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Editorial

Multimorbidity: what's the problem?

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Introduction

Imagine Mr Green. At the age of 72 he has acquired a modest clutch of diagnoses, including hypertension, type 2 diabetes, osteoarthritis, asthma and depression. He has just seen his general practitioner (GP) for a routine appointment following a diabetes review with the practice nurse. The GP was delighted to tell him that his haemoglobin A1c level was on target, but disappointed to find his blood pressure again 'too high'. She told him that he needed another medication for his blood pressure, and that he should try to lose some weight. As he left the room she reminded him that his asthma check with the nurse was overdue.

How might Mr Green have felt during this consultation? Would he have been satisfied to know that he was well on his way to a 'full house' regarding his diabetes, hypertension and asthma Quality and Outcomes Framework (QOF) points, or more concerned about other aspects of his health? Did he really want to add another tablet to his already sizeable pill-box, and risk adverse effects?[1,2] Why has he found it difficult to lose weight, and why has he not yet booked his asthma check? Mr Green's nurse and GP may have delivered recommended care for each condition, yet failed to deliver the outcomes most beneficial to his overall health.

Multimorbidity: today's suboptimal response

Mr Green is not unique. In our ageing society healthcare professionals are dealing with more patients with 'multimorbidity' every day.[3–5] A simple definition of multimorbidity is the co-existence of two or more chronic health conditions,[6] yet the lived experience of having multiple conditions varies widely between individuals.[7] A more clinically useful definition includes the impact of illness on the patient: 'two or more concurrent chronic conditions that collectively have an adverse effect on health status, function, or quality of life and that require complex healthcare management, decision making, or coordination'.[8]

Patients with multimorbidity, like Mr Green, account for around six in ten general practice consultations in the UK.[5] They also account for the greatest burden of disease in most Organisation for Economic Co-operation and Development (OECD) countries, with prevalence and healthcare costs expected to rise[9] – particularly as multimorbidity with ageing tends to be the rule, rather than the exception.[10] Should we be concerned about this burgeoning global 'multimorbidity epidemic'? Evidence suggests that we should: patients who have multiple morbidities have lower quality of life,[11] reduced physical function, higher rates of morbidity and mortality, and use more healthcare at greater cost than would be expected from the sum of the individual diseases alone.[12–14]

In one sense this is puzzling. Most patients with multimorbidity are affected by common conditions, such as hypertension, ischaemic heart disease and diabetes,[10] none of which are rare, complex or difficult to treat. The problem does not originate from individual conditions, but instead the failure to adequately accommodate the interplay between them. A predominantly biomedical model tends to focus on single diseases, creating a situation in which patients are treated for one condition without due regard for the impact on another. This can result in complex treatment regimens and polypharmacy, with consequent potential for medical error and risky prescribing.[1,2] It

also exposes patients to fragmented care and multiple visits to separate disease-specific clinics:[15] some of the burden of having multiple conditions is the amount of time and effort that patients need to spend securing appointments, tests and medications. Importantly, the paradigm of 'health as absence of disease' offered by the biomedical model is also unhelpful for patients with multimorbidity; these patients require a more open-ended and functional definition of health in which goals can be individually desired, as opposed to universally applied, 'health' states.[16]

Clinicians feel challenged too, with difficulties reported in balancing the varying risks and benefits of treatments within the time limits of the consultation.[15,17–19] Evidence-based clinical practice guidelines are available (and valuable) for single diseases, but most do not yet address the clinical management of patients with multimorbidity.[20] Moreover, UK GPs are remunerated using the QOF 'pay-for-performance' system for chronic disease management – a situation that has led to a service organisation that also works in disease-specific silos.

Finding a new approach

The recognition that the current model of specific disease management may not address the needs of our existing elderly population, let alone the larger and more multimorbid population of the future, is not new.[21–23] However, the optimal model remains unknown. Two recent systematic reviews concluded that there is no strong evidence for any one intervention to be effective in multimorbidity,[24,25] which is not surprising given the heterogeneity of this group of patients. Interventions that allow targeting based on risk factors or functional difficulties are more likely to be effective,[25] but to understand these difficulties it is essential to first know the patient's priorities.[26,27] A flexible approach is needed, allowing adaptation to the complex array of conditions experienced by each patient and the personalised context in which they occur.[28]

An example of 'guiding principles' for managing elderly multimorbid patients has been published by the American Geriatrics Society. Foremost among these is the need to elicit and incorporate patient preferences into medical decision making.[29] The importance of person-centred care in meeting modern healthcare challenges has also been emphasised by the World Health Organization in its 2008 *World Health Report*,[30] and it has been a part of UK health policy, particularly regarding the management of long-term conditions, for over a decade.[31–33] More recently, it has featured in the document published jointly by the King's Fund and Nuffield Trust which sets out a vision for the 'House of Care' model, a core aspect of which comprises shared decision-making conversations between patients and healthcare providers.[34]

Policy makers have been attracted by the potential of patient-centred care to reduce costs. One study found that, in comparison with usual care, individualising guidelines for treatment of blood pressure was able to prevent the same number of adverse health outcomes at a cost saving of 67%, or this approach could prevent 43% more adverse health events for the same cost.[35] Clinicians, too, see the need for change. GPs already recognise that managing this cohort of patients requires a different approach, with a need to adapt care to individual personal circumstances, involve patients in the decision-making process, and adopt a generalist approach.[36,37]

Implementing a new approach

Why is it that, despite these strong drivers, we appear stuck with our suboptimal approach? Many GPs perceive lack of time as a barrier;[38,39] consultation length may need to be longer if there is to be a patient-centred conversation along with screening, examination of a number of systems, test interpretation, and a review of drug medications before new treatments are commenced.[37] Providing a genuine opportunity for patients to prioritise their own goals and make an informed choice about treatment options is also time-consuming and challenging for both patients and GPs.

Disciplines including rehabilitation and mental health have successfully used goal-setting processes in their consultations with patients. Although GP consultations tend to be shorter, they may also have the potential to incorporate a simple goal-setting process. Goal-setting is a decision-making tool that both encourages patient engagement in the therapeutic process[40] and enables measurement of patient-centred outcomes.[41] It allows the common outcome of goal attainment to be meaningfully applied to individual patients with heterogeneous problems,[42] such as multimorbidity. Goal-oriented outcomes can be more sensitive to clinically important change than standard outcome measures.[43,44]

Challenges to the use of this approach may be anticipated. An intervention designed to be responsive to patient priorities and reduce over-treatment could achieve its aims yet lead to a reduction in conventional measures of disease control.[16] Patients may not understand the concepts of priorities and trade-offs or harms and benefits,[45] resulting in the choice of options for short-term gain whilst neglecting future health risk,[46] and goal-setting may be challenging for patients who prefer a paternalistic model of healthcare.[47,48]

These concerns highlight the importance of providing the patient with accurate and realistic information about the implications of different treatment options, to balance the focus on the patients' agenda with sufficient clinical knowledge and condition management, achieving true collaborative shared decision making.[49] Research is therefore required to explore the potential of the goal-oriented approach in consultations with multimorbid patients, including how it might enable us to understand patient-desired outcomes and hence design and measure quality of care.

Mr Green

Let us return to Mr Green, and show how he might be involved in setting realistic goals. His GP greets him, and asks him how he is feeling. She establishes that he is experiencing knee pain from his osteoarthritis and this is impairing his mobility. He is also worried about his wife – she has worsening dementia and he no longer feels able to leave her alone for long, which is why he has been late in booking his appointments. He admits that, at times, he has forgotten to take his medications as he has been so busy with his wife.

Mr Green's GP goes through his blood test results and rechecks his blood pressure, noting that it is 'above target'. She and Mr Green work together to establish his personal health goals: a reduction in knee pain such that he is able to do a weekly shop in the supermarket; to be able to leave his wife alone for a half a day each week so that he can concentrate on his own health; and to remember to take his medications each day. The GP notes that achieving these goals may also improve Mr Green's blood pressure and, through increasing his activity levels, encourage weight loss, so they agree to postpone the extra blood pressure medication for now. They finish the consultation by devising a management plan to achieve each goal (e.g. a change in Mr Green's analgesic regimen, referring him to social services for carer support, and use of a dosette box for his medication) and agreeing on criteria for meeting each goal. Finally, they set a date to meet in three months to review his progress.

The use of a goal-setting process can help to motivate and engage patients in their management.[50] Through the use of this approach, Mr Green and his GP have not only identified the health outcomes that matter to him, but also improved the chances that they will be achieved.

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CONFLICTS OF INTEREST

None declared.

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