Men's health: a tale of two nations

ALAN BEGG

Alan Begg investigates health disparities between different regions of the UK, looking in particular at the north–south divide in men's health.

There are considerable variations between different parts of the UK in life expectancy, health outcomes, healthcare structures, male cancers, erectile dysfunction, heart disease, smoking and diabetes.

LIFE EXPECTANCY
Scotland has one of the lowest life expectancies in Western Europe, with the comparison being particularly marked for males (Figure 1). Boys born in Scotland in 2010 can expect to live 76.3 years on average, 59.5 of these years in a healthy state. There are considerable differences in healthy life expectancy with girls born in the same year (80.7 and 61.9 years, respectively) with a clear differential for deprivation, which is 81 years for males in the least deprived quintile, lowering to 70.1 for those in the most deprived category.

In England there is a clear north–south mortality divide. Between 1965 and 2008 the northern mortality excess was 13.8 per cent (95 per cent confidence interval 13.7–13.9) with the geographical mortality inequality significantly larger for males than females (14.9 versus 12.7 per cent, p=0.001). The divide in Scotland is on an east–west basis. Between 1981 and 2001, Scotland became less deprived relative to the rest of Great Britain, but mortality rates were 12 per cent higher in Scotland in 1981, rising to 15 per cent higher in 2001; the rise was particularly large for middle-aged men. However, it is felt that there is a specific Scottish effect to account for the excess mortality in Scotland, which is not fully explained by the levels of deprivation. In spite of this, there remains pressure to address health inequalities and deprivation by an asymmetrical asymmetrical

Figure 1. All-cause age-standardised mortality rates/100 000 men in 2010

Alan Begg, FRCGP, FRCP, DA, DCH, DRCOG, GP, Montrose; Honorary Senior Lecturer, University of Dundee
approach of increasing health resources in deprived areas, especially at community or primary care level.1

HEALTH OUTCOMES

Health spending in Scotland is 12 per cent (£212) more per person compared with England, with staffing levels 30 per cent higher in Scotland.6 Scotland led the way in the development of evidence-based clinical guidelines through the Scottish Intercollegiate Guidelines Network as well as the development of quality standards, but this, in addition to the increased spending, is not reflected in improved outcomes of the main disease categories. In England, NICE is now producing a much more comprehensive range of clinical guidelines, technology appraisals, care pathways and commissioning guides, some of which are specifically targeted at male clinical conditions, such as clinical guideline 97 on lower urinary tract symptoms.7

HEALTHCARE STRUCTURES

Since devolution, the divergence of the healthcare systems across the devolved nations has been noticeable and significant. The members of the Academy of the Medical Royal Colleges have major concerns over the likely fragmentation and lack of patient care integration that may result from the current Health and Social Care Act. With primary care trusts planned for abolition and commissioning consortia due to take over responsibility for ensuring services are provided, there is considerable confusion and uncertainty of what is likely to happen in the near future within the NHS in England.6

<table>
<thead>
<tr>
<th>UK</th>
<th>England</th>
<th>Scotland</th>
<th>Wales</th>
<th>Northern Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>CI</td>
<td>Rate</td>
<td>CI</td>
<td>Rate</td>
</tr>
<tr>
<td>Age-standardised incidence rates of new diagnosed cancer/100 000 population</td>
<td>420.5</td>
<td>419.3–421.7</td>
<td>414.1</td>
<td>412.8–415.4</td>
</tr>
<tr>
<td>Age-standardised mortality rates from cancer/100 000 population</td>
<td>211.8</td>
<td>211.0–212.6</td>
<td>207.4</td>
<td>206.5–208.3</td>
</tr>
</tbody>
</table>

Table 1. Male malignancies, 2006–200812

In Scotland, although there is no direct commissioning of services, it is difficult to gauge the benefits of a different approach. Since devolution, in Scotland there has been an increased focus in partnership working between health and social care. However, according to a recent Audit Scotland report, the setting up of the Community Health Partnerships (CHP) has contributed to duplication and a lack of clarity in individual roles, with scope to achieve efficiencies by rationalisation.7 This report calls for a more systematic joined-up approach to planning and resourcing, to ensure resources are used effectively.

As a result of this report, the approach of the Scottish Government has been to announce an integration of adult health and social care by replacing CHPs with Health and Social Care Partnerships.10 These are intended to have a strengthened role for clinicians and the social care professionals in the planning of services, with more community provision and investment. In spite of the clear message from the Audit Scotland report that the current system does not work well to the benefit of patients, a recent report gives a more positive evaluation of partnership working in Scotland at a national level, which unfortunately is not translated down to the operational level.11

MALE CANCERS

The male age-standardised mortality rates are highest in Scotland and lowest in England, followed by Northern Ireland and Wales, with the incidence rate of newly diagnosed cancers highest in Wales (Table 1).13 Registration of cancers diagnosed in England in 2008 revealed that prostate cancer at 24.1 per cent of total malignancies is the most common cancer, followed by lung (14.3 per cent) and colorectal cancer (13.8 per cent).13 In Scotland, however, prostate cancer is the third most commonly diagnosed cancer in men after non-melanoma skin cancer and lung cancer.14 In Scotland, prostate cancer is the third most common cause of death from cancer in men after lung and colorectal cancer. The comparative age-standardised rate per 100 000 population of new cases of prostate cancer across the UK is shown in Table 2.15

The reason for this variation is not clear, with the main risk factors being increasing age, family history, African descent and various aspects of diet. In Scotland, the incidence is higher in areas of less socioeconomic deprivation, but it is not clear if this is a real difference in risk, or an increased willingness to present and undergo investigation. It is also suggested that there is a lower threshold to measure prostate-specific antigen in this higher socioeconomic group, with the survival rate lower in those in a socioeconomic deprived category.

ERECTILE DYSFUNCTION

Most of the large epidemiological studies looking at the prevalence of erectile dysfunction...
have been undertaken in the USA, with only small studies being performed in the UK, resulting in an inability to pinpoint regional variations. One study in Wales revealed a higher prevalence than in the Massachusetts Male Ageing Study, although direct comparisons were difficult to make. It is likely, however, that any differences in the prevalence of erectile dysfunction across the UK is likely to be reflected by specific variation in the individual risk factors.

HEART DISEASE

Although falling across the UK, death rates from coronary heart disease, especially in males, are high in Scotland and Northern Ireland, although there is evidence that the rate of decline is slower in Scotland (Figure 2). A recent Audit Scotland report has highlighted that, although death rates of all types of heart disease have reduced by around 40 per cent in the past ten years, they remain the second highest cause of death after cancer.

The rate of heart disease in Scotland is the highest in Western Europe, especially in men, with spending on hospital cardiology services having increased by 82 per cent in the past eight years. It is, however, felt that there is a potential to make significant efficiency savings in this cost and, in spite of the money spent, there is also still room for improvement in the universal coverage provision of services such as cardiac rehabilitation.

It is also acknowledged that there is a need for a reassessment of heart disease prevention measures to improve outcomes and to address inequalities, particularly in deprived areas. There is no universal population approach to cardiovascular disease risk prevention and diabetes screening in Scotland. The NHS health check, which offers a free health check to all those aged 40–70 years, applies only in England.

In the past ten years, the number of coronary revascularisation procedures in Scotland has increased by 50 per cent, with the number of coronary artery bypass grafts dropping, although the procedure rates remain lower in deprived areas. In 2009, 226 primary percutaneous coronary interventions per million population were carried out in Scotland, compared with 230 in England and 116 in Wales.

TRADITIONAL RISK FACTORS

Smoking is coming down in all countries across the UK, with all countries now having in place a smoking ban in public places, although Scotland led the way in this approach. The results in Scotland are generally felt to be positive in terms of a reduction in acute coronary syndrome events, respiratory symptoms and fetal wellbeing. Twenty-one per cent of men smoke in England, with 23 per cent in Scotland and 20 per cent in Wales. The Scottish figure is lower than expected because of incomplete data collection, although the 2012 Scottish Diabetes Survey gives a prevalence rate of 4.6 per cent.

It is interesting that men in Scotland exercise the most, with 46 per cent of males meeting the government’s recommended level, compared with 42 per cent in England and 38 per cent in Wales.

Within Great Britain there is considerable geographical variation in the prevalence of heavy drinking, with males in England leading the way. Twenty-two per cent of males drink in excess of eight units per day, compared with 19 per cent of males in Scotland and 16 per cent in Wales.

The blood pressure of the population may be affected by the individual consumption of salt. In Scotland in 2006, although the mean consumption of salt was higher than that in England, at 10.6g per day compared with 10.2g per day, the percentage of people in England exceeding the recommended daily consumption is higher (89 per cent compared with 85 per cent in Scotland).

DIABETES

Data from the Quality and Outcomes Framework reveal a variation in diabetes prevalence across the devolved nations. The most recent figures give a UK average of 4.5 per cent, with 2.9 million people diagnosed as being diabetic. The country variation in prevalence is:

- England: 5.5 per cent
- Northern Ireland: 3.8 per cent
- Scotland: 4.3 per cent
- Wales: 5 per cent.

The Scottish figure is lower than expected because of incomplete data collection, although the 2012 Scottish Diabetes Survey gives a prevalence rate of 4.6 per cent. Although the prevalence of type 2 diabetes is increasing rapidly in Scotland, as in other countries, it is surprising that it is lower than England. The rise...
in diabetes is felt to reflect poor diet with excess energy intake, low levels of physical activity and resulting increase in obesity, with the implication that large numbers may remain undiagnosed. The age-standardised prevalence is higher in males and also higher in more deprived categories.21

CONCLUSION
At present in Scotland there is a collective sigh of relief among health professionals that the health service in Scotland is not following the English approach. Over the coming years, as healthcare systems and approaches continue to diverge, it will be interesting to observe whether the gap in clinical outcomes presently seen will narrow or diverge more. Unless prosperity in the north is able to approach that seen in the south east of England, it is difficult to see a reduction in deprivation and social exclusion as well as changes in factors that are unique to Scotland. The future may depend on whether the intellectual case triumphs over the emotional argument for distinct separate countries.

Declaration of interests: none declared.

REFERENCES