

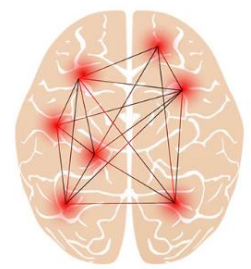
Levetiracetam (Keppra) and its connection with epilepsy: Effects on Quality of Life (QoL)



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Introduction:

Epilepsy:



- ❖ Chronic neurological disorder that causes repeated seizures.
- ❖ Happens due to abnormal electrical activity in the brain
- ❖ It affects: memory, mood and behavior, movement, Quality of Life (QoL).

Keppra (Levetiracetam):



- ❖ Medicine used to control seizures, commonly effective, and generally well tolerated
- ❖ First line of treatment, with few drug interactions.
- ❖ Side effects: Memory, behavioral, mental, and coordination issues

Purpose:



- ❖ To know the side effects experienced by patients with epilepsy who take Keppra, and understanding how this affects their way of thinking, behavior, movement, and quality of life.

Methodology:

- ❖ Research reviewed: clinical studies, observational studies, qualitative research, multicenter study, case reports, and systematic review.

Findings:

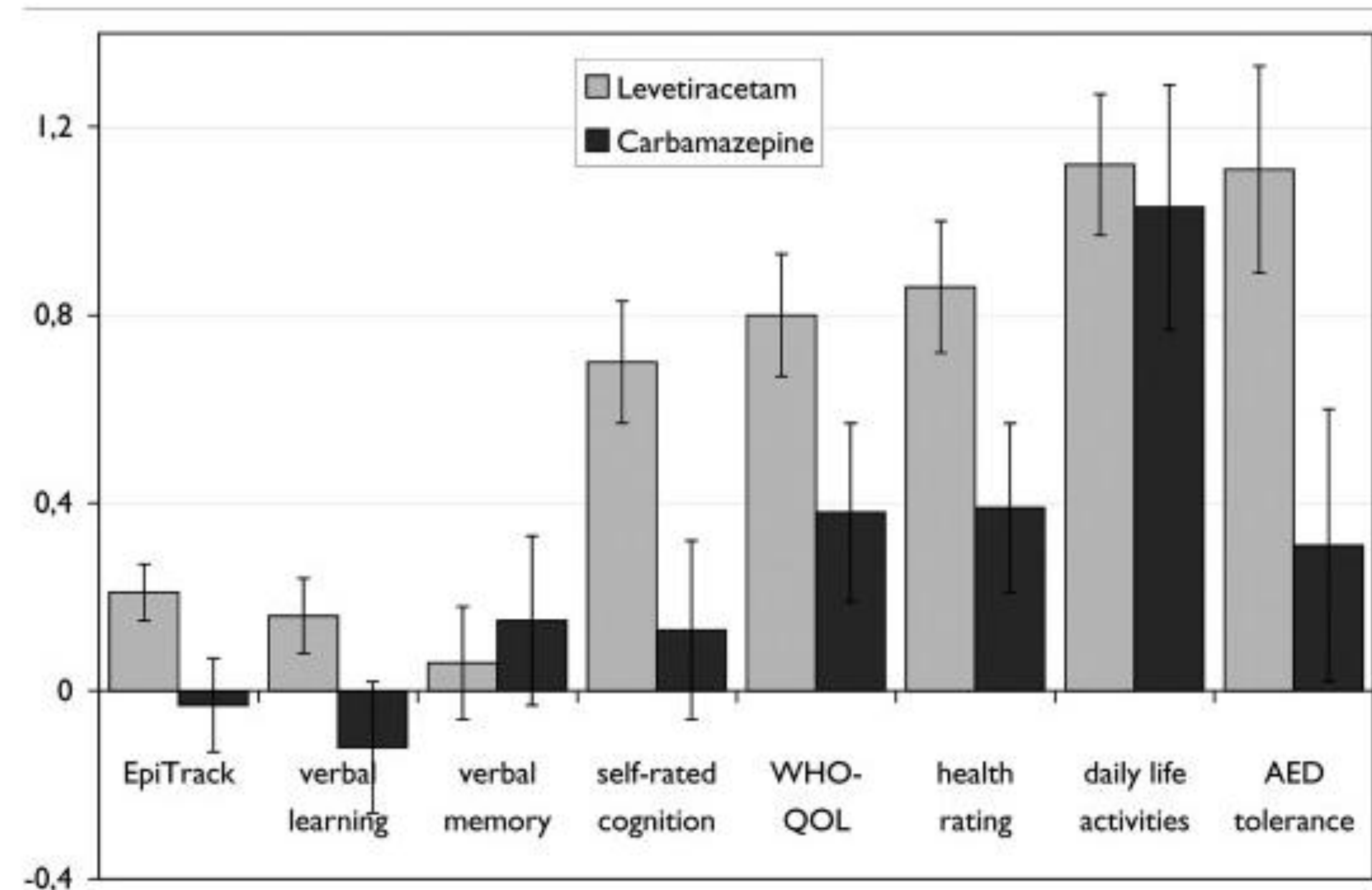


Figure 1: Patients treated with Levetiracetam (LEV) (2nd gen) showed improvement while Carbamazepine (CBZ) (1st gen) did not show significant changes in cognitive performance (Helmstaedter and Witt, 2010).

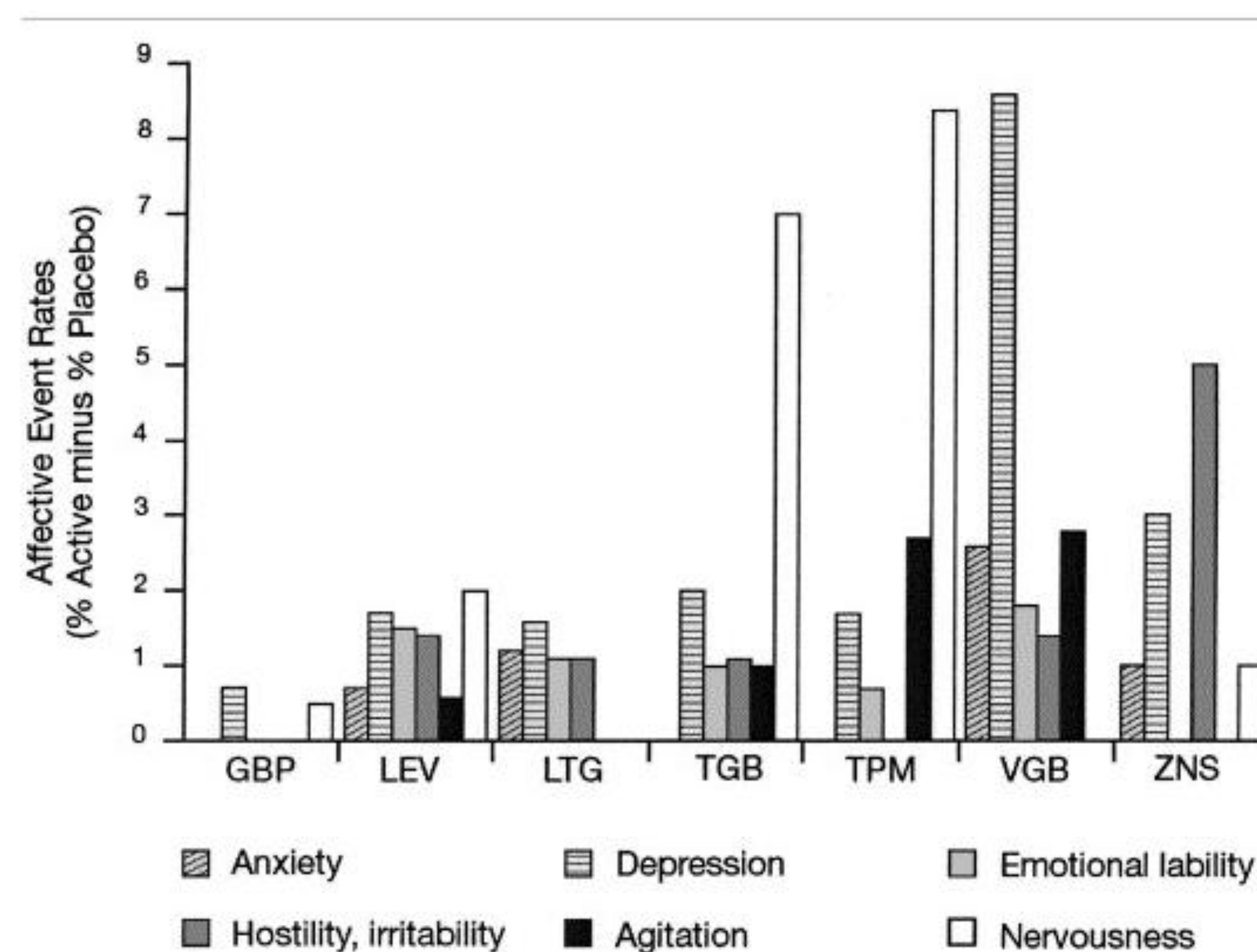


Figure 2: Compared to other newer anti-epileptic drugs (AEDs), Keppra demonstrates low adverse behavioral effects (Cramer, et al, 2003).

- ❖ Intaking AEDs does not completely make epilepsy patients seizure-free; seizures can only be controlled.

- ❖ Based on the review, small changes in motor function can be observed, but complete loss of movement is uncommon or is so subtle that it goes unnoticed.

Conclusions:

- ❖ Keppra is effective for seizure control: patients have stable cognitive and motor function.
- ❖ Behavioral side effects have been reported such as anger, irritability, mood changes, etc.
- ❖ Individual monitoring is needed for better treatment outcomes.

Future work:

- ❖ Investigate environmental causes of epilepsy, beyond genetics.
- ❖ Investigate the effect of epilepsy on memory loss, language, communication, and speech difficulties.

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References:

