Improving quality of life in patients with intellectual disability and epilepsy through comprehensive inpatient treatment

David Steinbart[1,2] // Anja Grimmer[1] // Rebekka Geelhaar[1] // Martin Holtkamp[1,2]

[1] Epilepsy-Center Berlin-Brandenburg, Institute for Diagnostics of Epilepsy, Berlin, Germany

[2] Charité - Universitätsmedizin Berlin, corporate member of Freie Universität and Humboldt-Universität zu Berlin, Department of Neurology, Berlin, Germany

Background

>> **Epilepsies in persons with intellectual disability (ID)**

> Prevalence depends on degree of ID: ~10% in people with mild ID up to >50% in persons with profound ID[1]

> Intractable epilepsies in 2/3 of patients[2]

>> **High rate of seizure-related complications[3]**

> Affects 1/3 of patients over 5 years

> Status epilepticus, aspiration pneumonia, high SUDEP risk[4]

>> **Impaired quality of life (QoL)[5]**

> Impact of seizures, complications, adverse events of antiseizure medication (ASM), social isolation, burden of caretaking

Research questions

>> **Evaluation of effects of comprehensive inpatient treatment on seizure frequency and severity, ASM adverse events and QoL**

>> **Predictors for improvement of QoL**

Study cohort

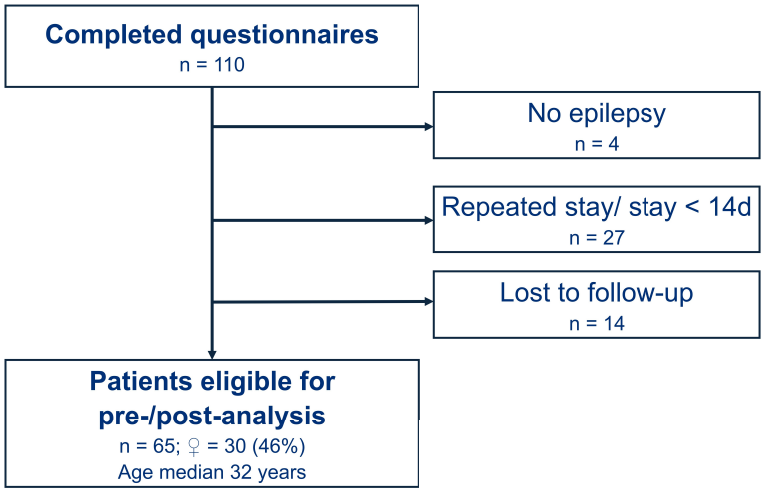

Figure 1: Patient cohort.
n: number of patients; QoL: quality of life.

Methods

>> Standardized questionnaire completed by care givers

>> 1 week before admission + 8 weeks after hospital discharge

>> Descriptive statistics, multiple regression analysis

Results

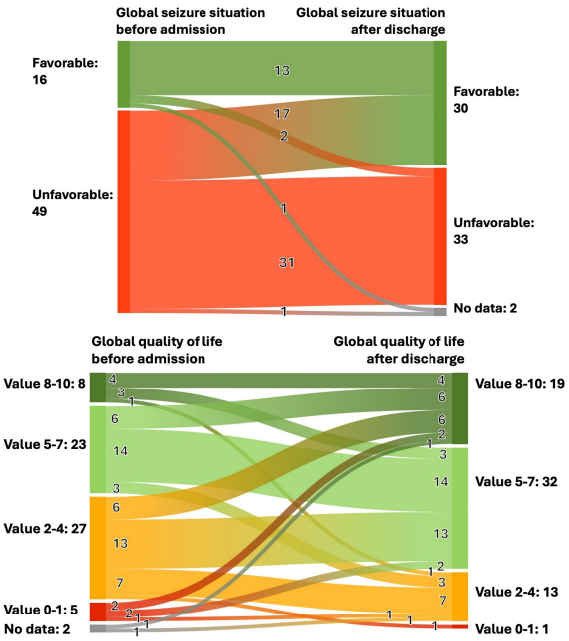

Figure 2: Effect of comprehensive treatment on seizure situation and global QoL.
Favorable seizure situation was defined by ≤ 1 seizure/month and no seizure-related injuries in last 2 months. QoL was assessed by care givers on 11-point global rating scale (0 = worst to 10 = best).

Table 1: Predictors for improvement of QoL

Variable	B (95% CI)
ASM number: reduction by 1 ASM	**1.4 (0.3 – 2.5)**
ASM dose: reduction by 1 DDD	0.6 (-0.4 – 1.5)
3rd generation ASM (portion of DDD +100%)	1.1 (-2.5 – 4.7)
Male sex	-0.1 (-1.5 – 1.4)
Duration of epilepsy (in years)	0.0 (-0.1 – 0.1)
Degree of intellectual disability	0.1 (-0.1 – 0.9)

DDD: defined daily dose

Conclusions

>> **Effects of comprehensive inpatient treatment:** improvement of seizure situation and QoL

>> **Reduction of ASM can foster QoL improvement**

References & Contact

References can be found here:

Digital poster copy can be found here:

Get in touch: david.steinbart@charite.de