VIEWPOINT

Tensions in public health policy: patient engagement, evidence-based public health and health inequalities

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This paper examines the proposition that there are considerable tensions between key strategies in health policy—namely, evidence-based approaches to population health improvement, reduction of health inequalities, and public and patient engagement—using (1) a critical analysis of the intersection of evidence-based public health, patient and public engagement, and health inequalities policies from a social constructionist perspective and (2) mathematical modelling of paternalistic and shared decision making in the management of hypertension in a random age and sex stratified community sample of residents of south east Northumberland, UK. It is concluded that there may be unintended effects on population health of incongruities in major components of public health policy. Greater public and patient engagement may militate against the disease prevention goals of evidence-based policy, and may better engage sections of the population who already benefit from greater access and better health associated with social status and opportunity, serving to increase inequalities by further marginalising those already suffering from relative exclusion.

information and choice and by requirements for the NHS to engage patients and the public;⁴ and (2) the challenges of pursuing greater public and patient engagement in the context of reducing inequalities.

EVIDENCE-BASED POLICY AND PATIENT CHOICE: THE EXAMPLE OF HYPERTENSION

Increasing blood pressure is directly related to increasing risk of cardiovascular disease; control of blood pressure reduces this risk. British Hypertension Society (BHS) and NICE guidelines,^{3 5} national service frameworks for coronary heart disease⁶ and older people,⁷ and the new General Medical Services contract⁸ actively promote enhanced hypertension detection, treatment, and control.

This model of evidence-based policy focuses primarily on prevention of disease, disability and death; it is here that a major tension exists with policy for public and patient engagement, particularly shared and informed decision making.⁹ There are several components to this. Firstly, guidelines development methods create a bias towards effectiveness with less emphasis on adverse effects. Secondly, evidence-based guidelines rarely take account of patient preferences; the guidelines approach produces guidance derived from patient groups (defined largely by trial inclusion criteria) focused on intervention effectiveness. However, patients may have a variety of reasons for not choosing what appears to be the most effective option. Thirdly, the outcomes which guidelines seek to affect focus on the prevention of disease which, although clearly important, fails to reflect a wider definition of health—for example, wider concepts of health status and quality of life that go beyond the absence of disease and incorporate the patient perspective.¹⁰ Finally, although guidelines should “assist practitioner and patient decisions”,¹¹ much of their application remains paternalistic. In developing guidelines that incorporate patient values, we have shown that treatment decisions are sensitive to patient preferences.¹²

Engaging patients in decisions on their own treatment might not therefore produce the same decisions as would be derived from a more paternalistic or prescriptive application of evidence-based guidelines,^{13 14} hence potentially failing to achieve the intended outcomes of the guidelines.

The year 2004 saw the coalescence in the UK of the international emphasis in health policy on evidence based approaches to population health improvement, reduction of health inequalities, and public and patient engagement. These three key policy approaches are exemplified in calls by the Wanless report¹ for the creation of a “fully engaged” populace and an evidence-based public health to “secure good health for the whole of the population”, and by the new approach of the UK Government’s Public Health White Paper² to “the health of the public” embedded in concepts of individual responsibility and choice.

We argue, using the example of hypertension, that there are considerable tensions between these key strategies in health policy, particularly in preventive interventions. We focus on two areas: (1) the apparent contradictions between the promotion of evidence-based practice, exemplified in the UK by National Institute for Clinical Excellence (NICE) guidelines,³ and the emphasis on public and patient engagement in decision making exemplified in the UK by strategies designed to promote patient

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POTENTIAL IMPACT OF SHARED DECISION MAKING

The paternalistic application of hypertension guidelines would reduce the incidence of stroke, with many patients taking long term daily medication with attendant adverse effects. Guidelines implicitly incorporate the judgement that the benefits of stroke reduction exceed the disbenefits of long term treatment for many people. This value judgement may not be shared by patients who may be more concerned about the immediate problems of drug treatment than the possibility of avoiding future stroke, particularly when they recognise that the “certainty” of quality of life deficits from treatment must be balanced against the uncertainty of subsequent strokes avoided. For example, the results of the MRC trial of mild hypertensive patients suggest that treatment of 823 patients for 1 year (all exposed to drug treatment and consequences) is needed to prevent one stroke.¹⁵ It is not surprising that perspectives on thresholds for treatment for high blood pressure differ across groups—for example, patients and nurses have higher thresholds for treatment than doctors.^{16 17}

A major element of this problem is that different goals are being pursued; guidelines are developed on the basis of reducing the risk of stroke while patients are more likely to consider trade-offs between immediate quality of life and the longer term possibility of avoiding stroke.

MODELLING

What would happen if shared decision making took precedence over evidence-based guidelines? To illustrate this, we use a broadly worked example of hypertension management in a population based cohort of older people¹⁸ comprising a random age and sex stratified community sample of 4773 residents of south east Northumberland, UK aged over 65 years. Baseline blood pressure measurements were available for 4514, of which 979 were treated hypertensives. An additional 2152 satisfied criteria for treatment using BHS guidelines; of these, the individual stroke risk could be calculated for 1662 using the Framingham equation.¹⁹

There are few direct data to estimate rates of uptake of treatment by patients in the context of shared decision making. Nonetheless, there is anecdotal evidence that suggests that patients faced with distant small risks and immediate disbenefits of treatment may be reluctant to take treatment, particularly as thresholds for diagnosing and treating hypertension fall.

Assuming a 36% reduction in the relative risk of stroke in treated patients,²⁰ we estimate that 244 strokes would be prevented over 5 years in a population of 100 000 with the same age/sex structure as the source population if all newly identified hypertensive patients over 65 years were treated according to BHS IV guidelines. However, if only 50% (or 25%) of eligible patients agreed to treatment as a result of shared decision making, then 122 (or 183) strokes would occur that would otherwise have been prevented. In a typical UK general practice with 10 000 patients, this would represent an extra 12 (or 18) strokes over 5 years.* These estimated figures, chosen for illustrative purposes, seek to give a feel for the potential impact of lower uptake of preventive treatment that may well occur as a result of shared decision making.

IMPLICATIONS

Engaging patients in treatment choices might therefore lead to fewer patients taking treatment, an increased incidence of stroke, and failure of health services to achieve targets for blood pressure control and disease reduction. Nonetheless,

* Calculations available from the authors.

patients would have experienced greater involvement in decision making, less decisional conflict,²¹ greater satisfaction with their decision and, in those who decide to take treatment, potentially better levels of concordance and blood pressure control. Patient engagement may thus limit the capacity to achieve health service goals. Of course, this highlights the problem of how we define health improvement. Superficially, if patient engagement led to increased strokes in future, this could be seen as undesirable. But this is only the case if we pursue policies that encompass a narrow definition of health (absence of disease). If we extend our outcomes definition, for example, to accommodate broader measures of health status and quality of life¹⁰ including quality adjusted life years, then the overall health of the population may be improved even if stroke incidence increases.

PATIENT ENGAGEMENT AND HEALTH INEQUALITIES

Patient engagement in decision making also has implications when we consider which patients are likely to engage. Social class is a determinant of engagement in decision making in two ways. Firstly, for reasons we do not yet fully understand, younger, educated, articulate patients of higher socioeconomic status are more likely to engage in decisions.²² Secondly, patients and practitioners from similar educational and social backgrounds are likely to share values and understandings which facilitates their engagement in shared decision making. Policy promoting patient choice may further enhance the engagement of these patients but may not improve communication with patients not already engaged or who hold different values. Both of these may contribute to increasing inequalities; groups in the population who do not engage may therefore experience a double exclusion—first on the basis of lack of access to decision making and second through a process whereby the needs, wants, values, and cultures of groups other than their own are predominant. Furthermore, not only do these groups already experience the greatest deprivation and marginalisation through poverty, discrimination and other inequities of power, but they also experience the highest prevalence of hypertension and the greatest burden of ill health due to cardiovascular disease.²³ Paradoxically, this may lead to a more paternalistic application of guidelines to this group and conceivably lead to higher levels of treatment and prevention, though not as “fully engaged” participants.

CONCLUSIONS

We have argued that there are considerable tensions between major components of public health policy. While it is unclear exactly what the impact of these tensions will be on population health, we have nevertheless argued, through the example of hypertension, that there may well be unintended effects. In particular, greater public and patient engagement may counter the disease prevention goals of evidence-based policy. Furthermore, the same engagement policies may better benefit people who already experience greater access and better health associated with social status and opportunity, serving to increase inequalities further.

What should we do about this? Firstly, we should recognise that such tensions exist. Secondly, although there is evidence that supports our arguments, it is limited; there is need for further research and methods to monitor the impact of policy implementation. For example, we need to quantify the effects of patient engagement in treatment decisions and model the impact of these decisions on population health. We also need research that supports engagement that does not increase inequalities—for example, better understanding of how we can communicate risks and benefits and support choice in

those already marginalised. Moreover, we need a wider debate about aligning the goals of health policies; one source of the problem we have described lies in the concentration of much public health policy on disease reduction strategies rather than wider concepts of health improvement.

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REFERENCES

- 1 Wanless D. *Securing our future health: taking a long-term view. Final report*. London: HM Treasury, 2004.
- 2 Department of Health. *Choosing health: making healthier choices easier*. London: Department of Health, 2004.
- 3 Rawlins M. In pursuit of quality: the National Institute for Clinical Excellence. *Lancet* 1999;**353**:1079–82.
- 4 Department of Health. *Strengthening accountability: involving patients and the public*. London: Department of Health, 2003.
- 5 Williams B, Poulter N, Brown M, et al. Guidelines for the management of hypertension: report of the Fourth Working Party of the British Hypertension Society – BHS IV. *J Hum Hypertens* 2004;**18**:139–85.
- 6 Department of Health. *National service framework for coronary heart disease*. London: Department of Health, 2000.
- 7 Department of Health. *National service framework for older people*. London: Department of Health, 2001.
- 8 Department of Health. *General Medical Services contract*. London: Department of Health, 2004.
- 9 Charles C, Whelan T, Gafni A. What do we mean by partnership in making decisions about treatment? *BMJ* 1999;**319**:780–2.
- 10 Bowling A. *Measuring health: a review of quality of life measurement scales*. Buckingham: Open University Press, 2001.
- 11 Institute of Medicine. *Guidelines for clinical practice: from development to use*. Washington: National Academic Press, 1992.
- 12 Thomson RG, Parkin D, Eccles M, et al. Decision analysis and guidelines for anticoagulant therapy to prevent stroke in patients with atrial fibrillation. *Lancet* 2000;**355**:956–62.
- 13 Howitt A, Armstrong D. Implementing evidence based medicine in general practice: audit and qualitative study of antithrombotic treatment for atrial fibrillation. *BMJ* 1999;**318**:1324–7.
- 14 Protheroe J, Fahey T, Montgomery AA, et al. The impact of patients' preferences on the treatment of atrial fibrillation: observational study of patient based decision analysis. *BMJ* 2000;**320**:1380–4.
- 15 Medical Research Council Working Party. MRC trial of treatment of mild hypertension: principal results. *BMJ* 1985;**291**:97–104.
- 16 McAlister F, O'Connor A, Wells G, et al. When should hypertension be treated? The different perspectives of Canadian family physicians and patients. *Can Med Assoc J* 2000;**163**:403–8.
- 17 Steel N. Thresholds for taking antihypertensive drugs in different professional and lay groups: questionnaire survey. *BMJ* 2000;**320**:1446.
- 18 Rodgers H, Greenaway J, Davies T, et al. Risk factors for first-ever stroke in older people in the North East of England. A population based study. *Stroke* 2004;**35**:7–11.
- 19 D'Agostino R, Wolf P, Belanger A, et al. Stroke risk profile: adjustment for antihypertensive medication. The Framingham Study. *Stroke* 1994;**25**:40–3.
- 20 SHEP Co-operative Research Group. Prevention of stroke by antihypertensive drug treatment in older persons with isolated systolic hypertension: final results of the Systolic Hypertension in the Elderly Programme (SHEP). *JAMA* 1991;**265**:3255–32.
- 21 O'Connor AM. Validation of a decisional conflict scale. *Med Decis Making* 1995;**15**:25–30.
- 22 Say R, Murtagh M, Thomson R. What influences patients' preference for involvement in medical decision making? A narrative review. *Patient Educ Counsel*, 2005 (in press).
- 23 Leon DA, Walt G, Satariano WA. Poverty, inequality and health: an international perspective. *Am J Epidemiol* 2001;**154**:588–9.

ECHO.....

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Standard forms for weekend management increase inpatient safety

A pilot study in a district general hospital in the UK has found that introducing a standard form to regularise inpatient management at weekends improved care and safety.

Documentation was better, with significantly more inpatients having a weekend plan in their notes and a recorded resuscitation decision, though recorded decisions on prophylaxis for deep vein thrombosis (DVT) were significantly fewer, maybe because the form did not specify this. The number of patients reviewed over a weekend was not affected.

Doctors found the form user friendly and helpful, and nurses, especially, valued it for briefing on call doctors unfamiliar with a patient. More generally, the form provided a useful prompt for resuscitation decision to be reviewed over time.

The form was based on an initial audit of the notes of 33 randomly chosen medical inpatients for one weekend to determine criteria that should be covered and was suitable for all medical specialties. Three months after its introduction a reaudit was performed on the notes of 273 inpatients. The form is now being applied to surgical patients.

Weekends are a critical time for patients as there is no regular clinical review. Research shows that this is a time of greater risk of avoidable heart attacks and deaths, so good communication among healthcare professionals is paramount. Local guidelines state that weekend plans should be in place, recording decision on resuscitation, on prophylactic treatment for DVT, and expected discharge date, for on call teams to refer to. The next step is to determine whether the form has improved clinical decisions at weekends.

▲ Grainge C, et al. *Postgraduate Medical Journal* 2005;**81**:524–525.