

Profiles of mothers who seek treatment for substance use disorders in a clinical
centre

Short title: Mothers in treatment for addiction

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Abstract

Purpose: This study explored the prevalence and profile of mothers among women who sought treatment for drug addiction, as well as the therapeutic progression of these patients. **Methodology:** A sample of 180 Spanish women with addiction problems was assessed. Information was collected on the patients' socio-demographic characteristics, consumption variables and psychological symptoms. **Findings:** Of the total sample, 22.2% ($n = 40$) of the women seeking treatment for substance use disorder were mothers. Compared with women without children, mothers scored significantly higher on several EuropASI and psychological variables. Specifically, mothers presented with more medical problems, worse employment/financial situations, and more severity in alcohol use. Moreover, having a history of lifetime physical and/or sexual abuse was related to belonging to the group of mothers. Regarding therapeutic progression, no statistically significant differences in the retention rate were found between mothers and non-mothers. **Value:** The results of this study show that mothers generally have more severe problems than non-mothers. Therefore, comprehensive, continuum-based, and client-centred care for mothers is paramount for effective treatment in mothers. The implications of these results for further research and clinical practice are discussed.

Keywords: substance use disorder; motherhood; profile; treatment; treatment progression.

INTRODUCTION

Recent studies about addictions have been focused on gender differences in the profile and therapeutic progression of patients seeking treatment for substance use disorders (Fernández-Montalvo, López-Goñi, Azanza, Arteaga, & Cacho, 2017; Fernández-Montalvo, López-Goñi, Azanza, & Cacho, 2014). The data found in these studies support the notion that addicted women in treatment have a profile that distinguishes them from addicted men. Specifically, the development of, the motivations for and the consequences of substance use do not coincide for both genders. This aspect is of great importance because these factors have a direct impact on the appropriate clinical treatment of the problem (Green, 2006; Grella, Scott, & Foss, 2005; Walitzer & Dearing, 2006). However, few studies on women with addiction problems are represented in the literature, probably because women are more reluctant to seek treatment than men, mainly due to the social stigma of addiction (Green, 2006; Greenfield et al., 2007).

Generally, the results in gender-based studies show that women start to use substances later than men do (Hser, Huang, Teruya, & Douglas, 2003; Picci et al., 2012); however, they present with more severe addictions in terms of the consequences (mainly medical, labour, economic, legal, family and social) derived from the consumption (Fernández-Montalvo et al., 2014; Green, 2006; Grella et al., 2005) and associated psychopathologic symptoms (primarily anxiety and mood disorders) (Bravo de Medina, Echeburúa, & Aizpiri, 2008; Colpaert, De Maeyer, Broekaert, & Vanderplasschen, 2013; Greenfield, Back, Lawson, & Brady, 2010; Landa, Fernandez-Montalvo, Lopez-Goni, & Lorea, 2006; Najavits & Lester, 2008). This further complicates the clinical picture that addicted women present with more associated psychopathologic comorbidity when they seek treatment than do men (Fernández-Montalvo, López-Goñi, & Arteaga, 2015).

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Few studies have been conducted on the specific needs of mothers seeking help for addiction problems. Little is known about how pregnancy, childbirth and motherhood impact these women's needs. Moreover, most of these studies have been carried out from a qualitative perspective and with specific populations (e.g., incarcerated women, social services, homeless). The results obtained to date show that pregnancy is a period that allows changes to occur in pregnant women's lives and therefore calls for support strategies to benefit both mothers and their children (Mejak & Kastelic, 2016). These women enter motherhood with uncertainty, fear, shame, and stress (Cleveland, Bonugli, & McGlothen, 2016). Consequently, although motherhood seems to be a time of increased motivation for entering addiction treatment and changing maladaptive patterns of substance use, treatment engagement could also be limited by barriers related to pregnancy and motherhood (Meixner, Milligan, Urbanoski, & McShane, 2016).

Regarding treatment progression of mothers, it is found that bringing children into treatment is positively associated with length of stay (Chen et al., 2004; Lundgren, Schilling, Fitzgerald, Davis, & Amodeo, 2003). Moreover mothers with longer treatment stays seem to be associated with more positive outcomes (Connors, Grant, Crone, & Whiteside-Mansell, 2006). However, little empirically validated information about the prevalence, characteristics, or specific treatment progression of mothers with addiction problems is available in the literature from general addiction treatment programmes.

Therefore, it is necessary to accurately assess mothers with addictions and identify the specific needs they present when seeking treatment to implement individually tailored strategies to increase retention in intervention programmes and to provide better treatment outcomes. In this sense, the main goals of this study were to establish the prevalence rate of mothers among women with addiction problems who underwent treatment, to

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distinguish between the profiles of those women who were or were not mothers, and to determine the relationship between motherhood and completing treatment.

METHOD

This is a secondary data analysis study of patients' electronic records. 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 women who entered treatment at the “Fundación Proyecto Hombre de Navarra” (Pamplona, Spain) for a substance use disorder 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 & López-Goñi, 2010; Fernández-Montalvo, López-Goñi, Illescas, Landa, & Lorea, 2008). The treatment is public and it lasts an average of 9 months with a subsequent follow-up period of 12 months after discharge.

The inclusion criteria for this study were that the women had to a) meet the diagnostic criteria of substance use disorder according to the DSM-IV-TR (American Psychiatric Association, 2000), b) be older than 18 years old, c) receive treatment in the “Proyecto Hombre” treatment programme, d) sign the 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. The main substances that motivated treatment were alcohol (59.3%) and cocaine (26%), followed by other substances (e.g., heroin, cannabis, amphetamine) in smaller numbers (14.7%).

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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 programme. This information was provided by the psychologists of the treatment programme.

Assessment Measures

The EuropASI (Kokkevi & Hartgers, 1995) is the European version of the Addiction Severity Index scale (ASI) (McLellan, Luborsky, Woody, & O’Brien, 1980). The Spanish version of the scale was used (Bobes, González, Sáiz, & Bousoño, 1996). This interview assesses the need for patient treatment based on seven different areas: a) general medical condition; b) employment and financial situation; c) alcohol use; d) use of other drugs; e) legal problems; f) family and social relationships; and g) psychiatric state. After concluding the interview, the intervention team assesses the patient’s need for treatment in each of these areas. The Interviewer Severity Ratings (ISR), which have shown good predictive validity in different studies conducted in the treatment context (López-Goñi, Fernández-Montalvo, & Arteaga, 2012; López-Goñi et al., 2010), were used for this assessment. The ISR are calculated based on a series of critical items in each of the areas to consider the patient's own self-evaluation and the interviewer's judgement.

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The score for each area ranges from 0 (no problem) to 9 (extreme problem). The higher the score, the greater the need for treatment, as a measure of the addiction severity. 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 .75. All information analysed in this study, including socio-demographic and motherhood variables, was collected through the EuropASI.

Data Analysis

Descriptive analyses were conducted for all variables. Comparisons between the groups of mothers and non-mothers were performed using X^2 or Student’s t statistics depending on the nature of the variables studied. Effect sizes (Cohen’s d) were provided, taking into account Cohen’s recommendation (Cohen, 1988): $d = 0.20$ (small effect size), $d = 0.50$ (medium effect size), and $d = 0.80$ (large effect size). A logistic regression analysis (enter method) was conducted to determine which specific factors were more relevant in differentiating between mothers and non-mothers. Only variables with statistically significant differences were included as independent variables. A difference of $p < .05$ was considered to be significant. Statistical analyses were carried out using SPSS (version 25.0 for Windows).

RESULTS

Prevalence of motherhood in women who underwent treatment for addiction

The prevalence of women who were mothers was 22.2% ($n = 40$). Most of them (92.5%; $n = 37$) were living with their children when they sought treatment.

Comparison of socio-demographic and consumption variables

The results of the comparison between mothers and non-mothers in socio-demographic and consumption variables are shown in Table 1. The only significant

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difference in socio-demographic variables was found in marital status. In mothers, the most prevalent marital status was “married”, and in non-mothers, it was “single”.

PLACE TABLE 1 HERE

Comparison of drug addiction severity and psychological variables

Mothers of the sample had significantly higher scores than non-mothers in three of the EuropASI areas: medical, employment/financial situation, and alcohol use (Table 2). Regarding psychological variables, no statistically significant differences were found between mothers and non-mothers. However, mothers in the sample had a significantly higher rate of lifetime physical and/or sexual abuse.

PLACE TABLE 2 HERE

Multivariate analysis for differentiating between mothers and non-mothers

A logistic regression analysis was performed to determine which specific factors were most relevant in differentiating between mothers and non-mothers (Table 3). The results showed that having a history of lifetime physical and/or sexual abuse was only related to the group of mothers.

PLACE TABLE 3 HERE

Comparison of treatment progression

When this study was carried out, 24 women continued receiving treatment. Therefore, the analysis of treatment progression was conducted with 156 women. The global rate of treatment dropout was 46.8% ($n = 73$). There were no statistically significant differences ($X^2 = .246$; $p = .620$) between mothers (47.9%; $n = 57$) and non-mothers (43.2%; $n = 16$).

DISCUSSION

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In this paper, the prevalence of mothers who sought treatment in a clinical centre for addiction problems and their specific clinical profile was determined. This is a relevant topic because of the scarce number of studies carried out to date with women and mothers in the field of addiction, as well as the lack of knowledge about the specific needs they have when receiving treatment. The results obtained show that 1 out of 5 women seeking treatment for substance use disorders are mothers. Moreover, in this study, mothers of the sample presented with more medical problems, worse employment/financial situations, more severity in alcohol use, and higher prevalence of lifetime physical and/or sexual abuse.

Regarding prevalence, there are no previous studies to compare our data to. However, from a global perspective, the prevalence of mothers seeking treatment is low. Taking into account that the general prevalence of women in addiction clinical centres in Spain is approximately 20% (Fernández-Montalvo et al., 2015), the real prevalence rate of motherhood among patients receiving treatment for substance use disorders ranges between 4% and 5%.

One surprising and worrisome piece of data obtained in this study is the high rate of mothers in the sample who had been victims of physical and/or sexual abuse (77.5%). Although recent studies about the relationship between lifetime abuse and addictions have shown high rates of physical and sexual abuse among women seeking treatment for addictions problems (Fernández-Montalvo et al., 2015; Fernández-Montalvo, López-Goñi, Arteaga, Cacho, & Azanza, 2017), no previous studies with mothers have been carried out. Nonetheless, the rate of abuse found in these patients was higher than expected, and it constituted the main variable related to mothers. Additional studies are needed to validate these findings and explore potential explanations for this phenomenon.

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According to the results of this study, practitioners should consider the high prevalence of victimization and traumatic events in mothers with substance use disorders. Accurate assessments of these mothers should be developed and tailored interventions according to the trauma-informed care perspective should be provided (Covington, 2008). There is a large literature on posttraumatic stress disorder (PTSD) and substance use in women (Melchior et al., 2019), and treatments like Seeking Safety have been developed as a specific and integrated psychotherapy for posttraumatic stress disorder and substance use disorder, showing promising results (Lenz, Henesy, & Callender, 2016; Schaefer et al., 2019).

Moreover, mothers had a more severe addiction profile than non-mothers. Specifically, in this study, there were statistically significant differences in areas related to medical status, employment/financial situation, and alcohol use. The results related to financial situation are similar to those found in previous studies (Bachman, Kerrison, Paternoster, Smith, & O'Connell, 2016; Gueta & Addad, 2015). Financial difficulties and motherhood, together with other factors, may hinder long-term recovery for mothers undergoing addiction treatment. Regarding medical status and alcohol use, the lack of previous empirical research makes it difficult to compare the results obtained in this study. Further research is needed on the psychological status of mothers.

On the other hand, although almost half of the sample dropped out of treatment, no significant differences were found between mothers and non-mothers. Some previous studies consider motherhood as a time of increased motivation for entering addiction treatment and changing maladaptive patterns of substance use (Meixner et al., 2016). However, our results do not find a higher retention rate in mothers. The influence of motherhood in the progress of treatment should be further studied in clinical programmes.

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Some previous studies have found that bringing children into treatment is associated with higher treatment retention (Chen et al., 2004; Lundgren et al., 2003). The provision of childcare support for mothers in addiction treatment programmes should also be studied.

This study presents some limitations. First, 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 women with addiction problems. Second, although clinically relevant, a larger sample of mothers would be necessary to find more consistent associations among the variables studied and to generalize the results obtained. Third, this is a secondary data study and some relevant information about motherhood (number of children, age of the children, economic situation of the family, etc.) and women situation (current living situation, substance use of their partners, presence of intimate partner violence, etc.) had not been collected and should be taken into account in future studies.

In conclusion, the results of this study show that mothers generally have more severe addiction problems than non-mothers. Therefore, comprehensive, continuum-based, and client-centred care for mothers is paramount for effective treatment in mothers. Future studies should corroborate these data.

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Table 1
Socio-demographic and consumption characteristics of the sample

	Total (N= 180)		Non-mothers (n = 140)		Mothers (n = 40)		X^2 (df)	<i>p</i>	<i>Phi</i>
	N	(%)	n	(%)	n	(%)			
Marital status									
Single	82	(46.1%)	74	(53.6%)	8	(20.0%)			
Married	53	(29.8%)	35	(25.4%)	18	(45.0%)	14.1 (2)	.001	.282
Divorced	43	(24.2%)	29	(21.0%)	14	(35.0%)			
Employment situation									
Employed	120	(84.7%)	93	(66.9%)	27	(67.5%)			
Unemployed	41	(10.4%)	30	(21.6%)	11	(27.5%)	1.8 (2)	.409	.100
Other (student, retired, etc.)	18	(4.9%)	16	(11.5%)	2	(5.0%)			
Substance that motivated treatment									
Alcohol	105	(59.3%)	76	(55.5%)	29	(72.5%)			
Cocaine	46	(26.0%)	40	(29.2%)	6	(15.0%)	4.1 (2)	.130	.152
Others (heroin, cannabis, etc.)	26	(14.7%)	21	(15.3%)	5	(12.5%)			

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Table 2

Comparisons of drug addiction severity variables and psychological variables

EuropASI (ISR)	Total (N = 180)		Non-mothers (n = 140)		Mothers (n = 40)		<i>t</i> (<i>d.f.</i> = 168)	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Medical	2.49	1.79	2.34	1.69	3.03	2.03	2.2	.032	0.39
Employment/financial situation	3.14	2.02	2.97	1.99	3.70	2.04	2.0	.044	0.36
Alcohol use	4.09	2.22	3.89	2.31	4.79	1.74	2.2	.028	0.41
Drug use	3.22	2.40	3.36	2.35	2.73	2.54	1.4	.158	-0.26
Legal	1.32	1.34	1.37	1.33	1.15	1.41	0.9	.371	-0.16
Family/Social	4.55	1.83	4.45	1.78	4.90	1.96	1.4	.177	0.25
Psychiatric	4.38	1.83	4.50	1.91	3.97	1.46	1.6	.114	-0.29
Psychological variables	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%	<i>X</i> ² (<i>d.f.</i> = 1)		<i>Phi</i>
Anxiety problems	147	81.7%	112	80.6%	35	87.5%	1.0	.314	.08
Severe depression	131	72.8%	100	71.4%	31	77.5%	0.6	.447	.06
Suicide ideation	96	53.3%	73	52.1%	23	57.5%	0.4	.549	.04
Problems of violence control	72	40.0%	57	40.7%	15	37.5%	0.1	.714	.03
Suicide attempts	59	32.8%	45	32.1%	14	35.0%	0.8	.852	.07
Hallucinations	30	16.7%	26	18.6%	4	10.3%	1.5	.219	.09
Psychopharmacological treatments	108	60.0%	86	61.4%	22	55.0%	0.5	.464	.05
Physical and/or sexual abuse	110	61.1%	79	56.4%	31	77.5%	5.8	.016	.18

ISR = Interviewer Severity Rating

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Table 3

Multivariate analysis for differentiating between mothers and non-mothers

Logistic Regression (Dependent variable = Non-mother/Mother; 0 = Non-mother; 1 = Mother)				
	Variable	OR	<i>p</i>	95% CI
	Physical and/or sexual abuse (yes)	2.87	.024	(1.13, 7.32)
	ISR Medical	1.06	.566	(0.86, 1.31)
	ISR Employment/Support	1.09	.363	(0.90, 1.31)
	ISR Alcohol	1.16	.104	(0.97, 1.39)
	Constant	0.046	<.001	
Adjusted R ²	.124			
Correctly classified	77.6% (Total)	98.5% (Non-mothers)	5.3% (Mothers)	

ISR = Interviewer Severity Rates

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