Increased prescribing trends of paediatric psychotropic medications

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IMy MIDAS Prescribing Insights is an audit drawn from a representative sample of medical practitioners in each country; table 1 summarises the details of data collection of each country. The prescribing data of sampled doctors were then adjusted according to the stratifications, and a projected national total of prescriptions data per year and 95.5% confidence intervals were calculated for each country. The within country differences of the data between years 2000 and 2002 were compared for significance.

RESULTS
Figure 1 shows that the number of psychotropic prescriptions for children has risen between the years 2000 and 2002 in all nine countries, and seven have shown a significant increase. The UK has the highest percentage increase (68%); the lowest was Germany (13%).

DISCUSSION
The results suggest that the increase in psychotropic prescribing in children is not only confined in the USA and UK but is also evident in other countries. The increase probably represents the improved recognition of paediatric psychopathology; there is also a concern that drugs are being used to replace non-drug treatments. However, there is insufficient research to confirm or refute the above suggestions. There are limitations to our data, especially as there is no information on the average prescription duration by drug or frequency, which may differ between years due to changes in prescribing practice. However, the observed increase in so many countries should raise concern, as little research has been conducted in children to study the effects of most psychotropic medications.

Table 1  Method of data collection in each country

<table>
<thead>
<tr>
<th>Countries by continent</th>
<th>No. of doctors involved in data collection</th>
<th>Stratification of sampling</th>
<th>Reporting time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>835</td>
<td>Region, age of doctor, community size, activity level, sex of doctor, environment (typology of areas)</td>
<td>7 consecutive days per quarter</td>
</tr>
<tr>
<td>Germany</td>
<td>2806</td>
<td>Region, specialty, community size</td>
<td>7 consecutive days per quarter</td>
</tr>
<tr>
<td>Spain</td>
<td>850</td>
<td>Region, specialty, community size</td>
<td>7 consecutive days per quarter</td>
</tr>
<tr>
<td>UK</td>
<td>500</td>
<td>Region, year of doctor qualification</td>
<td>Daily throughout year (computerised GP records)</td>
</tr>
<tr>
<td>South America</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>470</td>
<td>Region, specialty</td>
<td>7 consecutive days per quarter</td>
</tr>
<tr>
<td>Brazil</td>
<td>1155</td>
<td>Region, specialty</td>
<td>5 consecutive days</td>
</tr>
<tr>
<td>Mexico</td>
<td>1050</td>
<td>Region, specialty</td>
<td>Minimum of 4 consecutive days and maximum of 6 per quarter</td>
</tr>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>1227 physicians report per month, 3678 physicians report per quarter</td>
<td>Two staged stratified cluster, randomly drawn</td>
<td>2 consecutive days per quarter</td>
</tr>
<tr>
<td>Canada</td>
<td>652</td>
<td>Region, specialty</td>
<td>2 consecutive days per quarter</td>
</tr>
</tbody>
</table>
The recent recommendation by the Medicines and Healthcare products Regulatory Agency to withdraw selective serotonin inhibitors (SSRIs) from the treatment of paediatric depressive disorders should serve as a lesson to all of us. The percentage of SSRI prescriptions from all antidepressants prescriptions issued to children and adolescents in the UK increased considerably between 1992 and 2001; it is probable that the rationale for drug choice is not based on the research evidence in children, but based on the evidence in adults. This highlights an important point which paediatric clinical pharmacologists and pharmacists always advocate—"children are not small adults".

Certainly we need more well designed clinical trials to investigate the safety and efficacy of psychotropic medications in children; it is also necessary to study how and why these medications are being prescribed, through the application of pharmacoepidemiology. We believe the use of psychotropic medications in children is a global public health issue, which should be studied in partnership with pharmaceutical companies, governments, and researchers to grow and expand the evidence base for their use in children. Children should not be deprived of safe and efficacious treatments.

ACKNOWLEDGEMENTS
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REFERENCES
Let us consider the following steps:

1. When investigating potential abuse, it is important not to assume guilt based on initial suspicions.
2. It is crucial to have multiple sources of evidence before making a diagnosis.
3. Misinterpretation of medical evidence can lead to wrong conclusions.
4. It is necessary to consider all possible explanations, including scenarios that might not involve abuse.
5. When making a diagnosis, it is important to consider all available evidence and the perspectives of those involved.

In conclusion, it is essential to approach diagnostic processes with an open mind and a commitment to due diligence. By doing so, we can minimize the risk of making erroneous or harmful judgments.

Reference:
Taking a history

In reading this piece and the published response concerning the merits of personal interviews in child protection cases, I was struck by the sentence introducing the topic which reads: “Most paediatricians would not dream of giving a clinical opinion without taking a history”.

Accordingly this week I kept a diary of clinical opinions given. It was a quiet week “off service”—there were only 47: 24 on rounds, 9 in clinic, and 14 by phone, letter, or email. Among these, I met the child and parents and exchanged words with them in only 10. I took a history myself in only 7. I do infectious diseases and immunology, not child protection, but I reckon this is how consultants work in all areas.

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Reply by Dr John C Furness

Should expert witnesses interview parents?

Professor David’s article1 was in the main a helpful guide to those involved in this specialised work. I wonder how many of the readers are involved in this sort of work?

As a recently qualified general paediatrician I was surprised to read his recommendation that expert witnesses should interview the family. In the few child protection cases that I have been involved in as a witness to the fact, colleagues acting as expert witnesses have not interviewed the family. They have restricted themselves to their expert opinions on specific questions of medical knowledge that the legal teams have felt would be helpful to clarify. I read that other expert witnesses agree.2

I was also surprised to read Professor David’s views without a response from those who have differing opinions, especially as he is intimately involved in Professor Southall’s controversial General Medical Council hearing. I do trust that you will uphold the essential principle of good journalism and allow an open debate on this issue with equal prominence to differing views.

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References


BOOK REVIEW

Medical management of AIDS in children


Where would you get advice on how to manage a child with HIV? From a textbook like this, from the internet, or would you phone-a-friend? Paediatricians in the UK are increasingly likely to see children infected with, or affected by, HIV. Reasons for this include an increasing number of children with HIV and antenatal screening for HIV, which is identifying increasing numbers of infants at risk of mother to child infection. Most of these children will live in the London area, but 25% are now living in other parts of the UK. Paediatricians thus need information to help them manage these children. This book will provide some useful background information on HIV and about its specific complications. However it may be less valuable in managing children presenting acutely to hospital.

The three commonest reasons for paediatricians calling me for advice about HIV are: initial diagnosis and treatment; indications for antiretroviral therapy; and management of infants born to HIV positive mothers.

Diagnosis and initial treatment

This book contains little information about the issues involved in testing children for HIV, such as consent and confidentiality. These are probably outside the scope of this book, but essential for paediatricians to understand. These issues are well covered by a document on the Children’s HIV Association of UK and Ireland (CHIVA) website (www.chiva.org.uk/chiva).

Children with HIV may present with a variety of other infections. The chapter on infectious complications of HIV covers many of these. However, again the information on managing children with HIV with fever, respiratory illness, or diarrhoea on the CHIVA website will be of more immediate use to paediatricians.

Antiretrovirals

When to start antiretrovirals and what drugs to start remains controversial. The increasing number of drugs available will make any textbook out of date, almost as soon as it is published. This is probably the case here where newer agents, like tenofovir, are not mentioned. This book also reflects the American view that almost all children with HIV should be on anti-retroviral treatment. The European view of more selective treatment and more up to date information on the drugs available is available from the Paediatric European Network for Treatment of AIDS (PENTA), available at www.ctu.mrc.ac.uk/penta/ or accessed via the CHIVA website.

Infants born to HIV positive women

The book does have a good review of the history and methods of preventing mother to child transmission of HIV. This provides excellent background to this topic. However more practical information for managing these babies is provided in the British HIV Association (BHIVA) pregnancy guidelines, available at www.bhiva.org.

I found the chapters on HIV in the central nervous system and gastrointestinal system very useful. I have already shared these with colleagues in child development centres and dieticians. Other organ specialists and members of the multidisciplinary team looking after children with HIV, would find other specific chapters helpful. The chapter on palliative care was particularly moving, encouraging those in this field to have humility and perseverance.

My main criticisms of the book were that it was too focussed on practice in the United States (not surprising when all the authors work there) and missed some recent developments. If a second edition is planned I hope it will include reference to the landmark HIV Paediatric Prognostic Markers Collaborative Study,3 recognise that the organism that causes PCP is now named Pneumocystis jiroveci (not P carinii), and have some authors from outside the USA.

I would recommend that this book is available in every paediatric department who might see children with HIV. However it would be even more important for these units to have access to the guidelines on the CHIVA website and to have access to an expert in paediatric HIV. The establishment of managed clinical networks for paediatric HIV across the UK, as has already occurred in London, should improve this.

A Riordan

CORRECTION


doi: 10.1136/adc.2004.035046corr1

1. C K Wong, M L Murray, D Camilleri-Novak, et al. Increased prescribing trends of paediatric psychotropic medications (Arch Dis Child 2004;89:1131–2). The footnote for figure 1 in this short report was published incorrectly and should read “USA data is by ten thousand prescriptions”. The authors apologise for the error.

NOTICE

doi: 10.1136/adc.2004.034785corr1

Competing interest statement

Johnston LB, Savage MO. Should recombinant human growth hormone therapy be used in short small for gestational age children? Arch Dis Child 2004;89:740–4. The following statement accompanies this paper:

Competing interests: Dr Pelton has acted as an expert witness regarding the outcome of bacterial meningitis during the last 5 years.

www.archdischild.com