Solutions to problematic polypharmacy:

learning from the expertise of patients

A lively debate in the final plenary at last year's Royal College of General Practitioners (RCGP) Annual Primary Care Conference considered the provocation: 'My Doctor Makes Me Sick — what can we do about it?'. The event was run by the Heseltine Institute for Public Policy & Practice at Liverpool University, in conjunction with Mersey Faculty and the RCGP. It followed on from a public debate 'My doctor makes me sick' held in Liverpool at the opening of the conference. The audience were invited to propose solutions to current concerns about overmedicalisation, treatment burden, and over- and under-diagnosis. Two of the final eight proposals related to reducing prescribing. GPs called for incentives not to use medicines and for deprescribing; both seen as necessary to support the individually-tailored care that GPs and patients[1] seek. But GPs have described needing help in tailoring prescribing to individual needs, particularly when individual needs may appear to be at odds with the 'ideal' described by guidelines for best practice.[2] So how can we help professionals and patients tackle a problem of perceived overprescribing and problematic polypharmacy?

EXISTING SOLUTIONS: MEDICINES OPTIMISATION

In 2013, the Royal Pharmaceutical Society called for a shift in how we think about medicines use.[3] They proposed the need to move from thinking about medicines management (the safe and efficient process of issuing medication) to 'medicines optimisation' (supporting the best outcomes for patients). Four principles underpin medicines optimisation: the need to understand the patients experience; make evidence-based choices about medicines; ensure safe use; and make medicines optimisation part of routine practice. A greater role for pharmacists in supporting patient-centred use of medicines was advocated. Recent evidence suggests that some GPs are still unaware of the new approach.[4]

More recently, the Kings Fund report, *Polypharmacy and Medicines Optimisation,* offered a timely overview of a wide medical literature on optimising safe medication use.[5] The report recognises the challenges posed by a growing use of multiple medications in one individual (polypharmacy). It acknowledges the potential value of appropriate polypharmacy, but also the potential for inappropriate polypharmacy (Box 1). Their report provides a useful summary of what we already know on how to support a person-centred approach to safe and effective use of medicines, including references to existing tools we have to support medication review and reduced prescribing (for example, STOPP criteria, Beer criteria, and Medication Appropriateness Index). Several case studies provide practical advice for GPs on reviewing medication.

But perhaps the most important contribution of this report is its shortest section — 'Polypharmacy and the Patient Experience'. The language of medicines optimisation is still about supporting adherence (by practitioners as well as patients) to evidence-based prescribing. The Kings Fund report highlights a need for *'compromise ... between the view of the prescriber and the patient's informed choice'*. But also acknowledges the lack of research needed to support this process.

PROBLEMS WITH THE EVIDENCE BASE

Appropriate prescribing from an individual perspective may not be the same as the optimisation of medicines defined by rational prescribing and current evidence.[6] What a medical perspective might consider appropriate polypharmacy could create problematic polypharmacy for the patient; a burden of care that becomes greater than the potential benefit from the medication. One tablet can be too much for some people.[6] Prescribing decisions need to consider the impact that medicines have[7] on individual's daily lives.[8] 'Optimising' medicines use involves more than simply prescribing according to best medical evidence.[5] Yet our current evidence-based practice is inadequate to support patients and practitioners in making complex decisions that go beyond the standard disease-focused model of care. The lack of an adequate evidence base is the biggest barrier to achieving the aspirations of medicines optimisation.

SOLUTIONS LIE IN THE CO-PRODUCTION OF A NEW EVIDENCE BASE

We lack an evidence base that adequately recognises and includes the patient's perspective on appropriate prescribing.[9] While health professionals make decisions about what medicines could and should be used, it is the 'consumers' of health care (patients) who translate a medical decision into the best decision for me.[8] Patients, by necessity, find ways to fit medicines into the routine of daily life.[10] For many people living with long-term conditions, the ability to live their normal daily life and meet social obligations is more important than controlling symptoms or risk factors.[1,8,11] 'Real world' considerations come first;[8] daily living, not medical concerns, are the foreground issue for most patients. And it is this that influences their decisions about medication use.

However, there is little research that really explores how patients do it; both in terms of making decisions about using medicines and fitting medicine use into their daily lives. We don't know which approaches work best, and whether some things that people try make one thing better, but in turn upset something else. We need to stop viewing the patient as a passive user of medicines and instead recognise that many patients 'start out as amateurs but become experts from necessity' (M Dickenson, personal communication, 2013), while also recognising that many become overwhelmed and confused, or continue to take a passive role. We need to research the methods that patients use, so that we can learn from patients who are coping to help others who are not; to characterise the skills already developed by experienced patients managing well so that we can help others develop the skills appropriate for their circumstances.

Many (although not all) patients work in partnership with their health professionals to 'cope' with problematic polypharmacy. We need also to learn from the professionals who are already supporting individually-tailored approaches to prescribing.[12] By exposing the work done by both patients and professionals to critical scrutiny, we wish to generate the practice-based evidence that supports medicines optimisation.

Box 1. Polypharmacy definitions from Kings Fund report[5]

Appropriate polypharmacy: prescribing for individuals with multiple conditions where medicines use has been optimised and where medicines are prescribed according to best evidence

Problematic polypharmacy: prescribing multiple medicines inappropriately or where the intended benefit is not realised

GENERATING PRACTICE-BASED EVIDENCE

This in turn means we need to think again about how we generate evidence for practice. The current dominant model assumes knowledge production through the study of pre-specified interventions with the results translated into the applied context through the generation of guidance, tools, and mechanisms to support implementation.[13,14] The hierarchy of knowledge in evidence-based medicine means that scientific knowledge of disease control 'trumps' even the best scientific knowledge of the patients' perspective. The patients' perspective becomes lost in the translation process.

An alternative view of evidence-based practice is described by Evans and Scarborough[14] who outline the need to blur the boundaries between science and practice. The goal of science becomes not to provide the answer to be translated into the clinical context, but to support the process of knowledge generation within the clinical context. We describe this as 'translational scholarship': the co-creation and testing of new knowledge through partnership working between all stakeholders. Translational scholarship seeks blurring, rather than bridging, of the boundaries between partners[14] to generate outputs that meet the needs of each.[15]

We are adopting this model of translational scholarship to generate new practice-based evidence[13] supporting a revised model of rational prescribing. We want to optimise medication use by giving equal recognition to patients' and professionals' views on the role of medication in supporting health needs for an individual. Any resulting compromise needs to be recognised as a legitimate part of decision making related to medication.

Translational scholarship uses an action research approach: an iterative process of knowledge generation and testing, supporting change through shared learning.[16] We are starting with an exploration of existing practice through working with professionals, patients, and carers with experience of living with potentially problematic polypharmacy. We seek a better understanding of what strategies are being used to balance disruption and benefit of medicines, particularly those patients who have learned how to cope with polypharmacy and develop mutually-agreed treatment goals.[9] We will then explore whole-system enablers and barriers to these ways of working, to identify changes needed to support the compromise that is individualised medication use. Thus, we can identify, implement, and evaluate changes that address barriers and generate practice-based evidence that describes a new vision of rational prescribing for medicines optimisation.

If you are a practitioner or patient who has found new ways to deal with problematic polypharmacy, please do email us: we would be pleased to hear from you.

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