Safe, rational prescribing with a focus on polypharmacy

Dr Rupert Payne, currently NIHR clinical lecturer in general practice at the University of Cambridge, has been appointed as Prescriber’s new consultant editor. Joy Ogden speaks to him on his background and his plans for his new role.

Rupert Payne has many claims to fame. The one of which he is proudest – appropriately as Prescriber’s new consultant editor – is his unusual career combination of general practice and clinical pharmacology.

He also takes pride in riding bicycles fast, riding a unicycle slowly and his ability to solve a Rubik’s cube in about a minute. The cycling speed was fastest when he was a student in Edinburgh; the unicycle was a 30th birthday present, which he was dismayed to discover he should have learnt to ride aged eight; and the Rubik’s cube colours are beginning to fade.

However, Dr Payne’s pleasure and pride in his professional expertise is undimmed and he says: “It’s quite unique and very rewarding and enjoyable.”

How will he use this special expertise in his role at Prescriber?

“There is a bewildering array of new drugs and guidelines facing prescribers, as well as all the other pressures on clinicians’ already limited time.

“It’s difficult to keep up to date with current prescribing practice and, as the only medicines-focused journal readily available to GPs, education and professional development is something Prescriber can contribute to. My role is to ensure it remains accessible and relevant.”

His interest in pharmacology developed as a medical student at Edinburgh University, when he started studying for a PhD in the clinical pharmacology unit there. Working
with a lot of highly regarded people who were interested in “the safe and rational use of medicines” further enhanced his involvement.

Dr Payne decided to combine his specialist training with general practice rather than the more usual hospital option because of the growing use of primary care to manage long-term conditions.

He took up his post as a National Institute for Health Research (NIHR) clinical lecturer at the University of Cambridge in November 2010, where the core of his work is as an academic primary care researcher. His interests are broadly centred on safe, rational prescribing but with a particular focus on polypharmacy. When he moves to a senior lecturer position at the University of Bristol in February, he expects to continue along the same lines.

What insights has his research given into the pressures facing prescribers?

“I think antibiotics remain the biggest challenge,” says Dr Payne. “Most upper respiratory infections are viral in origin so antibiotics are usually unnecessary.”

Clinicians assume that patients always expect to emerge from a consultation with a prescription in their hands and – importantly – some prescribe antibiotics inappropriately, mistakenly believing this is what patients want, he claims.

He adds: “Given the growing concerns about antibiotic resistance and a dearth of new antimicrobial agents it’s a huge concern, and reducing unnecessary and inappropriate antibiotic use is crucial.

“Continuing public education is necessary but so, too, is the education of prescribers. I think it is essential to explore patients’ concerns and expectations in some detail before reaching for the prescription pad.” He acknowledges that the pressures of sorting out increasingly elaborate cases in very time-constrained situations makes that difficult.

What about the conflicts between the NHS and the pharmaceutical industry?

Dr Payne remarks: “In some ways I think the introduction of local formularies has made things a bit easier for prescribers because they are being encouraged to use things that are cost effective by local prescribing experts, so in some ways the decision is taken out of their hands.

“I think the industry is less visible in clinical settings than it used to be 15 or 20 years ago and I think the ABPI guidelines are helpful in preventing inappropriate tactics. They are a lot more transparent in how they engage with clinicians and things have improved in that way.

“I think some doctors still wrongly perceive the pharmaceutical industry as ‘evil’, but the fact is the NHS couldn’t operate without working alongside it. There are reports that some drugs are unavailable to NHS patients due to high costs, but we can’t forget that the development costs of new drugs are very high, and the NHS tends to get really good value.”

What are the factors driving polypharmacy and its possible adverse effects?

An aging population, with its increasingly complicated medical problems and complex prescribing needs, is a major factor in the rise of polypharmacy, says Dr Payne.

He adds: “I think the guidelines for single conditions are a driving force: a lot of them advocate starting new drugs but don’t necessarily make it clear when one should stop or reduce them. I think clinicians need more training in managing polypharmacy, both at undergraduate and postgraduate level.

“We need to empower clinicians to feel comfortable about stopping or reducing treatment. Not because they necessarily feel the drugs are futile – for instance in the case of palliative care – but because they genuinely feel it is in the patient’s best interests: when it may be causing a little bit of benefit, but the harms outweigh the benefits.”

What about the interaction between drugs: is that tested and open to scrutiny?

“A lot of things like drug safety information and drug interactions come out of initial preclinical work done by the pharmaceutical industry but some information is obtained postmarketing: that’s why we need good pharmacological systems for capturing potential problems once drugs go on the market,” argues Dr Payne.

There have been recent moves to increase transparency and access to clinical trials and make all the data openly available. “I think it’s starting to happen,” he adds. “I think the pharmaceutical industries realise they will be held accountable for not publishing data and not making it accessible.”

So who keeps an eye on the overall picture?

GP s are the key figures most likely to have an overview of a patient’s health and medication, because they have access to our birth-to-death medical records.

Says Dr Payne: “Most hospitals are still not actually using electronic records but that will change significantly in the next few years. Hospitals also see patients over a relatively short space of time – there’s a lot of pressure to get them out as fast
What are the likely developments in prescribing over the next five years?

“We’re seeing more and more novel drugs, designed with an understanding of immunology that was not available 10 or 20 years ago. GPs will have to become increasingly familiar with all these new medicines, which is a challenge for training and professional development,” notes Dr Payne.

“Newer remote ways of consulting that are emerging – such as Skype and email consultations – are another thing. They alter the nature of clinicians’ interaction with their patients and whether this will adversely or beneficially impact on patient care remains to be seen.

“We already have Skype consultations with private providers though I’m not aware of many GPs doing it. I have some concerns given that private providers can’t see your medical records. It’s down to the patient to provide the relevant information to the prescriber but what if the patient does not provide this?

“There are already some restrictions on data sharing within the EU but it’s the patient’s choice. If the doctor happens to work in the USA or Japan, I think there is likely to be an interesting challenge for us in terms of regulation.

“I guess a lot of patients will still want to be with a doctor in person,” Dr Payne adds.

Why are electronic health records and data linkage important?

Dr Payne lists electronic health records and data linkage among his interests. Electronic health records are ubiquitous in primary care but hospitals are still catching up, notes Dr Payne.

Data from primary care can be linked with hospital records such as Hospital Episode Statistics (HES), a large database where administrative details of every single hospital consultation in England are recorded.

When joined to specialist databases, cancer registries for instance, it can provide a very useful resource for research into medication use and prescribing, which can be anything from pharmacoepidemiology to clinical trials, he says.

He adds: “There are definitely a lot of concerns about how these sorts of data might be misused, particularly in the light of the care.data debacle. Although there are understandable and important concerns about privacy, confidentiality and so on, there are considerable benefits from a public health perspective of having access to this sort of information.

“I think the NHS could have done a much better job of demonstrating the significant benefits of sharing health data – in an anonymous form – we’re not talking about the data going out with your name on it. It’s not about solely selling it to the pharmaceutical or insurance industries for them to make money out of it but unfortunately that seems to be how it has been interpreted.”

Data linkage remains an ongoing challenge for Dr Payne but in the meantime, he is looking forward to his new role at Prescriber. And when he moves to Bristol, he says he will have to get used to cycling uphill.

Reference

http://www.bbc.co.uk/news/health-26259101

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