

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,

women's coronary vessels tend to be smaller than those of men, which makes them more difficult to revascularise percutaneously as well as surgically.⁸ And, because of late presentation, women more often need urgent intervention.

Although the absolute mortality for women undergoing percutaneous and surgical revascularisation seems to be improving,^{7,9} it remains higher than for men. Most studies have shown that mortality in hospital is similar in men and women undergoing coronary revascularisation after adjustment for the increase in overall risk among women.^{7,9} The wider use of drug eluting stents and adjunctive medical therapy such as glycoprotein IIb/IIIa inhibitors, as well as improved techniques such as off-pump surgery and minimally invasive coronary surgery, may help to improve outcomes in women having coronary revascularisation.^{10,11} For example, paclitaxel eluting stents reduce clinical and angiographic restenosis in both sexes.¹⁰ And a recent large study found that women who had off-pump coronary artery bypass surgery had 32.6% lower mortality, a 35.1% lower complication rate owing to bleeding, a 118.6% lower rate of neurological complications, and a 49.3% lower rate of respiratory complications than women having on-pump surgery.¹¹

Women continue to be under-represented in research on heart disease. They account for less than 30% of the participants in most studies and trials in cardiology. It is difficult, therefore, to draw conclusive evidence on managing cardiovascular disease in women. Despite differences between the sexes in risk factors, presentation, and response to treatment, women continue to receive similar treatments to men on the basis of trials that include mainly male participants. To remedy this, participants' sex must be considered in the design and analysis of cardiology studies.

Better awareness and education, earlier and more aggressive control of risk factors, and appropriate access to diagnosis and treatment are desperately needed to tackle this potentially fatal disease. To raise awareness the American Heart Association has launched the extensive "Go Red for Women Campaign," and in 2004 the association published

guidelines for preventing cardiovascular disease in women,¹² while the US National Heart, Blood, and Lung Institute runs "The Heart Truth Campaign."¹³ The European Society of Cardiology is soon to publish a scientific statement on the management of women's heart disease and will launch this month its Women at Heart Initiative to alert medical professionals to the burden and underappreciation of heart disease in women.

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Clean drinking water for homes in Africa and other less developed countries

Flocculant-disinfectant treatment with bleach is effective and acceptable

More than 1 billion people in developing countries lack access to safe water, and 2.2 million die annually of diarrhoea.¹ Unfortunately, communities where diarrhoea is a leading cause of morbidity and mortality often lack the capacity and the resources to establish and sustain centrally purified water free from sewage.²

Contamination of water during collection, transport, and storage at home presents a serious risk to health for millions of households in developing countries. Several studies have shown an increased risk of

diarrhoea because of inadequate water storage.³ Regardless of where or how the water is collected, storage vessels with wide openings such as pots or buckets are easily contaminated with faeces, through the introduction of cups, dippers, or hands. Water might also be contaminated by flies, cockroaches, and rodents.

Several organisations have adopted a three pronged approach for treating water at the point of use.⁴ This includes using simple household bleach (sodium hypochlorite) to disinfect the water, using narrow mouthed storage vessels, and working with

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