**Original article:**

**Neurobehavioral disorders in childhood epilepsy : a prospective, cross-sectional survey**

**Dr. Gajre Mona P\*, Ms Toral Bhatt \*\*\*, Ms Zarana Shah\*\*\*, Ms Minjal Shah\*\*\*, Dr Maninder Setia\*\***

 [ \*MD,DCH\* Professor , \*\*Clinical Epidemiologist , \*\*\* 2nd year MBBS Student ]

Pediatric Neurodevelopmental Centre, Division of Pediatric Neurology, Epilepsy and Developmental Pediatrics, Department of Pediatrics, LTMMC & LTMGH, Sion, Mumbai-22

Corresponding author: Dr Gajre Mona

**Abstract:**

**Objective**: Epilepsy is the commonest neurological disorder of childhood and 1 in 5 epileptic has a behavioural disorder

**Participants**: After IRB clearance,100 consecutive, aged 4-12 years childrenwith a history of epilepsy of at least one year duration were enrolled as cases and 100 controls.A baseline IQ test was performed .

**Intervention**: All the participants were administered an SDQ (Strength and Difficulty Questionnaire), available in Hindi, that records competencies of children in five domains such as emotional issues(fear, nervousness), behavioral issues (hyperactivity), prosocial tendencies, conduct problems (tantrums, lying, stealing) and problems in peer relationships. The datawas analysed using the chi – square test also age, sexadjustedlogistic regression multivariate analysis for outcome variables such as conduct disorders, hyperactivity and no specific complaints was done.

**Results:** The mean (SD) ages of the cases and controls were 9.05 (1.99) and 8.65 (2/05) years respectively (p=0.17). A higher proportion of cases had conduct disorders and hyperactivity compared with controls (conduct disorders: 16% vs 6%, p=0.02 and hyperactivity: 16% vs 6%, p=0.02).Four epileptic children were school dropouts. With logistic regression multivariate analysis cases were significantly more likely to have conduct disorders(OR: 3.11, 95% [CI]: 1.15-8.39) and hyperactivity(OR: 3.35, 95% CI: 1.22-9.19)compared with controls.

**Discussion:** Neurobehavioral comorbidity of epilepsy is now accepted as a major cause of potentially treated disability.In our study epileptic children had significantly higher externalizing behavior problems such as conduct disorders and hyperactivity compared with healthy siblings.

**Conclusions**: Neurobehavioral disorders are significant comorbid conditions seen in epileptics which cannot be ignored ;these require timely assessment and intervention for a holistic qualitative outcome.

**Keywords:** Neurobehavioral disorders, Epilepsy, SDQ