Commentary

An agenda for UK clinical pharmacology The roles of clinical pharmacologists in formulating medicines policy locally

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Specialists in Clinical Pharmacology and Therapeutics (CPT) can add value in day-to-day NHS activities in several ways. They provide a breadth of expertise that is not organ-based or disease-specific and that is based on an intimate knowledge and understanding of the effectiveness, safety and cost-effectiveness of pharmacological interventions. More than any other professional group, they can address the growing need for undergraduate and postgraduate teaching to be based on 'thoughtful therapeutics', not just the mechanics of prescribing. CPT specialists can and do take the lead in making local and national policy decisions relating to drug usage and they should be involved in local commissioning decisions. Because of the breadth of experience embraced by CPT, many clinical pharmacologists have taken on local and national senior clinical leadership roles. CPT needs to demonstrate to the NHS, and in particular to trainees, that a CPT post in the NHS is a legitimate and rewarding career path, where they can use their hard earned CPT skills and expertise to the benefit of the NHS as a whole.

Introduction

In an article in the *British Journal of Clinical Pharmacology* in 1996, Colin Dollery [1] wrote: 'Clinical pharmacology in a clinical setting has remained confined to major academic hospital centres and has not spread out to large district hospitals as we once expected'. He ended his article with a call to clinical pharmacologists to 'be willing to take on the challenge of promoting safe, effective and cost-effective treatment which may sometimes lead to differences of opinion with powerful forces in other branches of medicine and the pharmaceutical industry. That is the price of coming out of the ivory tower'.

A decade later Simon Maxwell & David Webb [2] exhorted the UK Department of Health to 'provide opportunities for clinical pharmacology and therapeutics to expand, by providing new posts in the health service', and they challenged clinical pharmacologists to 'articulate more clearly [their] value and commitment to the public health-service'.

So, here we are another 5 years on, and to what extent have we as clinical pharmacologists taken up this challenge to leave the ivory towers and head for the coal face? Clinical pharmacologists have very successfully taken

leading roles in professional bodies, the National Institute for Health and Clinical Excellence (NICE), the Scottish Medicines Commission (SMC), the All Wales Medicines Strategy Group (AWMSG) and in pharmacovigilance and other activities in regulatory agencies such as the Medicines and Healthcare products Regulatory Agency (MHRA) and the European Medicines Agency (EMA), but at a local level outside major teaching centres their involvement is very patchy. The local NHS arm of the specialty has never come to fruition and is at risk of extinction. In the current era of 'payment by results', what we have lacked is the ability to convince Trusts that clinical pharmacology can and should have a central role in delivering higher quality, safer and more cost-effective prescribing, and that doing so makes good financial as well as clinical sense. We have exhorted others to act, but we have done too little ourselves.

Leaving the ivory tower

Few clinicians with clinical pharmacology and therapeutics (CPT) training (and who still consider themselves to have retained their CPT skills) work outside teaching hospitals and national institutions [3], and yet there is as much need

now for high quality, thoughtful advice on prescribing and medicines policies as ever before. If we accept the status quo, others will take up the reins but will do so without the unique insight into medicines and therapeutics that clinical pharmacologists possess.

The potential roles of a locally-based NHS clinical pharmacologist can be broadly broken down into five categories:

- 1 Delivering a clinical service, often in general or acute medicine.
- 2 Taking the lead on prescribing policy in the hospital.
- 3 Working closely with primary care.
- 4 Working with commissioners.
- 5 Education and training.

Delivering a clinical service

We believe that it is crucial that those who seek to advise at a local level should either be actively engaged in delivering medical care or have sufficient recent past experience as to remain clinically credible. The distinction between having specifically medical rather than non-medical clinical training has been debated for CPT as a whole [4], but in hospital, leading by example is a powerful way to effect change. It also provides a unique opportunity to experience the day-to-day problems encountered by prescribers and to deliver teaching and training. A medically active clinical pharmacologist fulfils a role that is distinct from the pharmacist acting as a prescribing adviser, although they are entirely complementary and should work closely together.

Taking the lead on prescribing policy in the hospital

In all places where there are clinical pharmacologists they either chair their local Drug and Therapeutics Committee (DTC) or are active members of it [5]. This always requires a close working relationship with their colleagues in pharmacy. Most hospitals also have a variety of bodies with a remit for patient safety, drug expenditure review, prescribing audit, protocol development and much more. The resident clinical pharmacologist can and should contribute to each of these areas. However, most district general hospitals lack a clinical pharmacologist on the DTC. The importance of a physician with training and experience in CPT on these committees cannot be overemphasized.

Working closely with primary care

The differentiation between primary and secondary care, which has been accentuated by the purchaser-provider split, undermines a sense of common purpose in the NHS, as organizations strive to keep their own houses in order. Hospital and Primary Care Trusts cannot act in isolation and need to co-ordinate their drug and prescribing policies, ensure that there are no major conflicts across the interface and develop joint working practices (shared care protocols are a good example). With recent NHS reforms,

there has been a shift of care from hospitals to primary care and this will accelerate. There will be an increasing need to oversee the handing over of complex secondary care at an appropriate time to colleagues in primary care. Clinical pharmacologists are well placed to oversee these transitions and to ensure that adequate training is in place and that drug therapy, adverse reactions, drug interactions and evidence of efficacy are monitored appropriately.

Working with commissioners

Prescribing is not just about safety and effectiveness – all prescribers have a duty to ensure that they pay regard to cost-effectiveness [6]. Deciding on what requires an overarching national evaluation and policy and what is best left to local bodies is a challenge, and it is not simply based on the capacity of national bodies to deal with all of the work. Many decisions need to be responsive to local conditions and ultimately to individual patients. Broad-based principles should apply throughout the NHS, but often fine tuning and detail is best dealt with at a local level. This allows appropriate consideration of the local population demographics, socioeconomic data, disease prevalence and health needs. In all of this local knowledge is vital (Box 1).

The emergence of nationally driven, high quality technology appraisals and more rigorous cost-effectiveness analyses have served the NHS extremely well over the last decade. When NICE, the SMC or the AWMMSG have issued expert guidance on a specific drug or therapeutic area there is no justification for local committees to attempt to replicate the technology appraisal process or indeed to introduce major variations on the final appraisal decision. Sometimes, however, there is tension at a local level around the affordability of services and of high cost drugs in particular. The historic principle of the NHS to provide care according to need at the point of care is often in

Box 1

The advantages of local knowledge in determining medicines policy

- Local policy makers have knowledge of:
 - Experience and expertise of local providers
 - Facilities available and the suitability of introducing new models of care into existing infrastructure
 - Local capacity to monitor therapy safely
 - Local pricing arrangements
 - Local demands on existing finances – what is affordable
- Local policy makers have the ability to:
 - Identify trends in prescribing and monitor local activity
 - Identify drug safety problems and liaise with pharmacy, risk management and patient safety
 - Identify areas in which changes in prescribing can realize savings without compromising care
 - Act rapidly to disseminate information
 - Identify training gaps
 - Commission and provide education to aid implementation of policies

conflict with the statutory requirement placed on all Trusts to live within their means. Whatever future commissioning model is adopted in the NHS, local commissioning teams will continue to need authoritative clinical advice on how to disinvest from some areas in order to invest in others.

Education and training

Recent concerns about the preparedness of junior doctors to embark on their careers as prescribers [7], the changes in junior doctor training and reduction in hours, the increase in the number and complexity of pharmaceutical products and increased patient expectations and life expectancy have all played their parts in highlighting the shortcomings of the quality of prescribing in the UK. Although much can be achieved in education in medical schools and at a national level (and there are encouraging developments afoot) most opportunities for postgraduate education arise locally, and this surely must be a responsibility of clinical pharmacologists. We also need to show trainees that among all the other areas in which they might become involved, a CPT post in the NHS is a legitimate and rewarding career path, in which their hard earned skills and expertise give them a great advantage.

The NHS clinical pharmacologist

A recent survey of consultant clinical pharmacologists in UK hospitals has shown that they work a median of 50 h a week (and often much more than that) and divide their time as follows: teaching 10%, research 40%, clinical work 30%, policy and administration 12%, editorial work and writing 8% [5]. An NHS clinical pharmacologist would, in general, undertake only two of these activities: clinical work and policy and administration, and would probably split the time equally between them. How this might be done is illustrated in Box 2.

Box 2

Sample job plan for an NHS clinical pharmacology job

<ul style="list-style-type: none"> • >50% Active clinician 5–6 PA
<p>General/acute medicine or General Practice</p> <p>Clinical support to pharmacy</p> <p>Advice on prescribing</p>
<ul style="list-style-type: none"> • 25% Trust non-clinical duties 2–3 PA
<p>Trust drug expenditure review</p> <p>Patient safety/drug-related SUI investigations</p> <p>Education</p>
<ul style="list-style-type: none"> • 25% Local Medicines Policy 2 PA
<p>Chair Drug and Therapeutics Committee</p> <p>Represent Trust on Area Prescribing Committee</p> <p>Work with Commissioning teams across interface between primary and secondary care</p>
<ul style="list-style-type: none"> • National duties
<ul style="list-style-type: none"> • Research

PA, programmed activity; SUI, serious untoward incident.

Conclusions

A clinical pharmacologist working in a District General Hospital or Primary Care Trust can play a critical role in developing local policy through uniting medical experience with CPT expertise.

The clinical pharmacologist's responsibilities will include clinical service provision, implementing local prescribing policy, liaising with primary care and commissioners and education. While each precise job description will vary, there should always be a role for a specialist in clinical pharmacology on committees that determine formularies, policies and guidelines and those that oversee medication safety. Applying specialist knowledge in the local setting should facilitate the implementation of policies that are realistic and relevant to local needs.

Competing Interests

There are no competing interests to declare.

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RECEIVED

19 January 2012

ACCEPTED

30 January 2012

ACCEPTED ARTICLE PUBLISHED ONLINE

23 February 2012

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