

Psychoactive drug prescribing by Dutch child and adolescent psychiatrists

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Abstract

Aim: To gain more insight into the prescribing of psychoactive drugs by Dutch child psychiatrists. **Methods:** A questionnaire was sent to all child psychiatrists in the Netherlands. Questions were asked about the prescribing of antidepressants, antipsychotics, anxiolytics and psychostimulants for psychiatric disorders in children. **Results:** The preference of specific antidepressants, antipsychotics and anxiolytics depends on the disorder. For different disorders, off-label prescribing varies from 19 to 71%.

Conclusion: Preferences differ widely. Off-label drug prescribing is high. More studies on the efficacy and safety of psychoactive drugs in children are therefore required.

Key Words: *Child psychiatrists, prescribing of psychoactive drugs, off-label use, questionnaire, children*

Introduction

In the past decade the use of psychoactive drugs by children has sharply increased in Western countries [1–3]. Since only limited data of the effects of psychoactive drugs in daily practice are available and possible long-term adverse effects are not known, the increased use of psychoactive drugs has resulted in public concern. Moreover, uncertainty about the disorders and symptoms for which these drugs are prescribed has contributed to this concern. Studies on the consumption of psychoactive drugs by children are generally limited to the estimation of incidences and prevalences based on pharmacy medication records or data from insurance companies.

A recent Australian study of drug prescribing by child psychiatrists and child physicians showed that they prescribed a wide range of drugs for children [4]. Off-label use amounted to about 40%. However, at present there are only limited data on the efficacy and safety of psychoactive drugs in children.

It was the aim of the present study to gain more insight into psychoactive drug prescribing by Dutch child psychiatrists.

Methods

A questionnaire was sent to all 316 Dutch child psychiatrists registered with the Department of Child and Adolescent Psychiatry of the Dutch Society for Psychiatry in May–June 2001. After 1 mo, they received a reminder. The concept of the questionnaire was discussed with five child psychiatrists. Suggestions for changes were considered. The questionnaire was tested in a pilot study among 20 child psychiatrists.

- (1) The questionnaire contained general questions about the child psychiatrists and their practices. The child psychiatrists were asked whether drug treatment was an important element of the treatment of ADHD, depressive disorder, anxiety disorder, autism and obsessive compulsive disorder (OCD).
- (2) The child psychiatrists were asked which antidepressant they would use for the treatment of disorders that may be treated with antidepressants. This same question was asked for disorders that may be treated with antipsychotics and anxiolytics.

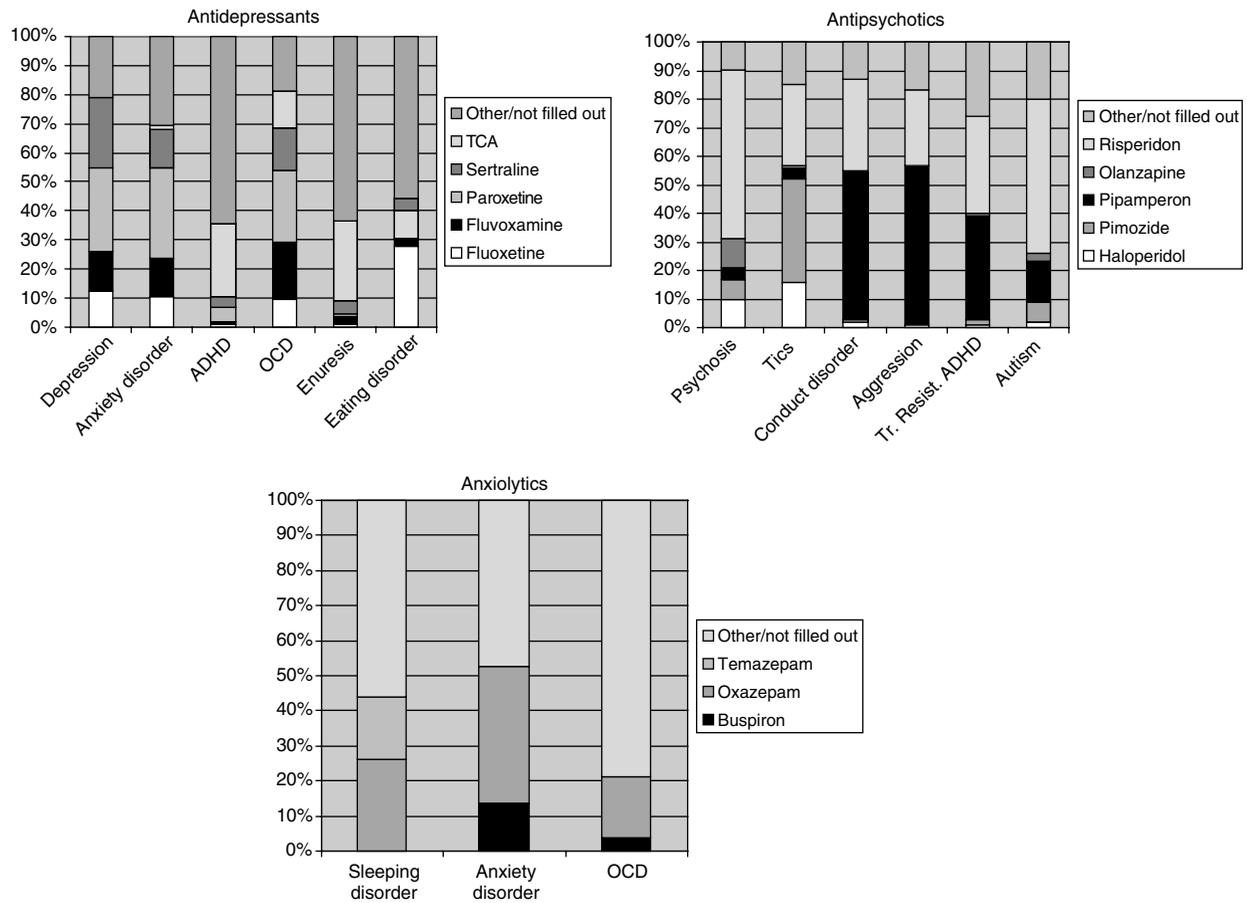


Figure 1. Percentage of child psychiatrists that prefers a specific (a) antidepressant, (b) antipsychotic or (c) anxiolytic drug for the treatment of the disorders mentioned.

(3) Questions were asked about the off-label prescribing of antidepressants, antipsychotics and anxiolytics.

Data were collected in SPSS 10.0. Calculation of frequencies was used to describe data on drug prescribing.

Results

Response and basic data of the child psychiatrists

One hundred and forty (44.3%) of 316 questionnaires were returned. Twenty-five respondents did not complete the questionnaire because they were retired or for any other reason no longer active as child psychiatrists. A study on the child psychiatrists registered revealed that a further 37 non-respondents were also no longer active as child psychiatrists. As a consequence, 115 of 254 (45.2%) questionnaires were evaluated.

The setting of the child psychiatrists was as follows: independent 23%, academic hospital 10%, ambulatory academic hospital 19%, peripheral hospital 21%,

ambulatory peripheral hospital 29%, institution 20%, and other 31%.

Psychoactive drug treatment and importance of drug treatment

For the treatment of ADHD, pharmacotherapy was considered important or very important by 91.3%. For OCD, depressive disorder, anxiety disorder and autism, these figures amounted to 67.0%, 65.8%, 30.1% and 28.9%, respectively.

Choice of antidepressants, antipsychotics and anxiolytics

Figure 1 shows which psychoactive drugs were preferred for the treatment of diseases which may be treated with a psychoactive drug. More child psychiatrists reported to have a preference for paroxetine than for the other antidepressants for the treatment of depressive disorders. Depending on the disorder, haloperidol, pimozide, risperidone or pipamperone were preferred when an antipsychotic drug was prescribed. When an anxiolytic drug was prescribed for the treatment of a sleeping disorder, primarily oxazepam and temazepam were chosen.

Off-label use of antidepressants, anxiolytics, psychostimulants and anxiolytics

In addition to depression, anxiety disorder and OCD, 82 (71.3%) of the child psychiatrists also used antidepressants for disorders such as ADHD, autism, aggression and eating disorder.

Twenty-two (19.1%) reported prescribing anti-psychotics for disorders other than those mentioned in Figure 1. These included sleeping disorder, eating disorder, impulse-control disorder not elsewhere classified, OCD and delirium.

In addition to ADHD and learning disorder, 29 (25.2%) of the child psychiatrists also prescribed psychostimulants for the treatment of autism, ADHD as co-morbidity, depression, enuresis and conduct disorder.

In addition to anxiety disorder, OCD and sleeping disorder, 34 (29.6%) of the child psychiatrists also used anxiolytics for the treatment of psychosis, autism, aggression, panic disorder, and impulse-control disorder not elsewhere classified.

Discussion

The results of the study show that Dutch child psychiatrists frequently prescribe psychoactive drugs off-label. The off-label prescribing of psychoactive drugs is based both on the expertise of the child psychiatrists and the proven efficacy of these drugs in adults (analogy-based use). It may occur more or less routinely (expertise-based use) or as a try-out when other drugs are not effective. Based on an Australian study, Efron and co-workers [4] also reported a high level of off-label prescribing of psychoactive drugs for children.

For the treatment of psychosis and autism, child psychiatrists preferred risperidone. The prescribing of this drug seems based only on the results of small, open studies [5,6]. However, recently a randomized, double-blind study indeed showed risperidone to be effective in children suffering from psychosis [7]. In 2002 the effectiveness in the treatment of behavioural symptoms in children with autism was also shown in a randomized, double-blind study [8]. A large part of the respondents prescribes haloperidol for the treatment of tics. Several placebo-controlled studies showed that both risperidone and haloperidol were effective in children [9–11]. The majority of the child psychiatrists preferred imipramine for the treatment of enuresis. This finding is in accordance with the efficacy of this drug shown in a number of studies [12].

In contrast, for the prescribing of a number of drugs, including bupropion, pipamperone and risperidone, for tics and treatment-resistant ADHD, studies supporting the use of these drugs in children are not available.

As a result of the large consumption of paroxetine by adults, a quarter to one-third of the child psychiatrists reported preferring the selective serotonin reuptake inhibitor (SSRI) paroxetine for the treatment of depressive disorder, anxiety disorder and OCD [13]. Recent warnings against the use of SSRIs and serotonin norepinephrine reuptake inhibitors (SNRIs) in children because of an increased risk of suicide show that the use of these psychoactive drugs in children may be accompanied by unknown risks. The prescribing of fluvoxamine for the treatment of eating disorder also seems to result from its effectiveness in adults [14]. The prescribing of temazepam for the treatment of sleeping disorder also seems based largely on the use of this drug for the treatment of sleeping disorder in adult patients. An evaluation of prescribing practices in Britain and a prospective study on the incidence of psychoactive drug prescribing for children have also shown that a wide range of drugs for a large number of conditions are prescribed [15,16].

Limitations

The use of a questionnaire may have resulted in socially desirable answers. In addition, it is difficult to get a very precise insight into off-label prescribing since, from some groups of drugs, only certain drugs are licensed for only certain diseases in children, e.g. haloperidol for psychosis. In addition, it is not clear whether a drug is prescribed for the treatment of a symptom, such as compulsive disorder in autism, rather than for the primary disorder.

Conclusion

Because of lack of sufficient data on the efficacy and safety of psychoactive drugs in children, the extent of off-label psychoactive drug prescribing gives considerable cause for concern. To improve this situation, more studies of the efficacy and safety of psychoactive drugs in children should be performed. In addition, a study of how child and adolescent psychiatrists prescribe drugs is required.

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