

Pathological personality dimensions and drug of choice in dual disorders

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Introduction

Personality traits (primarily the novelty seeking and impulsivity dimensions) may be risk factors for substance use disorder (SUD). Pathological personality traits have been linked to social deviance of drug. The objective of the study is to assess the effect size of pathological personality dimensions on the prevalence of types of SUD in dual patients according to the Cloninger personality model.

Material and methods

215 patients of the dual disorders unit in Centre Forum Barcelona (2007-2013). Cloninger Revised Temperament and Character Inventory (TCI-R) Scale was administered to measure personality dimensions. Effect size of pathological personality traits on type of SUD is estimated by calculating the prevalence ratios. For the analysis the statistical program SPSS 17 is used.

Results

General profile of sample

Table 1. Sociodemographics characteristics

SOCIODEMOGRAPHIC CHARACTERISTICS	
Age (mean/SD)	40,11 (10.7)
Sex	72%
Men	
Civil status	75,20%
Single	
Education level	33,50%
No school graduate	
Employment	75,70%
Without job	

Table 2. Psychiatric diagnosis

PSYCHIATRIC DIAGNOSIS	
Psychotic disorder	32,90%
Depression	12,90%
No diagnosis Axis I no SUD	29,60%
Personality disorder	33,90%

Table 3. SUD diagnosis

SUD DIAGNOSIS	
SUD sedative, hypnotic, anxiolytic	5,11%
SUD alcohol	36,74%
SUD cannabis	7,40%
SUD cocaine	11,60%
SUD polydrug cocaine without opiates	12,09%
SUD opiates and polydrug opiate without cocaine	6,04%
SUD polydrug opiate and cocaine	20,93%
Polydrug use	44,90%

Table 4. SUD and psychiatric disorder

	Sedative, hypnotic, anxiolytic (n=11)	Alcohol (n=79)	Cannabis (n=16)	Cocaine (n=25)	Polydrug Cocaine (n= 26)	Opiates and polydrug opiates (n=13)	Polydrug opiate and cocaine (n=45)	(p)
Psychotic disorder (n/ %)	6/54,5%	17/21,5%	9/56,3%	11/44,0%	14/53,8%	4/30,8%	11/24,4%	0.007
Depression (n/ %)	1/9,1%	19/24,1%	2/12,5%	0/,0%	0/,0%	1/7,7%	5/11,1%	
Bipolar disorder(n/ %)	0/,0%	7/8,9%	1/6,3%	3/12,0%	2/7,7%	0/,0%	1/2,2%	
Adaptative disorders (n/ %)	2/18,2%	5/6,3%	0/,0%	1/4,0%	4/15,4%	2/15,4%	2/4,4%	
Other diagnosis(n/ %)	2/18,2%	9/11,4%	1/6,3%	1/4,0%	2/7,7%	1/7,7%	5/11,1%	
Whithout Axis I diagnosis no SUD (n/ %)	0/,0%	22/27,8%	3/18,8%	9/36,0%	4/15,4%	5/38,5%	21/46,7%	0.037
Personality disorder (n/ %)	3/27,3%	27/34,2%	4/25,0%	3/12,0%	7/26,9%	8/61,5%	20/44,4%	

Prevalence ratio of type of SUD and pathological personality dimensions (effect size)

Table 5. Statistically significant associations

HIGH NOVELTY SEEKING (%)	9.2%
SUD cocaine	RP= 1.67 (IC 95% [1.20,2.3])
SUD cannabis	RP= 1.80 (IC 95% [1.047, 3.094])
HIGH IMPULSIVITY (%)	46.3%
SUD opiate	RP= 0.427 (IC 95% [0.187,0.974])
LOW COOPERATION (%)	43%
SUD de cocaine	RP= 1.379 (IC 95% [1.026, 1.854])
LOW SELF-DIRECTEDNESS (%)	69.4%
SUD opiate	RP= 3.373 (IC 95% [1.049, 10.845])

Table 6. Non statistically significant association

LOW HARM AVOIDANCE	7.9%
LOW PERSISTENCE	28.37%
LOW REWARD DEPENDENCE	25.11%
HIGH SELF-TRANSCENDENCE	43%

Conclusions

In dual disorders:
High novelty seeking is associated with cocaine and cannabis SUD, but is rare.
Patients with high impulsivity are less opioid users. Impulsivity is elevated in almost half of our patients.
Low self-directedness is strongly associated with opiate SUD. Probably due to personality disorder prevalence in this SUD in our sample.
Low cooperation is related to cocaine SUD.

References

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