Editorials

Pharmacy:

finally part of the team?

THE ISSUE

Few changes in pharmacy hit the national news headlines but a recent announcement by the BBC on 17 March reporting that the Royal College of General Practitioners (RCGP) had recommended that GPs should work more closely with pharmacists based in their surgeries drew considerable interest.

Should we be surprised? Was it because the proposal was from a profession that has long held turf wars with pharmacists over the right to dispense, or was it because many of the public still view pharmacists as a profession that dispenses prescriptions rather than a profession able to give clinical advice?

THE HISTORICAL CONTEXT

The last few decades have seen a steady change in the roles of pharmacists and the settings in which they work. To some extent this has paralleled the development of advanced practice and extended roles in many of the other non-medical healthcare professions; this is often perceived to have been driven by increasing pressures on traditional healthcare teams.

Which came first, the chicken or the egg? Are these new roles based on rigorous evidence of improved outcomes or are they due to the aspirations of professions whose training has become increasingly academised? Pharmacy and nursing are perhaps the two professions whose roles have changed most; they became all-graduate professions in 1967 and 2013 respectively. Graduates qualified with ambition and skills that were exploited in innovative ways, which gradually diffused into mainstream practice; in some cases these *de facto* extended roles resulted in *post hoc* legislative and regulatory changes, for example, the introduction of non-medical prescribing, which followed the second Crown report in 1999.¹ A recently published systematic review² suggests that, in general, these extended roles are associated with good patient outcomes and high satisfaction.

Reflecting specifically on pharmacy, it is pertinent to think back to 1986 and the Nuffield Committee of Inquiry into the profession. The report of that inquiry³ was one of the earliest influential policy papers to highlight that pharmacy could play a 'unique and vital role' in provision of health care in the community; it included a list

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of areas for development and specifically recommended that pharmacists and general medical practitioners should collaborate to improve the effectiveness and efficiency of prescribing.

Since then there have been successive policy papers from devolved governments seeking to use the untapped healthcare resource within pharmacy to address, at least in part, the capacity issue in primary care. This has mirrored the profession's continued ambition for pharmacists to move away from an increasingly redundant compounding role and an increasingly automated supply role, to one in which their clinical knowledge of medicines becomes their purpose, and they are integrated with the wider healthcare team.

Approximately one-quarter of the undergraduate pharmacy course is on pharmacology and therapeutics, more than in other health care-related courses. The value of this knowledge has been increasingly recognised as pharmacotherapy has become more complex, and the clinical and cost-effectiveness of prescribing is scrutinised ever more closely. In hospitals, the clinical pharmacy role has been established for many years, and it is now time for this to be the case for primary care too.

FROM POLICY TO PRACTICE

Reports of pharmacists working closely with medical colleagues in their primary care setting started emerging in the mid-1990s. One of the earliest was the Downfield project in Dundee when a GP employed two clinical pharmacists from the local hospital to run clinics, for example, for patients on anticoagulants⁴ or peptic ulcer disease, with reported improvements in patient outcomes. This led to a wave of similar small-scale projects being reported in the professional press and academic journals, and ultimately practice pharmacists, sometimes known as primary care pharmacists, being accepted as a discrete sector of the profession.

REVIEW OF THE EVIDENCE

However, in an evidence-based healthcare system is this use of pharmacists underpinned by good data? The authors of an early systematic review of the role,⁵ which included 16 randomised controlled trials, suggested that practice-based pharmaceutical services may be effective, but studies were methodologically weak and more research was needed to confirm whether such services were effective, efficient, or sustainable. Despite this, the numbers of pharmacists in prescribing support roles, either employed by local NHS organisations or more significantly by GPs, continued to increase.

As the volume of the evidence base has increased, results were initially inconclusive with respect to patient benefit. A review of interventions to improve polypharmacy in older people showed reductions in inappropriate prescribing but questioned their clinical significance.⁶ Researchers speculated that sometimes disappointing results could be attributed to use of inappropriate outcome measures, such as those unlikely to be affected by the intervention; for example, is a generic quality-of-life measure really likely to be changed by improved medication management for one condition, in a patient with multimorbidity? Can reduced mortality rates be demonstrated in the short timescale of most research projects? Furthermore, were interventions actually being targeted at patients with an identified need or were patients included who were already optimally managed? How consistently were interventions delivered and to what extent were GPs involved in intervention development? Finally, many studies evaluated prescriber-facing roles in which pharmacists undertook note-based medication reviews with advice fed back to the GP. Despite reporting that GPs agreed with the majority of suggested changes, it was not always clear that the advice was translated into changes for the patient. However, with the advent of pharmacist

prescribing, and reflecting increasing trust and further workload pressures, pharmacists are now increasingly running their own clinics with some limited evidence of benefit, for example, in chronic pain.⁷

No research is wasted. Learning from the earlier work, more recent studies have confirmed that pharmacists are key players in improving the safety and effectiveness of prescribing. The PINCER⁸ study showed that a pharmacist-led, information technology-based intervention is an effective method for reducing a range of medication errors in general practice, when patients on known high-risk prescribing regimens are targeted. Similarly, a cluster, randomised trial for patients with established heart disease showed that a pharmacist-led intervention results in improved prescribing of statins and a greater percentage of patients achieving their target cholesterol levels.⁹ Despite growing awareness of the issues, multimorbidity and polypharmacy associated with an ageing population are resulting in increased inappropriate prescribing,¹⁰ which is linked to adverse events. With improved patient safety the holy grail, has there ever been a greater need to enlist professional support to ensure prescribing is appropriate? The most recent evidence suggests this can come from the pharmacist.¹¹

A large proportion of the research evidence has focused on practice-based roles for pharmacy. But pharmacists operating from the traditional community pharmacy base are also key players in primary care, and must be included in plans for closer working between the professions. They have already proved their ability to deliver successful smoking cessation services, manage repeat dispensing, conduct medication-use reviews, and treat minor ailments. They too can also be a source of clinical advice for both patients and other healthcare colleagues.

THE FUTURE LANDSCAPE

Finally, as we look to the future, and recognising the current skill shortages and challenges of recruitment and retention in general practice, can pharmacy really help fill this gap? If so, the wider role in health care beyond the traditional 'chemist' image needs to be taken into account in workforce-planning models. Ideally these should be based on competencies needed to deliver care rather than arbitrary decision making based on professional post-nominals and practice setting.

In summary, no profession can stand still. Just as general practice has evolved to meet the challenges of modern medicine and

needs of today's society, so must pharmacy. Technical advances such as barcode labelling, e-prescriptions, robotic dispensing, internet supplies, and dispensing hubs are all replacing the traditional pharmacist supply role. Although the importance of the final clinical check at the point of dispensing remains, today's pharmacists can do much more. They must be integrated into the healthcare team so that their knowledge and skills can contribute to better, safer patient care, so it can no longer be said that pharmacists are overtrained for what they do and underutilised in what they know. The recent RCGP/Royal Pharmaceutical Society (RPS) joint report¹² and the RCGP announcement encouraging closer liaison are to be welcomed to ensure our two professions work together in an integrated way for the benefit of patients. Most recently the NHS in England has announced a £15 million pilot scheme to part-fund clinical pharmacists in GP practices. In Scotland the government has announced £16.2 million funding for pharmacist independent prescribers over 3 years. One hundred and forty pharmacists with advanced clinical skills training will be recruited to work directly with GP practices to support the care of patients with long-term conditions. Advice on implementing these changes is provided in a free guide issued by the Primary Care Pharmacists Association/RCGP about employing practice pharmacists.¹³

Finally, and most recently, radical proposals concerning how community pharmacy and general practice could work better together have been jointly announced by the RPS and National Association of Primary Care. The proposals include a greater role for community pharmacy in managing minor self-limiting conditions, joint prioritisation of patients at high risk of serious health problems, access to health records by community pharmacy, and better links between practice-based pharmacists and community pharmacy. I personally rejoice that these developments are a further step in the breaking down of the long-held barriers between the two professions, and hope pharmacists will use the opportunity to fulfil these new roles effectively and efficiently.

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