

Diabetes black spots and death by postcode

The incidence, and inequity, of diabetes are likely to be worsened by obesity

Papers p 1389

Like the villain in *Treasure Island*, diabetes is well known for handing the “black spot” of early demise to its victims. This reputation will be enhanced by a study in this week’s *BMJ* from South Tees, one of the United Kingdom’s black spots for both poverty and premature death, mainly from cardiovascular disease. Roper et al present a depressing snapshot of the prospects for diabetic people in the UK today, which shows diabetes to be particularly mean: sexist, ageist, and with a clear tendency to kick the underdog (p 1389).¹

Of their 4800 diabetic subjects, a quarter died during the study’s six year span—an overall mortality about 2.2 times the national average. Those who developed diabetes youngest had their lives shortened the most: life expectancy was reduced by nine years for those diagnosed by the age of 40 but by only one year for those diagnosed at 80. Women diagnosed between 55 and 65 years of age lost two more years of life than did men. Finally, mortality tracked closely with socioeconomic deprivation, rising steadily from 1.3 times the national average in districts with the most affluent postcodes to 2.3 times in the poorest.

The study was meticulous in design and conservative in its assumptions; if anything, the damage done by both diabetes and poverty was probably underestimated. As the authors point out, these findings repeat what is already known, but the message deserves repetition. In particular, it carries grim warnings about our attempts to manage diabetes, both now and in the future.

Diabetes is notoriously complicated and unpredictable and demands time and attention to detail as well as a sound understanding of the disease and its management. This paper comes at a time when the fashion in the UK is to devolve the routine care of diabetes away from specialist centres and into the community, where responsibility is too often delegated to practice nurses, who may have little or no specialist training. This timely reminder of the dangers of diabetes should prompt a careful look at the wisdom of that strategy. The systematic use of diabetes registers, as in this study, and comparisons with other countries should help us to identify the best way to look after this difficult disease.

The situation is hard enough to cope with now. Unfortunately, things are set to get worse. Most of Roper et al’s patients (nominally 85%) had type 2 diabetes, which, nourished by the obesity pandemic, is on the march throughout the world. Because of the

projected increase in type 2 diabetes the number of diabetic patients worldwide is predicted to double within the next 15 years, to over 100 million.² Worse still, type 2 diabetes is not the disease it used to be. It is no longer safe to assume (as did Roper et al) that type 2 diabetes is “maturity onset”: it is now appearing in ever younger subjects and already accounts for one third of newly diagnosed diabetic people under 20 years of age in some parts of the United States.³

Extrapolating from the data of Roper et al (their figure 1) suggests that patients diagnosed with type 2 diabetes at the age of 13—the average age of presentation among North American children³—would lose an average of 14 years of life. There will be many more who will not die particularly young but instead fall victim to the many complications of diabetes. The rising prevalence and the leftward shift in age of onset will therefore have dire consequences for the health and wealth of this nation. Although the UK currently spends less on health than almost all of its European neighbours, most countries in the developing world will be even less able to afford the increasing burden of diabetes. For them, the coming years will be particularly bleak.

Having glimpsed the future, can we do anything to change it? Responsibility for the rise in type 2 diabetes and its earlier age of onset can largely be attributed to obesity, which now affects a third of adults in many developed countries and is getting a firm grip on our children.⁴ There is no mystery about the causes of the obesity pandemic. Unfortunately, the rational countermeasures—encouraging physical activity and cutting energy intake⁵⁻⁸—will be vigorously resisted by powerful lobbies, including the manufacturers of cars, televisions, computer games, fizzy drinks, and fast food, and by the intended beneficiaries themselves. Sadly, obesity is especially prevalent among the poorer parts of the population.⁹ As it is now recognised as a cardiovascular risk factor in its own right,¹⁰ obesity may well explain a large part of the excess cardiovascular mortality associated with social deprivation.

Roper et al call for the national service framework (which will soon pronounce on the UK’s strategy for managing diabetes) to take their findings into consideration.¹ They also invoke the St Vincent Declaration and its guiding principle that those with diabetes should enjoy “a life approaching normal expectation in quality and quantity.”¹¹ We can only hope that the service framework and its counterparts in other countries can rise to these difficult challenges and that,

against expectation, public health measures will be able to turn the rising tide of obesity. If not, we shall find ourselves looking back with longing at the good old days portrayed by Roper et al, and St Vincent will turn out to be the patron saint of unfulfilled aspirations.

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Euthanasia: where the Netherlands leads will the world follow?

No. Legalisation is a diversion from improving care for the dying

Euthanasia and, to a much lesser extent, physician assisted suicide have been socially accepted and openly practised in the Netherlands for about two decades. The Netherlands' recent legalisation of euthanasia¹ merely codifies what already exists and is unlikely to change Dutch practices significantly. The one exception may be to permit a few more cases of euthanasia among children aged 12-18 years. But drawn out deaths in this age group, predominantly from cancer or AIDS, are rare, accounting for fewer than 400 deaths (<0.2% of all deaths) a year in all of the Netherlands. The key question is not whether things will change in the Netherlands, but whether legalisation of euthanasia and physician assisted suicide there will stimulate a trend in other developed countries.

This seems highly unlikely. Certainly in the United States, no state other than Oregon seems poised to take the opportunity presented by the 1997 Supreme Court ruling to legalise euthanasia or physician assisted suicide. Indeed, in the past five years 10 states have passed bills making euthanasia or physician assisted suicide illegal, and bills are pending in five more. In a referendum in 1998, Michigan voters overwhelmingly (70% to 30%) rejected the legalisation of physician assisted suicide, and in 2000, voters in Maine also rejected legalisation. Similarly, in Germany, history makes legalisation unlikely. Even though the current movement is based on the idea that euthanasia should occur only at the patient's own request and opinion polls suggest public support, the legacy of Nazi euthanasia for racial purification, sanctioned by the state and committed by a willing medical profession, makes many German physicians and politicians loath to consider it. There may be similar sentiments in Scandinavian countries, which have been shaken by recent revelations of state sanctioned sterilisation practices. In

southern Europe there is reluctance even to conduct surveys on euthanasia and physician assisted suicide: convincing a legislature to legalise these interventions seems inconceivable.

Besides the vagaries of politics, there is something deeper that makes widespread adoption of euthanasia or physician assisted suicide unlikely and even counterproductive. Many recent empirical data expose how irrelevant permitting euthanasia or physician assisted suicide is for ensuring high quality care at the end of life.

Ample evidence exists that the process of dying is less than optimal. Too many dying patients suffer unnecessary physical symptoms such as pain, dyspnoea, nausea, and vomiting; too many suffer untreated depression, anxiety, and hopelessness; and too many feel they have lost their dignity. It is the perception that dying is a painful process filled with unnecessary suffering and indignity that fuels campaigns—and public support—for legalising euthanasia and physician assisted suicide.

The only real justification for legalising euthanasia or physician assisted suicide is to address this situation. But would it? Probably not. Even in Oregon and the Netherlands euthanasia and physician assisted suicide are used in only a very small minority of deaths. The most recent data from Oregon shows that just 9 in 10 000 deaths (0.09%) occur by legal physician assisted suicide.² In the Netherlands, even after 20 years of practice and including the cases of involuntary euthanasia that lack contemporaneous consent from the patient and violate the safeguards, just 3.4% of all deaths are by euthanasia and physician assisted suicide.³ These data mean that in Oregon over 99.9% of all deaths and in the Netherlands over 96% occur without the intentional active ending of a life.⁴ It is true that about three times as many patients in the Nether-