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Furthermore, high quality teaching and learning do not happen by accident: a curriculum is initially no more than a document. Medical schools must engage with the foundation programme, helping to develop expertise in medical education and ensuring that the years spent as junior hospital doctors are part of a smooth transition for graduates. There will have to be rapid expansion in the number of medical graduates who have been taught to teach—those with formal training in methods of teaching and learning. Postgraduate training in medical education may have to become a formal requirement for at least some clinicians in each teaching facility, and medical education may develop into a formal postgraduate medical

specialty. Lastly, the current difficult pathways for medical practitioners to gain formal educational qualifications may need to be simplified, with more flexible professional doctorates or membership courses.

The success of the foundation programme, then, will require genuine academic development and support throughout the entire healthcare system, rather than in a relatively small number of elite teaching facilities.

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Self monitoring of high blood pressure

Doing it in the practice's waiting room may be better than doing it at home

Lowering raised blood pressure reduces patients' risk of developing cardiovascular disease.^{1,2} But the control of hypertension is often suboptimal, and this is borne out by the poorer effectiveness of treatment in observational studies than in randomised clinical trials.³ A recent systematic review by Fahey and colleagues emphasised that effective care for people with hypertension requires rigorous management with regular review and willingness to intensify drug treatment.⁴

The outcome of regular care depends on patients as much as, or more than, it does on practitioners. Evidence on managing chronic diseases such as diabetes mellitus and asthma emphasises the value of patients' participation, and the same is probably true for self monitoring of blood pressure. Measuring blood pressure is straightforward and has become even more so with the development of validated electronic measuring devices, which are now available to the public.⁵ Self monitoring satisfies the public's demand for more self control and knowledge about health and disease. In addition, it may affect workload in primary care.

A randomised controlled trial by McManus and colleagues in this issue (p 493) reports on self monitoring of blood pressure in the patient's general practice rather than at home.⁶ Practice based self monitoring of blood pressure is an original concept and is worth testing. The self measured and professionally measured blood pressure values were comparable, suggesting that hypertension guidelines, which will be based for the foreseeable future on professional measurement data, are applicable to self monitoring. In this study self monitoring resulted in a

cost effective reduction in blood pressure, with no increase in patients' anxiety.

This new study provides valuable empirical data in line with earlier studies showing that home monitoring is more effective than usual care in controlling blood pressure and achieving targets.⁷ This effect is probably explained by the absence of a white coat effect and better adherence to treatment through self control. Despite these promising findings, some important questions remain unresolved.

Even though small gains in blood pressure reduction provided by self monitoring are clinically relevant, it is crucial to know whether they can be sustained over time, given the chronic nature of hypertension. If adherence to home monitoring declines over time it could lead to even poorer control of blood pressure through diminished contact between patients and doctors.⁸ Yet the average follow-up in all but a few studies of self monitoring has been less than a year.⁷

A weakness in the study by McManus and colleagues was the absence of cluster randomisation. As a consequence, general practitioners may have optimised their measurement during usual care, diminishing the effect size. Furthermore, systematic reviews show that most studies have been marred by methodological problems and have included only a small part of the hypertensive population in general practice.^{4,7} Self selection by enthusiastic participants in these studies may partly explain effectiveness, and this makes it difficult to recommend self measurement to all patients.⁹

Self monitoring of blood pressure should be part of a plan that includes patients more fully in decisions over treatment; includes regular checks of patients' blood

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pressure measurement technique; and provides some form of regular professional supervision. The hypertensive population in general practice is heterogeneous—for example, in terms of age, comorbidity, and individual preferences.¹⁰ That many patients declined the offer to join the self measurement group in the study by McManus and colleagues hampered recognitions of this heterogeneity. A practical solution could be to offer self monitoring only to those most likely to practise it, probably minimising the risk of anxiety and other adverse effects among patients. Testing patients' motivation and allocating a treatment strategy accordingly, along the lines of the stages of change model used in risk factor management, could facilitate selection.¹¹

Given that the current value of self monitoring of blood pressure remains uncertain, we recommend carefully designed experiments within the broader

context suggested in the Cochrane review by Fahey and colleagues.⁴ Consultation at the practice at least once a year seems necessary to check whether the conditions for successful self measurement of blood pressure are still in place. But practice based self monitoring, as introduced by McManus and colleagues, offers a greater safety net. It allows active participation by patients without losing professional supervision, which may prove to be a considerable advantage over self monitoring at home.

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Coronary heart disease in women

Is underdiagnosed, undertreated, and under-researched

Coronary heart disease remains the leading cause of death in men and women worldwide, and cardiovascular deaths exceed the number of deaths from all cancers combined. In the United Kingdom, coronary heart disease causes almost 114 000 deaths a year, and one in six occurs in women.¹ In the UK and Europe, one woman dies every six minutes of heart disease and in the United States, one every minute. Moreover, in Europe, cardiovascular disease kills a higher percentage of women (55%) than men (43%).² Yet coronary heart disease is still considered a disease of men.

Many women are unaware that coronary heart disease is their main killer; their biggest fear is breast cancer. Even more worrying, however, is the apparent lack of awareness of cardiovascular disease in women among healthcare professionals. At the time of presentation with heart disease, women tend to be 10 years older than men, and at the time of their first myocardial infarction they are usually 20 years older.³⁻⁴ As coronary heart disease is a disease of the older woman, many women believe that they can postpone attempts to reduce their risk.

Risk factors for heart disease differ between the sexes. For example, women with diabetes have 2.6 times the risk of dying from coronary heart disease than women without diabetes compared with a 1.8-fold

risk among men with diabetes.³ Similarly hypertension is associated with a twofold to threefold increased risk of coronary events in women.³ Low concentrations of high density lipoprotein seem to be a better predictor of coronary risk in women than high concentrations of low density lipoprotein.³ Furthermore, high levels of triglyceride are associated with greater risk among women than men.³

Women and men with heart disease tend to differ in their presenting symptoms, their access to investigations and treatment, and their overall prognosis. Women may have more atypical symptoms than men—such as back pain, burning in the chest, abdominal discomfort, nausea, or fatigue—which makes the diagnosis more difficult. Women are less likely to seek medical help and tend to present late in the process of their disease. They are also less likely to have appropriate investigations, such as coronary angiography and, together with late presentation to hospital, this can delay the start of effective treatment.

There are particularly clear sex differences in patients undergoing coronary revascularisation: mortality in women is notably higher.⁵⁻⁷ At the time of presentation with coronary artery disease, women are more likely to have comorbid factors such as diabetes mellitus, hypertension, hypercholesterolaemia, peripheral vascular disease, and heart failure.⁸ In addition,