

edged that our sample did not include intensive care units (PICU) or rehabilitation wards (although, one hospital did not have a PICU). There may also be subtle methodological differences between the studies, for example, in calculating as-required doses.⁸

A more significant factor may be the introduction of various national guidelines, most notably by NICE. One aim of NICE is to reduce inappropriate prescribing variation⁹ and ensure an evidence-based approach to disease management. Our survey was completed three years after the NICE guidance on the use of newer antipsychotic drugs for the treatment of schizophrenia,² which effectively recommends atypicals for schizophrenia as do the British Association of Psychopharmacology (BAP) guidelines for bipolar disorder.¹⁰ Only two hospitals approach compliance with these guidelines in the use of atypicals. There is obvious variation in as-required prescribing that could be reviewed by analysing policies and the ward environment.

While co-prescription of antipsychotics still remains common it does not always result in supra-BNF doses. In the majority of cases, this prescribing combines an atypical with a typical agent. In the two hospitals with the lowest atypical prescribing rates, typical/typical combinations were common. Dual prescription is often seen as poor prescribing although there is some evidence that outcomes may not be as compromised,^{11,12} as has been suggested.¹³

Formularies were in operation at all hospitals except hospital two, which, paradoxically, appears to have the narrowest range of prescribing. The formularies at the other hospitals were

broad and should not have impeded the prescribing of atypical antipsychotics. The range of drugs prescribed has economic implications as there are likely to be wastage and storage problems if drugs are intermittently prescribed.

A limitation of this prescribing survey is that while we have identified significant variation in prescribing practice, we do not have data that may further facilitate its interpretation. We cannot ascertain if patients suffer more adverse incidents when receiving polypharmacy or whether polypharmacy reflects significant variation in patient complexity that is not evident on comparison of basic demography. Ito *et al.*¹⁴ noted that basic demographic features, use of physical restraint, legal status, and admission and Global Assessment of Function (GAF) score did not appear to influence prescribing. However, at discharge, poor functioning (GAF score) and severity of illness did. In our study we do not know if 'better prescribing' (defined as following NICE or BAP) results in shorter admissions, increased patient satisfaction and better clinical outcomes. However, later local audits have suggested a positive association.¹⁵

There are other potential reasons for variations in prescribing practice. We did not collect data on the prescriber. Variables such as age, experience and qualifications might reasonably be expected to influence prescribing decisions although Ito *et al.*¹⁴ reported that this was not the case. However, they did note that a clinician's view of algorithms was a significant predictor of prescribing behaviour; with high-dose prescribing being associated with unwillingness to accept the validity of algorithms. Also, hospi-

ABBREVIATED PRESCRIBING INFORMATION (Please consult the Summary of Product Characteristics (SPC) before prescribing Equasym XL® 10mg, 20mg and 30mg modified-release capsules, hard. **Active Ingredient** Methylphenidate Hydrochloride 10mg, 20mg or 30mg. Also contains 45g 90mg and 135mg sucrose. **Uses:** Attention-deficit hyperactivity disorder (ADHD) in children over 6 years, part of a comprehensive treatment programme under supervision of a specialist in childhood behavioural disorders. **Dosage and Administration:** **Children (over 6 years and adolescents):** New patients: Careful dose titration necessary at the start of treatment with methylphenidate. For Equasym XL begin with 10mg before breakfast, increasing the dose as necessary. **Patients currently using methylphenidate:** 20mg Equasym XL = 10mg methylphenidate at breakfast and lunchtime. Doses above 60mg daily are not recommended. Equasym XL capsules can be administered either intact or the capsules may be opened and the contents swallowed immediately after sprinkling onto soft food such as apple sauce followed by a drink. The capsules or their contents must not be crushed or chewed. A small evening dose of immediate-release methylphenidate may be given if the effects wear off too early in the evening if it is known that an additional late dose was also required for conventional immediate release regimen at equivalent breakfast/lunchtime dose. **Adults:** Not applicable. **Contraindications, Warnings etc.:** **Contraindications:** Hypersensitivity to methylphenidate or to any of its excipients; marked anxiety, agitation or tension, glaucoma, hyperthyroidism, thyrotoxicosis, severe angina pectoris, cardiac arrhythmia, severe hypertension, heart failure, myocardial infarction, severe depression, psychotic symptoms, psychopathological personality structure, history of aggression, suicidal tendencies, drug dependence or alcoholism, in combination with non-selective, irreversible monoamine oxidase inhibitors (MAOI) (also within 14 days of discontinuation of non-selective irreversible MAOIs), motor tics, tics in siblings or family history of Tourette's syndrome, during pregnancy. **Warnings:** Not for use in children under 6 years of age, for severe depression or normal fatigue states. May exacerbate symptoms in psychotic children. Chronic abuse can lead to tolerance and dependence with abnormal behaviour. Frank psychotic episodes can occur. The likelihood of addiction in later life should be monitored. The choice of treatment should be determined on an individual basis with particular consideration to symptom control in the latter part of the day. **Precautions:** Equasym is not indicated in all cases of ADHD, detailed history and clinical evaluation necessary. Monitor weight, growth, blood pressure, blood counts and platelet counts during long term use. Not to be taken by emotionally unstable patients, patients with epilepsy and anorexia nervosa. Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrose-isomaltase insufficiency should not take Equasym XL. Women of childbearing potential should use effective contraception. Supervise drug withdrawal. **Interactions:** MAOIs, phenobarbital, phenytoin, primidone, tricyclics and SSRIs, coumarin anticoagulants, clonidine and other alpha-2 agonists, haloperidol, thioridazine, guanethidine, halogenated anaesthetics, alcohol. **Pregnancy and Lactation:** Methylphenidate is contraindicated in pregnancy and should not be used by breast feeding mothers. **Driving etc.:** Caution is advised when driving, operating machines or engaging in other potential hazardous activities. **Adverse Effects:** Very common: Nervousness, insomnia. Common: Arrhythmias, palpitations, tachycardia, abdominal pain, nausea, vomiting, dry mouth, changes in blood pressure and heart rate, decreased appetite and reduced weight gain, arthralgia, dizziness, drowsiness, dyskinesia, headache, hyperactivity, abnormal behaviour, aggression, agitation, anorexia, anxiety, depression, irritability, alopecia, rash, pruritus, urticaria. Consult SPC in relation to other side effects. **Pharmaceutical Precautions:** Store in the original container. **Legal Category:** CD (Sch 2) POM. **Product Licence Numbers:** PL 00039/0528 (10mg); PL 00039/0529 (20mg); PL 00039/0530 (30mg). **NHS Cost:** (for 30 capsules): 10mg: £25.00, 20mg: £30.00, 30mg: £35.00. **Date of Revision:** July 2006. **Name and Address of PL Holder:** UCB Pharma Ltd., 208 Bath Road, Slough, Berkshire SL1 3WE. **Tel:** 01753 534655. **Email:** medicalinformationuk@ucb-group.com. Further information is available on request. Equasym XL is a registered trade name.

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