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Title **Cessation of Attention Deficit Hyperactivity Disorder Drugs in the Young (CADDY) – A Pharmacoepidemiological and Qualitative Study**

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Aim

To review current practices in treating adolescents and young adults with attention deficit hyperactivity disorder (ADHD).

Conclusions and results

Objectives: 1) To estimate the prevalence of ADHD treatments in the target population. 2) To describe the demographic and clinical details of patients in the target population who received ADHD pharmacotherapy. 3) To estimate the percent of patients in the target group who stopped ADHD pharmacotherapy. 4) To search the literature for and assess the feasibility of using appropriate quality-of-life measures in this patient population. 5) To identify the reasons for and factors related to cessation of ADHD pharmacotherapy (and effects on symptoms). 6) To interview clinicians to obtain their perceptions of the process and outcome of cessation of ADHD pharmacotherapy (and effects on symptoms).

Part 1: 983 patients (896 males, 91%) received 18 371 prescriptions during the study period. The overall prevalence of prescribing (males and females aged 15-21), increased 87.4% over the study period, from 0.26 per 1000 patients in 1999 to 2.07 per 1000 patients in 2006. The largest increase in prevalence occurred in younger patients, but the increase became less evident as patients grew older.

Treatment Cessation: Survival analysis was conducted on 845 patients who entered the analysis aged 15 between 1999 and 2006. The Kaplan Meier plot estimate of the survival function showed that when patients were 16 years of age (ie, 1 year after entering the study) 83% remained on treatment. At age 17, only 54% remained on treatment. This fell to 36% at age 18, 24% at age 19, 22% at age 20, and 17% at age 21. Of the covariates tested, gender and the year of study entry were significant in predicting treatment cessation. Regarding gender, the Cox model suggested no difference in the hazards before 6 months. However, after 6 months the hazard of a female stopping treatment was 63% less than a male. The model also suggested that the patients aged 15 years between 2004 and 2006 at inclusion were 40% less likely to stop treatment compared to patients aged 15 years between 1999 and 2003. See Executive Summary link at www.hta.ac.uk/project/1513.asp.

Recommendations

This study raises the possibility that treatment may be prematurely stopped by or for some adolescents and young adults with ADHD, and that overall the fall in treatment prevalence may be out of step with the numbers of people who still require treatment as young adults. The evidence base on the outcomes of cessation of treatment in ADHD patients is scarce. Hence, guidelines may help patients, clinicians, and families decide on an appropriate cessation strategy. Further research would be necessary to develop these guidelines.

Methods

See Executive Summary link at www.hta.ac.uk/project/1513.asp.

Further research/reviews required

An RCT would be appropriate to determine the outcomes of patients who stop treatment compared to those who do not. Such a study, if sufficiently powered, might be able to detect factors that predict which patients are more likely to have favorable outcomes.

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