

Use of antipsychotics by child and adolescent psychiatrists

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Aims and methods A postal questionnaire of Trent Region's consultant child and adolescent psychiatrists was used to investigate the two-year period prevalence rates of antipsychotic medication prescription, and the ICD-10 psychiatric disorders it was used to treat.

Results The response rate was good (92.3%) and 78% of respondents had prescribed antipsychotic medication for a range of conditions over the period, albeit very infrequently. Antipsychotics were used for a range of psychotic and non-psychotic disorders. The older antipsychotic agents (thioridazine, chlorpromazine and haloperidol) comprised the bulk of prescriptions. Newer, atypical, antipsychotics were prescribed only four times over the period and no patients in residential in-patient units received this form of treatment.

Clinical implications These results highlight a pressing need to address antipsychotic prescribing in children and adolescents and, especially, the role of new antipsychotic drugs.

Since the relaunch of clozapine in the UK in 1990, a number of new 'atypical' antipsychotics (risperidone, olanzapine and sertindole) have been developed. There is now good evidence from randomised clinical trials (RCTs) in adults that these drugs are at least as effective as traditional antipsychotics, while carrying a reduced risk of extrapyramidal symptoms (EPS) and possibly tardive dyskinesia (Kerwin, 1994, 1996). Most evidence for the benefits of atypical antipsychotics in the treatment of childhood-onset schizophrenia comes from case series (Birmaher *et al.*, 1992; Mozes *et al.*, 1994). However, one recent RCT (Kumra *et al.*, 1996) showed the benefits of clozapine over haloperidol in treatment-resistant childhood-onset schizophrenia.

Schizophrenia in children and young adolescents is a severe disorder, associated with a chronic course and poor outcome using traditional treatments (Green *et al.*, 1992). Young people have a higher risk of developing EPS and tardive dyskinesia with traditional antipsychotics (Campbell *et al.*, 1983), while being less responsive to the antipsychotic effects (Leiberman *et al.*, 1994). These features suggest that the new atypical antipsychotics could offer important therapeutic advantages in children and adolescents. However, the paucity of clinical

trials in this age group means that clinicians must extrapolate from research and clinical experience in adults. A reluctance to use new antipsychotics in children and adolescents may also stem from drug company datasheets which state (because of a lack of clinical trial data rather than adverse effects) that these drugs are "not recommended" for children or patients under the age of 15.

We decided to investigate the impact of the new antipsychotics on the prescribing practices of a representative sample of consultant child and adolescent psychiatrists over a two-year period. We aimed to answer three specific questions: What proportion of child and adolescent psychiatrists prescribe antipsychotic medication, and for which conditions are they used? What proportion of antipsychotic prescribing involves the new atypical drugs? What are child psychiatrists' attitudes towards the use of antipsychotics and their reasons for non-prescribing?

The study

Our study sample was based on the 39 consultant child and adolescent psychiatrists employed in the Trent Region in January 1997. Trent Region has a population of over five million and includes Derbyshire, Leicestershire, Lincolnshire and South Yorkshire. In addition to out-patient and day-patient services, there are four adolescent in-patient units.

A retrospective postal questionnaire survey design was used to enquire about the consultants' use of antipsychotic medication over a period of 24 months from January 1995 to December 1996. A brief eight-item questionnaire was constructed to cover three broad areas: clinical contact with psychotic cases, the use of antipsychotic drugs and attitudes towards prescribing. Consultants were asked about the number of psychotic patients they had seen over the previous two years in ICD-10 categories F20-29 and F30-39. Consultants were also asked to list all non-psychotic cases for whom they had prescribed antipsychotics over the same period. The list of antipsychotic drugs was taken from section 4.2 of the *British National Formulary*

(Number 32 (1996)). Additional questions addressed the consultants' attitudes towards prescribing and reasons for non-prescribing, and their views concerning the need for further training in this area.

Findings

There was a 92.3% response rate (36/39). The results are grouped in the three main areas of enquiry. Over a two-year period, 64% ($n=23$) of consultants had contact with at least one psychotic case (range of one to 12 cases, with a median of one case per consultant): 78% ($n=18$) of these consultants prescribed antipsychotic medication. Over a third of all consultants (36%) had contact with at least one case of childhood-onset schizophrenia. Overall, 58% ($n=21$) of the consultants had prescribed antipsychotics, with 50% ($n=18$) prescribing for psychoses, and 30% ($n=11$) prescribing for non-psychotic conditions (five consultants prescribing for Tourette's syndrome, and four prescribed for conduct disorder or learning disability). A very small minority of the prescribing consultants ($n=3$) used antipsychotics exclusively for non-psychotic conditions.

Table 1 shows that thioridazine was the drug prescribed by the largest number of consultants (39%), while only four consultants (11%) reported using a new atypical antipsychotic. None of the respondents had used clozapine. None of the four residential in-patient units reported using the new atypical antipsychotics.

Table 2 shows that the principal reasons for non-prescribing were "lack of suitable cases" or "lack of opportunity". Only one consultant said that they never use medication, and no one mentioned lack of efficacy or problems with side-effects. For the five consultants who had contact with psychotic cases but did not prescribe, three cited immediate transfer to an in-patient facility as the reason, while one consultant asked a colleague to prescribe.

Table 1. Child psychiatrists' choice of antipsychotics for psychotic disorders

Drug	n	%
Thioridazine	14	38.9
Chlorpromazine	10	27.8
Trifluoperazine	8	22.2
Sulpiride	7	19.4
Haloperidol	5	13.9
Zuclopenthixol	3	8.3
Risperidone	3	8.3
Flupenthixol	1	2.8
Olanzapine	1	2.8
Clozapine	0	0.0

Several consultants used more than one drug.

Table 2. Reasons for child psychiatrists' ($n=18$, 50%) non-prescription of antipsychotics

Reason for not prescribing	n	%
No suitable patients	10	55.6
No opportunity	4	22.2
Other reasons	2	11.2
Never use medication	1	5.6
Not stated	1	5.6
Unconvinced of efficacy	0	0
Too many side effects	0	0
Unpredictable actions	0	0

Several consultants cited multiple reasons.

When asked to give a view on the national picture of antipsychotic use in child and adolescent psychiatry, most respondents believed that they were either under used (36.6%, $n=13$), or used to an appropriate degree (27.8%, $n=10$). None of the respondents believed that antipsychotics were over prescribed in this age group. Finally, 61% ($n=22$) of the surveyed consultants requested more training in the use of antipsychotic medication, in particular with the new and atypical antipsychotics.

Comment

The high response rate of 92% enabled us to obtain a representative sample of consultant child and adolescent psychiatrists working in a large region of central England. Overall, just over half of the consultants in our sample had prescribed antipsychotics. This is in line with the findings of James (1996) in Oxford. Almost two-thirds of the consultants in our sample had contact with psychotic cases and, of these, about 80% had prescribed antipsychotics. A third of consultants had prescribed antipsychotics for a spectrum of non-psychotic disorders. While the use of antipsychotics in Tourette's syndrome is recognised practice, some clinicians were also using them for conduct disorder, learning disabilities and in very young children.

The great majority of prescribing consultants used traditional antipsychotics, with thioridazine being the most popular choice, possibly because of its tendency to produce fewer EPS than other traditional antipsychotics. The new atypical antipsychotics were only prescribed by four consultants, all of whom worked in non-specialist out-patient clinics. We were surprised that none of the four in-patient adolescent units had used either clozapine or any of the other new atypical antipsychotics. A similar picture of low use of new antipsychotics in an adolescent in-patient unit was reported by Lowe *et al* (1996). Given the increasing interest in new antipsychotics and the recent launch of several new

compounds it would be important to know if prescribing practices were changing, albeit from a low baseline rate. Our data did not allow us to examine whether the use of new atypical drugs had changed over the two-year study period. However, we are currently conducting a prospective survey of the same sample which will allow us to determine if there has been any change in the use of new antipsychotics since our initial baseline survey described here.

It appears that the relatively low frequency of prescribing for each child psychiatrist makes it difficult to develop confidence and experience in the use of the new antipsychotics. Our results suggest that lack of clinical experience and training in psychopharmacology are more important reasons than a lack of published research evidence, or ideological resistance, for the infrequent prescribing of new antipsychotics by child and adolescent psychiatrists. The lack of use of new antipsychotics in adolescent inpatient units is a matter of concern, particularly if adolescents with severe, early-onset schizophrenia are being denied the potential benefits of new atypical antipsychotics.

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Changes in practice of ECT: a follow-on study

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Aims and method A retrospective case note study examining the effects of increased supervision on practice of electroconvulsive therapy (ECT).

Results Increasing the level of supervision of ECT sessions was associated with patients receiving on average almost two fewer treatment applications per course of ECT.

Clinical implications The risk of treatment is reduced because patients receive fewer anaesthetics, and they

may be discharged home sooner. Such improvements in ECT practice should be relatively easily achievable in many ECT clinics.

In a previous study (Trezise & Conlon, 1997), changes in practice of electroconvulsive therapy (ECT) over two successive years, before and after replacement of an Ectron Series 5 ECT machine