Editorial

Extended prescribing rights – the UK experience

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(Aust Prescr 2009;32:118–9)

We are not doing too well with the prescribing of medicines in Britain. A recent review of the best evidence for the Royal Pharmaceutical Society of Great Britain (RPSGB)[1] found errors at each step of medicines use. There is an error rate of 7.5% in primary care prescribing, 2.6–5.2% of prescriptions are not taken to the pharmacy, and 3.3% of prescriptions are incorrectly dispensed. Non-adherence by patients with a chronic condition is 30–50%, and 72% of medicines are not reviewed for more than a year. Around 4–5% of hospital admissions are due to avoidable adverse events from medicines. On admission 58% of patients have discrepancies in their medicines and the inpatient prescribing error is 1.5–9.2%. After discharge and a subsequent prescription, around half of patients have unintentional discrepancies in their medicines. Following outpatient visits, 5% of prescribed items are not added to the general practitioners' records and doses are not recorded in 13% of consultations.[1]

Access to medicines is another issue; it is heavily controlled by regulation. Patients may suffer unnecessarily, or go long periods without treatment because they cannot get to a doctor who can write them the prescription they require.

The question is, could we improve prescribing quality and access for patients by extending prescribing rights to other professional groups – or would it make matters worse?

In this issue …

Renal disease reduces the production of erythropoietin by the kidneys. If patients then develop uraemic anaemia, Simon Rogers says they will benefit from treatment with a recombinant erythropoietin.

Renin is also produced by the kidney. Duncan Campbell and Karen Duggan explain how new drugs which inhibit renin can help in the management of hypertension.

The management of childhood coughs and colds may involve the use of over-the-counter medicines. Valerie Sung and Noel Cranswick question whether these products are of any benefit.

Iodine is found in over-the-counter antiseptics, but is rarely a cause of allergy. Connie Katelaris and William Smith also dismiss iodine as the cause of seafood allergy.

In answering this, we need first to differentiate, as has been done in the UK, between prescribing that follows a diagnosis and agreed clinical management plan (called, unhelpfully, supplementary prescribing in the UK) and the combined act of diagnosis and prescribing (called independent prescribing in the UK).

The drive to extend prescribing rights in the UK came predominantly from nurses. They conducted a large, politically adept campaign which was aided by the public's perceptions of nurses' skills, by role extension in the USA, and by examples of problems such as district nurses being unable to prescribe dressings when on a home visit. Pharmacists were more cautious, but their expertise in the management of medicines led to them being offered extended prescribing rights. Supplementary (originally called dependent) prescribing rights were introduced in 2003 and were followed by independent prescribing rights in 2006. The new prescribers work as part of a team with the doctor, in primary and secondary care, but they are legally responsible for their own prescribing. They have access to, and contribute to, the patient's medical records.

Supplementary prescribing by nurses and pharmacists has recently been evaluated jointly by the Universities of Sheffield, Nottingham, Flinders and South Australia.[2] The evaluation, which included primary and secondary care, is positive and provides interesting data. In 2007, after consultations around 20 minutes long, nurses prescribed 9.3 million items and pharmacists 64 883 items (around 1% of primary care prescribing). Of the pharmacists surveyed, most (60%) prescribed cardiovascular medicines while the largest category of nurse prescribing (46%) was for infections. Interviews found that health professionals generally liked supplementary prescribing and thought it safe. Case studies showed that patients found nurses and pharmacists easier to talk to than doctors. The main evaluation of independent prescribing, by Keele and Southampton Universities, is expected later this year.

If Australia widens the range of prescribers, it can avoid our errors and draw on our experiences of education (details of training can be found on the RPSGB website[3]). Currently nurses and pharmacists have common training, some of which, such as pharmacology, the pharmacists find very simple – separate training will probably work better. What is more, some nurses want specific prescribing skills and resent having to learn a

wider curriculum. The skills of the doctors providing training should also meet minimum standards. The doctors should be centrally funded for this role (at present in the UK nurses and pharmacists sometimes have to pay for themselves, or defer training until one of the small number of bursaries becomes available). In some states in the USA, pharmacists are certified by the same board as physicians, which aids local acceptability.

Overall, there is a clear rationale to extend prescribing rights. While it needs continued evaluation, where it has been introduced it seems to have improved access, been liked and, on the evidence of a small number of case studies, been effective. Extending prescribing rights is also logical. The burden of knowledge associated with medicines is vast and expanding, so it makes sense to share the task of prescribing while retaining an integrated system of care.

The role of the doctor is in a transition akin to that which theatre went through in the last century. The doctor's role has been like that of the great Victorian 'actor-managers' – controlling the whole show, making all the key decisions and being centre stage in the action. Medicine is getting too complex for that model to survive. Doctors should move to the equivalent of the theatre director of today. They can set direction, strategy and priorities, working with teams of colleagues, including non-medical prescribers.

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Letters

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Warfarin pharmacogenetics

Editor, – Dr Martin has comprehensively reviewed the genetic and environmental factors contributing to the large inter-individual variability in warfarin requirements (Aust Prescr 2009;32:76–80). These factors explain about 50% of such variability which is quite impressive considering that for most drugs, 100% of the dose variability cannot be explained. It is very unlikely that additional genetic factors will be uncovered, as whole genome association studies have clearly identified CYP2C9 and VKORC1 genotype as the major genetic contributors to dosage requirements with a very small contribution by CYP4F2.[1] Other factors that need to be considered are drug-drug interactions, medication adherence, psychosocial factors and the less than optimal system of care for people prescribed warfarin.[2]

The Food and Drug Administration in the US refers to the genetic factors (CYP2C9 and VKORC1) which influence dosage requirements in the product information for warfarin, but Medicare and Medicaid will not pay for the genetic test (except as part of clinical trials) because of insufficient evidence of benefit. There is clearly a need for large scale prospective studies, including pharmacoeconomic studies, before any decisions are made to incorporate genetic testing into best practice guidelines.[3]

In Australia, the situation is complex as some pathology services already advertise the test, but there are no known large prospective multicentre trials being conducted to determine feasibility, interpretation, dosage recommendations and cost-benefit. It is timely that this be done so that Australia, with its different spread of ethnicities and diets, can contribute to the evidence and importantly, that Australian-based cost-benefit analyses and dosage recommendations can be made to determine whether or not warfarin genetic testing should become part of treatment guidelines.

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