Attention deficit hyperactivity disorder in adolescents with epilepsy

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Background
This study examined attention deficit hyperactivity disorder (ADHD) in adolescents with epilepsy and their association with seizure-related and socio-demographic variables.

Methods
Strengths and Weakness of ADHD-Symptoms and Normal-Behaviors (SWAN) rating scale was administered to 122 children with epilepsy and 50 children with asthma, aged 10-18 years attending mainstream schools.

Results
Twenty-nine (23.7%) adolescents with epilepsy compared to 5 (10%) with asthma had ADHD (P = 0.037). Adolescents with epilepsy had a significantly higher score in inattention subscale when compared with those with asthma (-0.25+ 1.2 vs -0.64 + 1.07, P= 0.049). Combined subtype was most frequent in epilepsy group. Oppositional defiant disorders were more prevalent in those having ADHD. Psychiatric service has only been provided to one-third of our patients with epilepsy and ADHD at time of study. There was a negative correlation between ADHD scores and age of seizure onset. Positive correlation was observed between the number of antiepileptic drugs and inattentive subscale score. The impact of various correlates on individual subtypes was not identical. Independent risk factors associated with ADHD were medical comorbidities (OR= 12.82, 95% CI 4.44, 37.03, P <0.0001) and age at seizure onset (OR=0.73, 95% CI 0.56, 0.94, P= 0.016).

Conclusions
ADHD is overrepresented in adolescents with epilepsy, screening for ADHD symptoms should be an integral part of management in adolescents with epilepsy.