New study raises concerns about the safety of long-term ADHD medication treatment in children

FINLAND, May 14, 2025 /EINPresswire.com/ -- A recent study by the University of Turku and the University of Helsinki in Finland and the Finnish Social Insurance Institution Kela reveals that the average duration of ADHD medication for children and adolescents is more than three years. However, reliable, controlled data on the safety of marketed ADHD medicines in children are available for only one year of follow-up.

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> *Specialist in Child Psychiatry Päivi Ruokoniemi*

The use of ADHD medication has increased notably in recent years, but its long-term effects in children have not been sufficiently studied, despite years of use. A recent population-based register study found that the average duration of ADHD medication treatment for Finnish children and adolescents was over three years. In the quarter of children with the longest duration of ADHD medication treatment, the treatment lasted more than seven years.

"This is an important research opening, as the duration of long-term use of ADHD medication in children and adolescents in everyday life has only been studied to a very limited extent," says the study lead Päivi Ruokoniemi, a Specialist in both Clinical Pharmacology and Therapeutics and Child Psychiatry from the University of Helsinki.

Boys treated more often and for longer periods

The study found that both gender and the age at which ADHD medication is started have a significant effect on the duration of treatment. On average, ADHD treatment lasted just over a year longer for boys than for girls. For both genders, an early age of onset led to longer medication treatment.

The longest duration of ADHD medication was for boys who started medication at the age of 6–8 years. The median duration of their medication treatment was 6.3 years, and for a quarter of them the treatment lasted more than 9.4 years. This group was also the largest group to start ADHD medication. Boys aged 6 to 8 accounted for 32.4 percent of the study subjects.

“Our research shows that a significant proportion of young children, especially boys, are on ADHD medication for years, throughout their comprehensive school years. In this context, it is worrying that reliable research data on the safety of these medicines is only available for a follow-up period of up to one year. After all, we are talking about children at a very sensitive stage of development," says Ruokoniemi.

Studies on long-term effects lacking

The most reliable evidence for the safety of medicines comes from clinical, controlled, and randomised trials. For the regulatory approval of ADHD medications, the European Medicines Agency requires pharmaceutical companies to establish clinical safety with a study covering at least one year of follow-up.

“The long-term effects of ADHD medicines have been studied extensively in various observational and uncontrolled research settings, but these are always prone to confounding and therefore do not provide reliable information on cause-and-effect relationships,” continues Ruokoniemi.

“Due to these uncertainties, it is important that ADHD medication is only started when non-pharmacological treatments have been deemed insufficient. Even in this case, it must be ensured that both the caregiver and the child, in accordance with the child’s age and level of development, have access to sufficient information on the expected benefits and harms of the medicine and the uncertainties associated with them.”

The researchers also recommend that the need for ADHD medication that has already been started should be reviewed annually by a medical doctor.

The descriptive register study, recently published in the journal European Child & Adolescent Psychiatry, was carried out as a research collaboration between the Universities of Turku and Helsinki and the Finnish Social Insurance Institution Kela. The data used in the study was from the register of dispensations reimbursable under the National Health Insurance Scheme for the years 2008–2019. The data included nearly 41,000 children and young people who had started medication treatment in Finland. The duration of medication treatment was estimated using Kaplan-Meier survival analysis.

In 2019, the last year of the study data, the prevalence of ADHD medication was 5–6 percent for boys and 1.3–1.5 percent for girls. Since then, the use of ADHD medication has continued to increase both globally and also in Finland, where the increase has been even faster than in other Nordic countries.

“We know that the proportion of Finnish children and adolescents using ADHD medication in Finland has already doubled since the years we conducted our research," says Ruokoniemi.

The research article "Duration of ADHD medication treatment among Finnish children and adolescents a nationwide register study" was published in the journal European Child & Adolescent Psychiatry on 7 May 2025.

Päivi Ruokoniemi
University of Helsinki
email us here
