

Self-perceived attention deficit and hyperactivity symptom levels and risk of non-migraine and migraine headaches among university students: A cross-sectional study

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Abstract

OBJECTIVES:

The aim was to evaluate the association of self-perceived levels of attention deficit and hyperactivity symptoms with non-migraine and migraine headaches among university students. We also evaluated their association with migraine aura.

METHODS:

Study subjects were all participants in the internet-based Students Health Research Enterprise. Scores were built to evaluate global attention and hyperactivity symptom levels, self-perceived attention deficit levels and self-perceived hyperactivity symptom levels based on the Adult Attention Deficit and Hyperactivity Disorder Self-Report Scale (ASRS v1.1.). We used standardised questions to classify headache and group participants into "no headache," "non-migraine headache," "migraine without aura" or "migraine with aura".

RESULTS:

A total of 4816 students were included (mean age 20.3 ± 2.8 years; 75.5% women). Compared with participants without headache, we found significant associations between global ADHD scores and migraine. Students in the highest quintile of global ASRS scores had adjusted odds ratio (aOR) of 1.95 (95% CI 1.56-2.45) when compared to the lowest. This association was mainly driven by an association between self-perceived hyperactivity and migraine with aura. The aOR for migraine with aura was 2.83 (95% CI 2.23-3.61) for students in the highest quintile of hyperactivity. No significant association was found for any attention and hyperactivity symptom level measure and non-migraine headache and between self-perceived levels of attention deficit and migraine.

CONCLUSIONS:

Among students in higher education in France, self-perceived levels of attention deficit and hyperactivity symptoms were selectively associated with migraine. The association was strongest for the hyperactivity domain and migraine with aura.