater adherence to therapy (Rosekranz, Henderson, Muller, & Goodman, 2011; Slesnick, Kang, & Aukward, 2008).

A limitation of this study is that only women who sought treatment at a specialized centre for addiction were included. Undoubtedly, this created a bias that prevents us from generalizing the results to all addicted women. Moreover, future studies must take into account other important variables related to abuse, such as age of onset, severity of abuse, duration, frequency, etc. Moreover, it is necessary to study the



differential therapeutic progression in different treatment settings (e.g. inpatient or outpatient).

In summary, the results of this study highlight the need for accurate assessment of abuse in addicted women. It seems necessary to develop detailed tracking of each abused, addicted woman's progress in order to prevent her from becoming an early treatment dropout. Knowing the specific characteristics of abused women will allow therapists to implement individually tailored strategies in order to increase retention in intervention programs and to provide better treatment outcomes, in the same way as Seeking Safety programs with PTSD and addiction (Searcy & Lipps, 2012; Patitz et al., 2015).

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Table 1

*Comparisons of drug addiction severity variables and psychological maladjustment*

	<b>Total</b> N = 180	<b>Without abuse (a)</b> n = 46	<b>Psychological abuse (b)</b> n = 24	<b>Physical abuse (c)</b> n = 53	<b>Sexual abuse (d)</b> n = 57		
<b>EuropASI (ISR)</b>	<b>M (SD)</b>	<b>M (SD)</b>	<b>M (SD)</b>	<b>M (SD)</b>	<b>M (SD)</b>	<b>F</b>	<b>Post-hoc</b>
Medical	2.49 (1.79)	1.82 (1.23)	2.09 (1.70)	2.54 (1.71)	3.16 (2.05)	5.46**	d***, c** >a
Employment/Support	3.14 (2.02)	2.16 (1.58)	3.00 (1.86)	3.06 (1.94)	4.05 (2.10)	8.20***	d***, c* >a
Alcohol use	4.09 (2.22)	4.00 (2.27)	3.73 (2.25)	4.24 (2.10)	4.18 (2.32)	0.32	
Drugs use	3.22 (2.40)	2.53 (2.04)	2.86 (2.14)	3.36 (2.30)	3.78 (2.73)	2.45	d* > a
Legal	1.32 (1.34)	1.23 (1.31)	0.74 (0.62)	1.26 (0.99)	1.72 (1.75)	3.20*	d** >b
Family/Social	4.55 (1.83)	3.55 (1.86)	4.00 (1.45)	5.02 (1.41)	5.17 (1.92)	9.50***	d***, c*** >a, b
Psychiatric	4.38 (1.83)	3.72 (2.05)	3.91 (1.59)	4.81 (1.80)	4.69 (1.60)	4.05**	d**, c** >a; c* > b
<b>Psychological maladjustment</b>	<b>N (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>		<b>X<sup>2</sup> (d.f.)</b>
Anxiety problems	147 (81.7%)	30 (65.2%)	21 (87.5%)	46 (86.8%)	50 (87.7%)	11.2**	(3)
Severe depression	131 (72.8%)	29 (63.1%)	16 (66.7%)	42 (79.2%)	44 (77.2%)	4.3	(3)
Suicide ideation	96 (53.3%)	15 (32.6%)	8 (33.3%)	38 (71.7%)	35 (61.4%)	20.5***	(3)
Problems of violence control	72 (40.0%)	10 (21.7%)	7 (29.2%)	31 (58.5%)	24 (42.1%)	15.2**	(3)
Suicide attempts	59 (32.8%)	8 (17.4%)	4 (16.7%)	21 (39.6%)	26 (45.6%)	13.2**	(3)
Hallucinations	30 (16.7%)	4 (8.70%)	3 (12.5%)	10 (18.9%)	13 (22.8%)	4.1	(3)
Psychopharmacological treatments	108 (60.0%)	20 (43.5%)	13 (54.2%)	37 (69.8%)	38 (66.7%)	8.7*	(3)
	<b>Total</b> N = 156	<b>(a)</b> n = 39	<b>(b)</b> n = 18	<b>(c)</b> n = 47	<b>(c)</b> n = 52		<b>X<sup>2</sup> (d.f.)</b>
	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>		
<b>Drop-out</b>	73 (46.8%)	12 (30.8%)	5 (27.8%)	23 (48.9%)	33 (63.5%)	1.5**	(3)

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Table 2  
*Multivariate analysis (final models)*

	<b>Logistic Regression</b> (Dependent variable = Physical and/or sexual abuse; 0 = Absence; 1 = Presence)					
	<b>Model 1: Severity of addiction</b>			<b>Model 2: Psychological maladjustment</b>		
	<b>Variable</b>	<b>OR</b>	<b>95% CI</b>	<b>Variable</b>	<b>OR</b>	<b>95% CI</b>
Adjusted R <sup>2</sup>	ISR Medical	1.34*	(1.06, 1.70)	Problems of violence	2.57**	(1.28, 5.14)
Correctly classified	ISR Family	1.51***	(1.22, 1.86)	Suicide ideation	3.30***	(1.71, 6.37)
	Constant	0.13		Constant	0.61*	
	.227			.184		
	71.0% (Total)	81.4% (Abused)	55.4% (Not abused)	66.9% (Total)	76.9% (Abused)	51.4% (Not abused)
	<b>Logistic Regression</b> (Dependent variable = Therapeutic discharge; 0 = Dropout; 1 = Completer)					
	<b>Model 3: Severity of addiction + Psychological maladjustment</b>					
	<b>Variable</b>	<b>OR</b>	<b>95% CI</b>			
Adjusted R <sup>2</sup>	Without abuse	2.42	(1.12, 5.25)			
Correctly classified	ISR Family	0.78	(0.63, 0.96)			
	Constant	2.90				
	.145					
	70.1% (Total)	64.1% (Dropouts)	75.0% (Completers)			

ISR = Interviewer Severity Rates

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$