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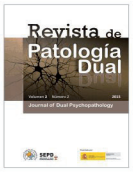

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Artículo

Trastornos de personalidad, Trastornos por uso de sustancias y transeuntismo

Personality disorders, substance use disorders, and homelessness

Baquero Abel[a, b], Ballester Rafael[b], Haro Gonzalo[b,c], Benito Ana[d], Calvo Gema[e], and Real Matías[e]

[a] *Dual Pathology Program, Castellón Provincial Hospital Consortium (Spain).*

[b] *Dept. Basic and Clinical Psychology and Psychobiology Jaume I University, Castellón (Spain).*

[c] *School of Medicine, CEU-Cardenal Herrera University, Castellón (Spain).*

[d] *Torrente Mental Health Unit, Valencia (Spain).*

[e] *Castellón Provincial Hospital Consortium (Spain)*

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RESUMEN

La prevalencia de los trastornos mentales es mayor en los usuarios de drogas y en la población sin hogar que en la población no afectada por estas condiciones, aunque no existen estudios que comparan específicamente la gravedad clínica y social de estos dos grupos. Se analizó la relación entre los trastornos de la personalidad, trastornos por consumo de sustancias y transeuntismo, utilizando un diseño experimental de comparación intergrupo. 311 sujetos fueron reclutados y divididos en dos grupos: un grupo de trastorno por uso de sustancias y un grupo de transeuntes. Se utilizó el inventario Clínico Multiaxial de Millon (MCMI-II) y una entrevista para recopilar información sobre los aspectos físicos y sociales de los sujetos. Nuestros resultados muestran que el transeuntismo agrava el deterioro social y obtiene mayores puntuaciones en la escala de personalidad agresiva/sádica que en el grupo de trastorno por uso de sustancias, lo que puede ser una causa de la exclusion social, independientemente de las conductas antisociales y consecuencias legales.

ABSTRACT

The prevalence of mental disorders is higher in drug users and in the homeless population than in the population not affected by these conditions, although there are no studies that specifically compare the clinical and social severity of these two groups. We analyzed the relationship between personality disorders, substance use disorder, and homelessness using an inter-group-comparison experimental design. 311 subjects were recruited and divided into two groups: a substance use disorder group and a homeless group. We used the second Millon clinical multiaxial inventory (MCMI-II) questionnaire and an interview to collect information on the physical and social aspects of the subjects. Our results show that homelessness exacerbates social deterioration, and higher scores on the aggressive or sadistic personality scale than in the substance use disorder group, which may be a cause of their social exclusion which is independent of antisocial behaviors with legal consequences.

Correspondencia:
abelbe@hotmail.com

Introduction

Problems which arise from substance use disorders are one of the main reasons for psychological consultation[1]. This situation becomes complicated, when we consider that substance use disorders usually coexist any number of related psychopathologies, such as schizophrenia spectrum and other psychotic disorders[2], depression disorders[3], anxiety disorders[4] or personality disorders[5].

Due to the high number of personality disorders, the diversity of psychoactive substances, and the different consumption patterns, reaching agreement about the relationship between substance use disorders and personality disorders is difficult although accounts published on specific experiences such as studies discussing the relationship between personality disorders and alcohol[6] cocaine[7], heroin[8], cannabis[9,10] or simultaneous cocaine and heroin use[11] offer useful results which facilitate the therapeutic treatment of substance use disorders patients. However, these studies have methodological limitations (e.g. the use of different instruments, variable registration and evaluation methods, data analysis techniques, etc.) which make it difficult to classify or generalize their results[12].

Moreover, most studies focus on a single personality disorder, such as antisocial personality disorder (ASPD)[13] which is particularly common among substance use disorders, or borderline personality disorder (BPD)[14], while not paying sufficient attention to other personality disorders such as dependent personality disorder (DPD) or histrionic personality disorder (HPD), which are significant despite their lower prevalence, although more recent lines of research are now starting to analyze these disorders[4,15].

There are also a few studies which take aspects other than the psychological factors related to addictions into account, and as such, also consider the relevance of other social factors, such as an individual's social situation, personal family difficulties[16] or biological factors such as physical health problems like HIV or hepatitis infection[17]. It is probable that these factors are also related to possible psychopathologies, and perhaps even to personality and substance use disorders[18]. In this study, based on the findings of researchers such as Birtchnell and Shine[19], we analyze the characteristic prevalence of different personality disorders in homeless patients or in substance use disorder patients. We simultaneously evaluate the possible relationship between different socio-demographic and medical variables and their associated psychological conditions[20, 21].

Methods

Participants

311 participants were recruited and categorized into two groups: patients with substance related disorders (the SRD group), and a homeless group which we supposed is similar to the social vulnerability experienced by patients with substance-related disorders. The sampling procedure used for the two groups was discretionary following the ethical principles expressed by the World Medical Association (WMA) Declaration of Helsinki, and supervised by the committee of doctoral studies at Jaume I University. All the procedures used in the patients were performed after obtaining informed consent.

272 SRD patients were recruited from therapeutic community and rehabilitation centers in Castellón de la Plana (Spain). According to the fourth edition text revision of the Diagnostic and Statistical Manual of Mental Disorders[22], all these patients met the criteria for at least one drug dependence (Table 1): 31,5% of the patients were opioid dependent (7,7% in methadone assisted treatment), 16,2% were opioid and cocaine dependent, 32,7% were cocaine dependent and 19,6% were alcohol dependent.

Table 1. Distribution of substance use in the substance-related disorder group.

Substance	Administration	N	(%)
Cocaine	Inhaled	57	20,9
	Intravenous	32	11,8
Heroin	Inhaled	23	8,4%
	Intravenous	42	15,4
Heroin and Cocaine	Intravenous	44	16,2
Methadone	Oral	21	7,7%
Alcohol	Oral	53	19,6
Total		**272**	**100%**

39 homeless patients were selected from the council-managed shelter in Castellón de la Plana (Spain) and the shelter for the attention of people in need in Alicante (Spain). To design this comparison group we considered a factor which may relate to the characteristics and the psychological state of SRD patients: the unstructured social condition which has been associated with their addictive disease[23, 24]. That is, during the life of a substance abuse disorder patient there are stressful factors such as robberies, social vulnerability, stays in penitentiary or correctional houses, or homelessness, which may

facilitate the emergence of psychological problems in these patients. For these reasons, a comparison group was established with people who do not suffer from an SRD but who had similar social characteristics to the clinical group, such as unemployment, broken families, loneliness, homelessness, etc.

Data collection

Socio-demographic information was collected through an interview made for this study which examined: age, sex, the family support received, marital status, job situation, academic level, and criminal record. To assess the psychopathological aspects and substance use disorders a review of clinical records and a semistructured clinical interview was conducted. Finally, variables associated with physical-health conditions such as HIV, or hepatitis B or C (HBV/HCV) infection were recorded.

The second Millon clinical multiaxial inventory (MCMI-II)[25] questionnaire was used to evaluate personality dimensions and disorders, as well as the main axis I disorders[26, 27, 28].

Data analysis

We started with a descriptive examination of the variables selected for this work. Statistical analysis was performed using the SPSS-21 program to test our hypothesis that we would not find differences in socio-demographic and medical variables between the two groups and that we would find a higher prevalence of ASPD and BPD in SRD patients than in the homeless group. The homogeneity of variance was first checked using the student t-test to investigate the main differences and interaction effects between the different variables. We also used the Chi-squared test to test the null hypotheses of sample independence.

Results

Socio-demographic and social variables

Regarding the socio-demographic characteristics of the SRD group, the average age was 35,9 years old (SD = 7,37), and 87,9% were male. Concerning marital status, 34,9% were single, 30,5% were divorced or separated, 6,3% were widowers, and 28,3% were in a married or unmarried partnership. Their educational level was distributed into different groups: 0,7% graduate, 4% higher vocational studies, 19,1% primary school certificate, 11,4% secondary school certificate or basic vocational studies, 40,1% had not completed primary school, and 24,6% were uneducated. In relation to work activity, 29% were working and 71% were unemployed. 50,4% of the subjects had a relationship with their family.

In the homeless cohort, the average age was 34,9 years old (SD = 8,89), and 92,3% were male. In terms of their marital status, 12,8 were single, 33,3% were divorced or separated, 7,7% were widowers, and 14,4% were in a married or unmarried partnership. Regarding their academic level 33,3% had a primary school certificate, 12,8% secondary school certificate or basic vocational studies, 41% had not completed primary school, and 12,8% were uneducated. In relation to the work activity 12,8% were working and 87,2% were unemployed. 79,5% of them were not in contact with their family.

There were statistically significant differences in the marital and working status of the SRD and homeless group (X^2 = 9,83, P < 0,043; and X^2 = 4,55, P < 0,033 respectively), with a higher percentage of subjects in a married or unmarried partnership in the SRD group (28,3%) compared to the homeless group (14,4%) and with a higher percentage of subjects working in the SRD group (29%) compared to the homeless group (12,8%). There were also significant differences in the number of subjects who had some kind of relationship with their family (X^2 = 12,21, P < 0,000): 50,4% of the SRD group had some contact with their family but only 20,5% of the homeless group had any relationship with their family. Finally, there was also a statistically significant difference in the variable which implies a stay in a penitentiary or correctional house (X^2 = 17,95, P < 0,000), 43,3% of the SRD subjects had history of imprisonments which was much higher than in homeless group (7,7%). Likewise, the mean number of imprisonments was higher for the SRD group (X = 0,89, SD = 1,35) than for the SE homeless group (X = 0,10, SD = 0,38).

Physical-health conditions

SRD patients had a higher prevalence of medical diseases compared to homeless patients (52,2% vs. 7,7%; X^2 = 27,15, P < 0,000). Thus, whereas 11% of the SRD patients were HIV-positive, none of the homeless patients included in our cohort was infected. However some participants in both groups had hepatitis C infections (16,5% of SRD and 5,1% of homeless patients respectively), and 16,5% of the SRD group vs. 2,6% of the homeless group had hepatitis B infections.

MCMI-II questionnaire personality evaluation

After analyzing the results in each group are obtained in the SRD group higher scores in the paranoid scale (X = 53.5, SD = 18.8), avoidant (X = 50.6, SD = 23.5), schizoid (X = 50.5, SD = 25.8) and histrionic (X = 50.2, SD = 23), while in the group of homeless highest scores appear in antisocial scale (X = 66.3 , SD = 14.7), schizoid (X = 62.4, SD = 16.4) self defeating (X = 61.6, SD = 16) and paranoid (X = 53.5, SD = 14.3) these values are higher in the homeless group (see table 2). There were only statistically significant differences between the groups on the aggressive or sadistic clinical personality scale (see table 3) (T Student= -2,01, P < 0,045), with higher values in the homeless group (X = 55, SD = 26,4) compared to the SRD group (X = 46,1, SD = 25,8).

When the scores were analyzed with regard to the substances consumed, the subgroup with highest score was the medication assisted treatment (methadone) group (X = 55,9, SD = 29,2; see table 4), followed by cocaine and heroin user subgroups.

Table 2. Scores of the SRD and homeless group on the second Millon clinical multiaxial inventory

MCMI II Scale	Homeless group		SRD Group	
	X	SD	X	SD
Schizoid	62,4	16,4	50,5	25,8
Avoidant	50,3	21,9	50,6	23,5
Dependent	44,4	22,0	42,3	24,1
Histrionic	52,5	18,7	50,2	23
Narcissitic	43,8	21,9	45,8	25,8
Antisocial	66,3	14,7	51,7	24,2
Aggressive-Sadistic	55	26,4	46,1	25,8
Compulsive	41,1	16,7	48,5	21,6
Passive-Agressive	41,6	20,4	45,6	30,4
Self-defeating	61,6	16	49,5	23,5
Schizotypal	51,7	14,5	46,3	22,5
Borderline	50,9	19,7	45,0	21,9
Paranoid	53,5	14,3	53,5	18,8
Anxiety	66,4	18,6	54,8	28,8
Somatoform	57,8	11,1	47,3	22,2
Hypomaniac	48,1	16,4	48,1	18,9
Dysthymic	33,1	21,8	42,8	27,9
Alcohol Abuse	53,3	22,5	53,2	23,9
Drugs abuse	47,0	20,3	62,6	18,9
Psychotic thinking	62,3	5,9	55,0	19,5
Psychotic depression	52,8	13,7	50,9	18,2
Psychotic delusion	61,7	9	55,8	17,4

Table 3. Statistical differences between groups based on the second Millon clinical multiaxial inventory Aggressive/ sadistic scale.

	GROUP	X	SD	F Levene	Sig.	T Student	gl	Sig. (bilateral)
Aggressive/ sadistic	Substance Related Disorders Group	46,1	25,8	0,419	0,518	-2,01	309	0,045
	Homeless Group	55,0	26,4					

Table 4. Mean scores of each of the clinical substance use subgroups on the aggressive or sadistic scale.

Clinical Subgroup	X	SD	Anova Gl 4	
			F	Sig
Methadone	55,9	29,2	6,07	0,000
Heroine/Cocaine	55,4	27,9		
Heroine	47,8	21,7		
Cocaine	45,7	23,2		
Alcohol	33,1	26,7		

Discussion

Homeless group was compared to the SRD patient group because of its likely socio-demographic and social characteristic similarities to the SRD group. However our investigation and that of other researchers[29, 30, 31] shows that the scores for the main indicators of social problems (employment and a family or other support network relationship) were more malajusted in the homeless group. More than half of the homeless evaluated had no job, or contact with family or other support networks. In addition, these factors can have some consequences at the psychological level, for example whether a patient has access to treatment, emotional support, etc.[32].

Regarding the health condition of the patients, we reached a few pertinent conclusions. Firstly, it stood out that the prevalence of hepatitis and HIV infections was high, affecting more than half of substance users. The poor health condition of SRD patients has previously been attributed to their social vulnerability, a frequent consequence of substance consumption (for example HIV infection in intravenous susbtance users) and the 'substance abuse disorders lifestyle' which can encourage malnutrition, poor hygienic conditions, etc[33]. It is of note that the overall physical health of the SRD group was far more deteriorated than that of the homeless group; this could be explained by the damage consumption does to substance users' general health, although we cannot conclude that social and health deterioration are mainly a consequence of substance

use rather than an inherent influencing factor[34, 35]. Thus, the direction of causality is not clear because aspects such as family support, (which can affect HIV infection rates) or imprisonments (which are sometimes associated with infection with diseases such as Hepatitis C), confound the results[36, 37, 38]. It is also interesting to consider the health status in patients that meet both the SRD and homelessness criteria, e.g. the prevalence of HIV in long-term homeless substance users is five times higher than in the non-clinical population[39].

From the results obtained on the most basic MCMI-II scales, the biggest difference between the groups was on the aggressive or sadistic clinical personality scale, with the homeless group showing higher scores than previous studies on homelessness[31,] SRD[40], people who was incarcerated[41] or in patients with associated criminal behavior[42]. However, these results are lower than those obtained with proactive aggressors[43] and thus it is likely that personality pattern is a decisive factor in the etiology of homelessness because it contributes to the generation of social exclusion[44 , 45].

Our findings regarding the SRD group support past studies related to social situation[46, 47], agressive or sadictic personalities[48], other B cluster disorders[49,50], epidemiological results on personality disorders[51] and longitudinal studies[52] which suggest that maladaptive personality patterns can determine an individual's evolution toward drug use or social exclusion[53].

Conversely, some studies conclude that an unstructured social condition is a vital stressor which seems to facilitate, or at least be related to, personality disorders independently of addictive disease[54, 55]. In contrast, our study focused on social aspects in order to explore the relationship between homelessness, substance abuse, and dual pathology. Moreover, others have posited that the consumption of certain substances might reduce the emotional distress and social impairment of users with this type of personality disorder[56, 57]. Aggressive-sadistic clinical patterns are related to poor social integration, increased rates of treatment dropout[31], and poor social adjustment to other community members. Therefore this personality variable seems to have an evolutionary role in peer-group inclusion or exclusion; as shown by our data and that of others homeless[58], or other patients with above-average aggressive or sadistic clinical personality scores, are more often socially excluded.

Using a larger sample size in future studies would help to make more generalized and rigorous conclusions and the inclusion of homeless substance users would provide a new comorbid comparison group. In addition, following patients up with a longitudinal design would help to clarify the comorbid relationship between psychological disorders and other addictive pathologies, as well as with the social, physical, or psychological factors which mediate that relationship. In conclusion, we still do not know the exact causal relationship between personality disorders, unstructured social situations, and the development of substance abuse disorders, although further detailed study in this area, taking these caveats into account, should help us to better understand the direction and interactions of causality in these types of patients.

Conflict of interest

The authors declare no conflict of interest.

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