Pediatric epilepsy impacts sleep for the child and parents

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Researchers from Massachusetts General Hospital for Children in Boston have determined that pediatric epilepsy significantly impacts sleep patterns for the child and parents. According to the study available in *Epilepsia*, a journal published by Wiley-Blackwell on behalf of the International League Against Epilepsy (ILAE), sharing a room or co-sleeping with their child with epilepsy decreases the sleep quality and prevents restful sleep for parents.

Over 1% of children in the U.S. are diagnosed with epilepsy—a chronic, neurological disease characterized by recurring seizures. In families impacted by childhood epilepsy, both children and parents often have disrupted sleep patterns. Previous research has described a reciprocal interaction, where sleep patterns affect seizures and seizure profiles affect sleep. These prior studies have shown that sleep deprivation can trigger seizures, that sleep disorders can interfere with seizure control, and that epileptic discharge can disrupt sleep-wake cycles.

In the present study, Dr. Elizabeth Thiele and colleagues explore the impact of pediatric epilepsy on child and parental sleep quality, particularly as it relates to sleeping arrangements. Researchers included 105 households with epilepsy and 79 controls in this study. Parents of children between the ages of two and ten, with and without epilepsy, were surveyed to assess seizure history, child-parent sleep quality, and household sleep arrangements.

In this study, the mean age of seizure onset was 2.3 years, and 41% of
patients had seizures within the first year of life. In patients with epilepsy, 64% had at least one seizure within the previous month and 37% reported having daily seizures. At least one antiepileptic drug was used in 91% of pediatric participants.

"Our study determined that households with a child with epilepsy had higher rates of parent-child room sharing and co-sleeping compared to controls," said Dr. Thiele. Close to 64% of parents who reported co-sleeping did not do so prior to onset of their child's seizures, and nearly 66% did not co-sleep with the child's sibling at the same age. A decreased quality of sleep was reported in 62% of parents who were co-sleeping with their children.

Moreover, children with epilepsy had greater sleep disturbance, including awakening at night, daytime sleepiness, and bedtime resistance. Parents of children with epilepsy were also found to have increased sleep dysfunction and greater fatigue. In fact, 69% of parents felt concerned about night seizures and 44% reported feeling "rarely" or "never" rested. Results indicate that nighttime seizures were associated with parental sleep issues, while room sharing and co-sleeping were linked with child sleep problems.

Dr. Thiele concludes, "Our study demonstrates the profound impact of epilepsy on child and parent sleep patterns. The findings highlight the need for improved therapies for epilepsy and innovative nocturnal seizure monitoring technologies."
