

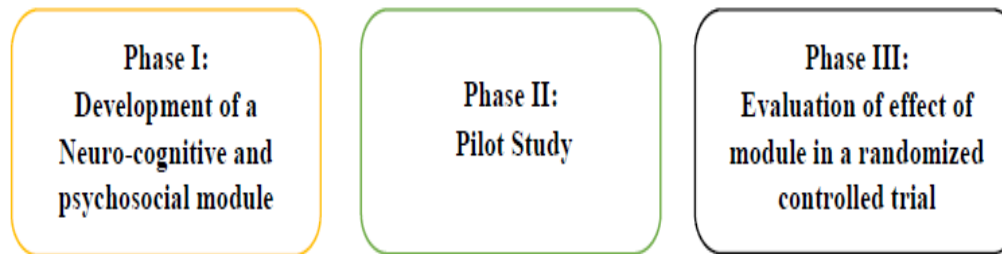
An Integrated Neuro-Cognitive and Psychosocial Intervention to Improve Quality of Life in Drug-Resistant Epilepsy: A Randomized Controlled Trial

Neetu Choudhary , Parampreet Singh Kharbanda, Kamalesh Chakravarty, Jitupam Baishya, Devender Rana, Akhilesh Sharma

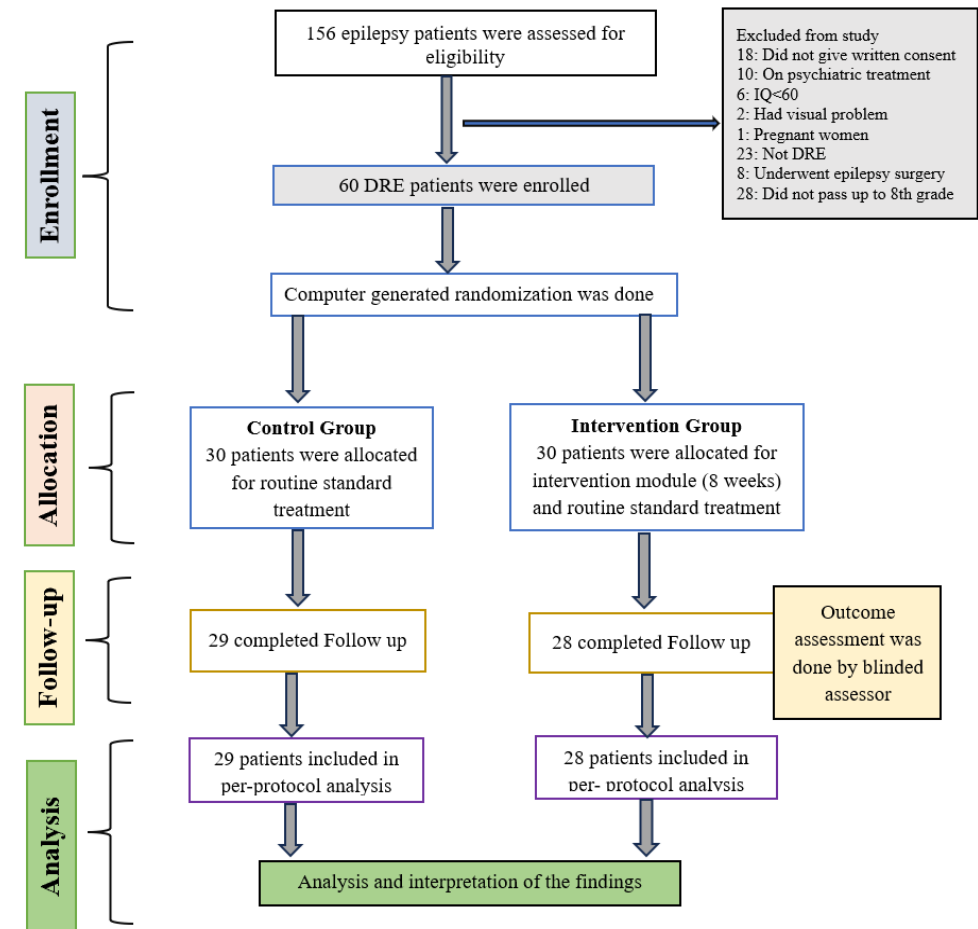
Introduction:

Drug-resistant epilepsy (DRE) significantly impairs quality of life, cognition (attention, memory, executive function), and psychosocial well-being (stigma, anxiety, depression). This study developed and tested a neuro-cognitive and psychosocial intervention module tailored for DRE patients..

Methodology:



8 weeks - 8 session							
Session 1	2	3	4	5	6	7	8
Psychoeducation	Cognitive retraining exercises					CBT	
Family counseling							



Results:

Characteristics		Intervention Group (30) Mean (SD)	Control Group (30) Mean (SD)	p value
Age (Years)		29.16(8.17)	27.93(8.51)	0.57
Age, <u>n(%)</u>	Below 30	16(53.33%)	17(56.66%)	0.79
	Above 30	14(46.66%)	13(43.33%)	
Gender, <u>n(%)</u>	Male	16(53.33%)	21(70%)	0.19
	Female	14(46.66%)	9(30%)	
Marital Status, <u>n(%)</u>	Single	20(66.66%)	21(70%)	0.78
	Married	10(33.33%)	9(30%)	
Age at onset of seizure (years)		12.15(8.61)	12.43(6.56)	0.88
Duration of epilepsy (years)		16.98(8.75)	15.50(7.08)	0.47
Duration of Epilepsy	<5 years	2(6.66%)	1(3.33%)	0.91
	5 to <10 years	4(13.33%)	5(16.66%)	
	>10 years to <20 years	14(46.66%)	15(50%)	
	20 years to >20 years	10(33.33%)	9(30%)	
Seizure frequency per month		7.53(16.44)	9.09(14.96)	0.31
Type of seizure, <u>n(%)</u>	Focal	25(83.33%)	28(93.33%)	0.23
	Generalized	5(16.66%)	2(6.66%)	

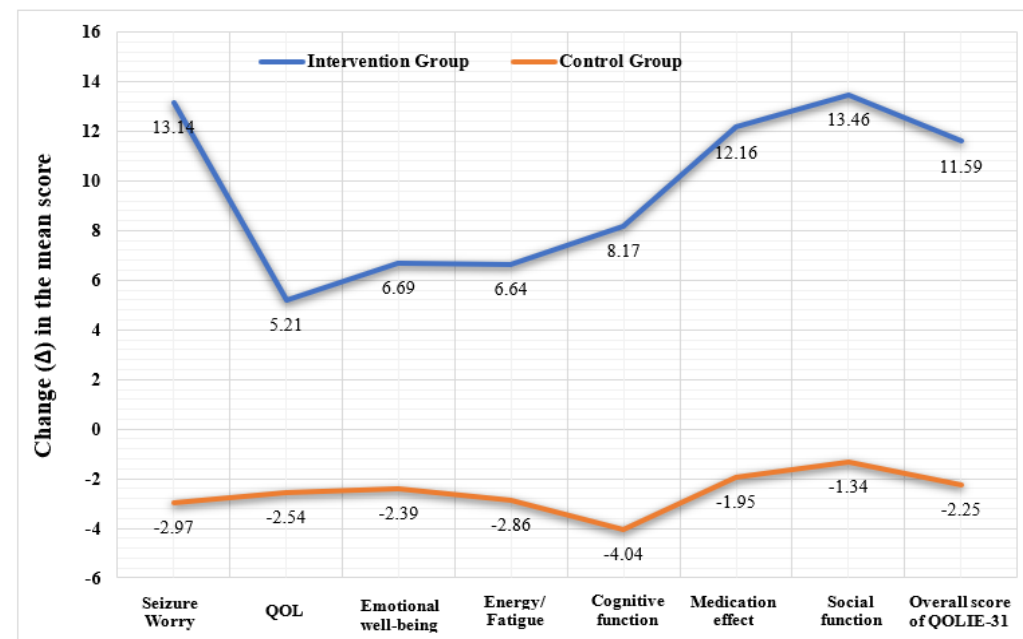


Figure 3: Changes (Post-Pre) in the Quality of Life in Epilepsy-31 score

- Assessments: QOLIE-31, BDI, HARS, neurocognitive tests
- QoL improved: QOLIE-31 ↑ from 52.4 ± 8.5 to 67.8 ± 7.2 ($p < 0.001$).
- Anxiety reduced: HARS ↓ from 21.3 ± 5.8 to 12.1 ± 4.7 ($p < 0.001$).
- Stigma reduced ($p = 0.03$).
- Cognition improved (attention, memory, executive function).

Conclusion

A structured neuro-cognitive and psychosocial intervention module can significantly enhance cognitive function, psychosocial well-being, and overall quality of life in patients with drug-resistant epilepsy.

References:

1. Baxendale S. Cognitive rehabilitation and prehabilitation in people with epilepsy. *Epilepsy Behav* EB. 2020 May;106:107027.
2. Farina E, Raglio A, Giovagnoli AR. Cognitive rehabilitation in epilepsy: Anevidence-based review. *Epilepsy Res*. 2015 Jan;109:210–8.

Copyright © 2025, Neetu Choudhary
Neetumeel@gmail.com
8800136337

