# Personality traits in a sample of patients with drug-resistant epilepsy in an Epilepsy Unit in Barcelona

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## Introduction

Epilepsy is associated with an increased prevalence of psychopathology compared with the general population and it is present to a higher rate in drug resistant epilepsy (DRE), which makes treatment of DRE more complex, as it must not only focus on achieving seizure-freedom, but also on the management of psychiatric comorbidities amongst other complications (1).

Since many years it has been investigated how epilepsy can affect the neural circuits mediating personality (2). It has been shown that it is likely that suffering from epileptic seizures negatively influences personality development and can result in the development of maladaptive personality traits (3). This can be seen to a higher extent in patients with DRE, who could show more marked personality traits.

### Aim

To describe the personality profile of a sample of patients with DRE from the Epilepsy Unit in Hospital Clinic in Barcelona during a 9-year period.

## **Methods**

Retrospective study of 453 patients diagnosed with DRE from the Epilepsy Unit of Hospital Clinic from 2008 to 2016. Clinical and sociodemographic variables were analyzed and patients completed the PDQ-4 (Personality Disorder Questionnaire-version 4), a psychometric questionnaire which consists of 99 items which describe symptoms of DSM-IV personality disorders (4). Analyses were performed using SPSS Statistics.

### Results

Sociodemographic characteristics and presence of axis I disorders are shown in Table 1. The results of the PDQ-4 are shown in Table 2.

**Table 1. Clinical and sociodemographic characteristics** 

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Variables	Results
Age (average)	36,9 years
Sex	
Men	196 (43.3%)
Women	257 (56.7%)
Localization of epileptic focus	
Temporal	225 (49.6%)
Extratemporal	130 (28.7%)
Not established	98 (21.7%)
Presence of axis I disorder	
No	273 (60.2%)
Yes	180 (39.8%)
Diagnostic categories	
Mood disorders	80 (17.7%)
Adjustment disorders	64 (14.2%)
Anxiety disorders	15 (3.3%)
Psychotic disorders	14 (3%)
Substance-related disorders	2 (0.5%)
Other disorders	5 (1.2%)
Diagnostic categories Mood disorders Adjustment disorders Anxiety disorders Psychotic disorders Substance-related disorders	80 (17.7%) 64 (14.2%) 15 (3.3%) 14 (3%) 2 (0.5%)

**Table 2: Results of the PDQ-4 for Specific Personality Disorders** 

PDQ-4	Mean	SD
Paranoid	39.17	26.475
Schizoid	31.51	21.122
Schizotypal	31.39	22.287
Histrionic	30.23	17.701
Narcissistic	24.98	19.533
Borderline	31.04	21.275
Antisocial	13.62	16.786
Avoidant	40.48	25.853
Dependent	26.01	24.849
Obsessive-	44.68	22.361
compulsive		
Negativistic	33.44	22.861
Depressive	48.66	27.517
Cluster A	34.60	19.010
Cluster B	25.22	14.313
Cluster C	36.72	18.864
Total score	32.65	15.377

PDQ-4: Personality Diagnostic Questionnaire-version 4; SD: standard deviation.

## **Conclusion**

The results from our sample show moderate and high levels of psychopathology in different subtypes of personality disorders, being particularly high (scores>30) (4) in all areas except for narcissistic, antisocial and dependent. They are in accordance with previous data (3,5,6) as they suggest that the presence of abnormal personality profiles in patients with epilepsy is high, being more severe in DRE. However, a difference is found in the fact that patients with responsive epilepsy tend to show higher dimensional scores particularly on the cluster C personality disorders (6) whilst patients with DRE from our sample show higher scores both for cluster C and also cluster B. These outcomes imply an important concern as the recognition of different personality profiles is essential for the adequate management of these patients, being of particular relevance the fact that its presence can affect the ability to treat the underlying epilepsy (5) and has great impact on quality of life.

Further investigation is required in order to provide more knowledge on this topic, with the objective of contributing to a complete and adequate approach of maladaptive traits or personality disorders in these patients.

# References

- 1. Dalic L, Cook MJ. Managing drug-resistant epilepsy: challenges and solutions. Neuropsychiatr Dis Treat. 2016;12:2605–16.
- 2. Brandt J, Seidman LJ, Kohl D. Personality characteristics of epileptic patients: A controlled study of generalized and temporal lobe cases. J Clin Exp Neuropsychol. 1985 Feb 4;7(1):25–38.
- 3. Yazici E, Yazici AB, Aydin N, Orhan A, Kirpinar I, Acemoglu H. Temperament and Character Traits in Patients With Epilepsy. J Nerv Ment Dis. 2013 May;201(5):365-70.
- 4. Hyler SE. Personality Diagnostic Questionnaire-4 (PDQ-4). New York: New York State Psychiatric Institute, 1994.
  5. Trimble M. Treatment issues for personality disorders in epilepsy. Epilepsia. 2013 Mar;54:41–5.
- 6. Swinkels WAM, Duijsens IJ, Spinhoven. Personality disorder traits in patients with epilepsy. Seizure. 2003;12:587-594.







