Epilepsy in acute psychiatric inpatient settings

Prevalence, treatment gaps, and mortality

Nyakomi Adwok[1 2] , Risha Govind[1 2], Irene Faiman[1] Mark P. Richardson[1]

[1]Institute of Psychiatry, Psychology and Neuroscience (IoPPN), KCL [2]South London and Maudsley NHS Foundation Trust

BACKGROUND

- Acute inpatient mental health settings are under-represented in clinical epilepsy research (1).
- Neurological and psychiatric comorbidity presents clinical challenges, particularly in individuals with severe mental illness (2,3,4). More research in these settings is required to guide clinical practice.

AIMS AND METHODS

Aim 1: to report the lifetime prevalence of epilepsy in individuals admitted to acute psychiatric inpatient wards.

- **Method**: Retrospective review of the clinical records of adults admitted to acute psychiatric inpatient wards **(n = 9,237**).
- Epilepsy cases identified using ICD-10 codes, pharmacy-linked prescription data and free-text searches.
- Identified cases manually verified against standardised criteria, with expert consultation.

Aim 2: to assess demographic and treatment patterns in individuals with epilepsy

- **Method**: Assessment of linked clinical data from local pharmacy records and national acute hospital trust records.

Aim 3: to investigate the association between epilepsy and all-cause mortality

- **Method**: We evaluated mortality risk in individuals with epilepsy and a comparator cohort using an adjusted Cox-proportional hazards model.
- We used a Kaplan Meier survival analysis to estimate the five-year survival probability from the most recent admission date.

RESULTS

Epilepsy lifetime prevalence = 3%, (95% CI: 2.65–3.36)

72.8% of people with epilepsy were in the lowest 5 IMD (Index of Multiple Deprivation (IMD) deciles.

64.1% of individuals with epilepsy were prescribed two or more antiseizure medications.

Epilepsy was associated with a **43% increased risk of mortality** (HR 1.43, 95% CI: 1.08–1.90, p = 0.01).

32.6% received specialist neurology input in the year before and after their most recent admission.

5-year survival probability was lower in the epilepsy cohort (81.3 %) than in the comparator cohort (86.4 %, (log-rank test p = 0.02)

CONCLUSIONS

- Patients with epilepsy in acute psychiatric inpatient settings face significantly higher mortality risk.
- Despite complex treatment needs, specialist neurology input remains low.
- **Enhanced interdisciplinary collaboration and systemic changes in care pathways are urgently needed.**

Scan for full study

References

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