



## PERSONALITY DISORDERS IN EPILEPSY AND THEIR PREVENTION.

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**Annotation:** Epilepsy is a chronic neurological disorder characterized by recurrent seizures, but its influence extends beyond neurological symptoms and affects psychological well-being, social adaptation, and personality development. Personality disorders are frequently observed among individuals with epilepsy, often arising due to neurobiological changes, psychosocial stress, long-term stigma, and medication effects. This article examines the relationship between epilepsy and personality disorders, highlighting major risk factors, commonly observed personality changes, and the mechanisms through which epilepsy contributes to personality pathology.

**Keywords:** Epilepsy, personality disorders, mental health, behavioral changes, epilepsy-related stigma, depression, anxiety, psychosocial prevention, cognitive behavioral therapy, neuropsychiatric complications.

Epilepsy is one of the most widespread chronic neurological disorders, affecting approximately 50 million people worldwide. Traditionally, epilepsy has been considered primarily as a disorder of seizures and abnormal brain electrical activity. However, modern clinical research demonstrates that epilepsy has a multidimensional nature, influencing cognitive functioning, emotional regulation, behavior, interpersonal relationships, and long-term personality development.



Psychiatric comorbidities are common in epilepsy, including depression, anxiety, psychosis, and personality disorders. Among these, personality disorders represent a particularly complex challenge because they affect not only the individual's mental stability but also their social functioning, treatment adherence, and long-term prognosis.

Personality disorders in epilepsy are not necessarily caused by epilepsy alone. Rather, they emerge as a result of multiple interacting factors such as brain damage, seizure frequency, chronic stress, social stigma, isolation, and side effects of antiepileptic medications. These disorders often manifest as emotional instability, impulsivity, aggression, suspiciousness, social withdrawal, or rigid behavior patterns. Such symptoms can significantly impair a patient's ability to live independently, maintain relationships, and succeed academically or professionally.

Therefore, studying personality disorders in epilepsy and developing prevention strategies is essential for improving patient outcomes. Prevention not only reduces psychological suffering but also contributes to better seizure control, as mental stress is a known seizure trigger.

Personality disorders in epilepsy: Epilepsy is associated with a higher prevalence of personality disorders (PDs) compared to the general population, with epileptologists and psychiatrists noting this correlation in clinical practice. This link has been observed for centuries, but modern research highlights how epileptic seizures and related factors can influence personality development, leading to maladaptive traits. PDs in people with epilepsy (PwE) can complicate overall health management, affecting treatment adherence, quality of life, and prognosis.

Prevalence and common types: Studies indicate that PDs occur in 18-42% of individuals with focal epilepsy, particularly temporal lobe epilepsy (TLE), often among surgical candidates or those post-surgery. In juvenile myoclonic epilepsy (JME), rates are lower at 8-23%. Among those with psychogenic non-epileptic seizures (PNES), which can co-occur with epilepsy, PD prevalence is notably higher



at 30-60%. Overall, PwE show elevated dimensional scores for various PDs on assessments like the DSM-IV and ICD-10 criteria, with rates around 21% in medically refractory cases.

The most common PDs vary by epilepsy type:

- Cluster C PDs (e.g., avoidant, dependent, obsessive-compulsive) are predominant in focal epilepsy, especially TLE, representing up to 72% of PD diagnoses in some samples.

- Cluster B PDs (e.g., borderline, histrionic, narcissistic) are more linked to PNES and JME, with borderline PD being particularly common in PNES and showing associations with emotion dysregulation.

- Cluster A PDs (e.g., schizotypal) are less frequent but noted in some TLE cases.

PwE also experience higher rates of related psychopathology, such as mood disorders (depression, anxiety) and maladaptive traits like disinhibition and psychoticism, which can overlap with PDs.

Causes and risk factors: The development of PDs in PwE is multifactorial. Epileptic seizures themselves may negatively impact personality development, fostering maladaptive traits over time. Key risk factors include:

- Epilepsy characteristics: Longer disease duration (e.g., >10 years), drug-resistant seizures, and auras are associated with higher PD risk. TLE and extratemporal foci are linked to microstructural brain abnormalities that may underpin PDs.

- Psychosocial factors: Stigmatization, disrupted social relationships, and lower quality of life contribute, potentially exacerbating avoidant or dependent traits. Family cohesion issues and poor socioeconomic status can worsen personality changes.



- Comorbidities: PNES co-occurrence heightens Cluster B traits, while psychiatric history (e.g., anxiety, depression) correlates but does not directly predict PDs.

- Medications: Antiseizure medications (ASMs) like levetiracetam and perampanel can exacerbate underlying PDs, complicating the picture.

Epilepsy surgery may improve some PD symptoms in cases like TLE with mesial temporal sclerosis, but pre-existing PDs predict poorer seizure outcomes post-surgery.

Prevention and management: Direct prevention strategies for PDs in PwE are not well-established due to research gaps in neurobiological mechanisms and long-term effects of interventions. However, indirect approaches focus on early intervention to mitigate risk factors and prevent escalation of maladaptive traits:

- Seizure Control: Optimizing epilepsy management through early diagnosis, appropriate ASMs, and surgery (when indicated) may reduce the impact of seizures on personality development. Avoiding ASMs known to worsen PDs (e.g., selecting alternatives to levetiracetam) is crucial for prevention.

- Psychosocial Support: Enhancing family cohesion and quality of life through education, support groups, and addressing stigma can act as protective factors against PD development. Multidisciplinary care involving neurologists, psychiatrists, and psychologists from the outset promotes early screening and personalized strategies.

- Lifestyle and Monitoring: Regular psychiatric assessments in PwE, especially those with risk factors like long disease duration or PNES, can help detect emerging traits early. Improving overall well-being (e.g., via exercise, social integration) may buffer against PDs.

For management once PDs develop:

- Psychotherapy: Cognitive-behavioral therapy (CBT) is first-line for reducing seizure-like events in PNES and addressing PD symptoms. Dialectical



behavior therapy (DBT), a CBT variant, targets emotion dysregulation in borderline PD and has shown efficacy. Other counseling approaches can alleviate mood overlaps.

- Medications: Antidepressants or anxiolytics may be used alongside ASMs, but careful monitoring is needed to avoid interactions that worsen PDs.

- Holistic Approaches: Integrated care improves adherence and outcomes, with emphasis on tailoring treatments to comorbid PD subtypes.

Future research is essential to better understand prevention, including ASM impacts and surgical effects on PDs.

The findings confirm that epilepsy should be treated as a biopsychosocial disorder rather than solely a neurological condition. Personality disorders in epilepsy result from the interaction of brain pathology, emotional trauma, social challenges, and treatment-related influences.

### **Conclusions**

Personality disorders in epilepsy represent a serious and underestimated complication of the disease. They arise through complex neurobiological and psychosocial mechanisms and are particularly common in patients with temporal lobe epilepsy, early onset of seizures, poor seizure control, and exposure to stigma.

These disorders negatively affect quality of life, treatment adherence, and social integration. Modern research supports an interdisciplinary approach that combines neurological care with psychological support, psychiatric screening, and social rehabilitation.

The most effective prevention strategies include early identification of behavioral changes, family psychoeducation, psychotherapy, stigma reduction programs, and optimized seizure management.



### Adabiyotlar.

1. American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*. Washington, DC: American Psychiatric Publishing.
2. World Health Organization. (2019). *Epilepsy: A public health imperative*. Geneva: WHO Press.
3. Kanner, A. M. (2016). Psychiatric comorbidities in epilepsy: Should they be considered in the classification of epileptic disorders? *Epilepsy & Behavior*, *64*, 306–308.
4. Kanner, A. M., & Mula, M. (2018). *Psychiatric comorbidities in epilepsy: Diagnosis and treatment*. New York: Springer.
5. Mula, M., & Sander, J. W. (2016). Psychosocial aspects of epilepsy: A wider approach. *The Lancet Neurology*, *15*(6), 561–562.
6. Trimble, M. R. (1991). *The Psychoses of Epilepsy*. New York: Raven Press.
7. Devinsky, O., Vezzani, A., O'Brien, T. J., Jette, N., Scheffer, I. E., De Curtis, M., & Perucca, P. (2018). Epilepsy. *Nature Reviews Disease Primers*, *4*(1), 18024.
8. Fisher, R. S., Acevedo, C., Arzimanoglou, A., Bogacz, A., Cross, J. H., Elger, C. E., Engel, J., Forsgren, L., French, J. A., Glynn, M., Hesdorffer, D. C., Lee, B. I., Mathern, G. W., Moshé, S. L., Perucca, E., Scheffer, I. E., Tomson, T., Watanabe, M., & Wiebe, S. (2014). ILAE official report: A practical clinical definition of epilepsy. *Epilepsia*, *55*(4), 475–482.
9. Blumer, D. (2000). The psychiatric aspects of epilepsy. In: Wyllie, E. (Ed.), *The Treatment of Epilepsy: Principles and Practice* (pp. 1225–1234). Philadelphia: Lippincott Williams & Wilkins.
10. LaFrance, W. C., & Barry, J. J. (2005). Update on treatments of psychological comorbidities in epilepsy. *Epilepsy & Behavior*, *7*(S1), S31–S40.



11. Gilliam, F. G., Santos, J., Vahle, V., Carter, J., Brown, K., & Hecimovic, H. (2004). Depression in epilepsy: Ignoring clinical expression of neuronal network dysfunction? *Epilepsia*, 45(S2), 28–33.
12. Jones, J. E., Hermann, B. P., Barry, J. J., Gilliam, F., Kanner, A. M., & Meador, K. J. (2005). Clinical assessment of psychiatric comorbidity in epilepsy. *Epilepsy & Behavior*, 6(1), 26–37.