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Death certification in the UK

We now have it on the authority of an official Home Office review[1] that the process of death certification in the UK is 'not fit for purpose'. Likewise Dame Janet Smith, in her third and final report on the Shipman case,[2] concludes that the present arrangements whereby, in effect, doctors decide whether or not to report a death to the coroner, are not satisfactory and should not be allowed to continue. Harold Shipman and many other doctors knew this all along, but two independent reviews have been completed, the problem has been formally recognized, and a report has been sent to Parliament. The time has come to act. Whether the correct action will be taken remains to be seen.

The Home Office report provides a detailed analysis of the system's faults, and offers a plan for putting things right. This plan does not include placing leadership in the hands of forensic pathologists or adopting something akin to the 'medical examiner' system used in much of the USA. Instead, the Commission wants to add new layers of controls and administrative structures, including a 'statutory medical assessor' who will oversee the work of local clinicians. The Commission proposes use of 'doctors looking after hospital and family practice patients' in the certification of most deaths. Creation of this new post will be expensive, but the Commission thinks that the costs will be more than offset by an 'anticipated reduction in the use of the autopsy'. Just how the performance of fewer autopsies will restore trust, or deter future Shipmans, is not made clear. Commission members seem to have been oblivious to the central flaw of the existing system—namely, that it capitalizes upon the public trust yet violates it at the same time. This paradox did not escape the eye of Dame Janet Smith.

When cremation is proposed, the usual practice in the UK is for the doctor completing Part B of the form to make only a cursory inspection of the deceased and nominal, if any, contact with the doctor completing Part A. The law demands much more. Moreover, this casual attitude to a medical duty violates both the family's trust and the interests of the state. Dame Janet observed that, if doctors had been conscientious about completing Part B, Shipman would have been deterred in his appointed rounds and quite possibly caught much earlier. The Commission would rectify matters by using salaried public employees. Does the Commission have any reason to believe that the new breed of public service employees will behave any better, or act more effectively, than their predecessors?

There is abundant evidence that clinicians get the cause of death wrong in a high proportion of cases. If a physician just guesses at what diagnosis to put on the death certificate, the chances of error are particularly great. And, apart from the implications in the individual case, aggregate error deprives the State of the information it needs to allocate resources. Could the past high incidence of deaths from coronary artery disease in Scotland,[3] where autopsies are conducted in only about 9% of the population compared with nearly 25% in England and Wales, be more a function of vogues in certification than actual pathology? There is no way to tell. It is bad enough that under the current system the coroner may not act until a case has been brought to his or her attention. But another flaw in the system went unrecognized both by Dame Janet and by the Home Office Commission members: once the coroner has decided to act, the decision whether or not to pursue additional testing becomes one for the coroner, not the doctors. Most coroners are not medically qualified, but even so they have to approve, case by case, requests for further tests such as toxicology screening or special examinations of the heart and brain. When the coroner's budget gets squeezed, fewer tests get done. This sort of arrangement almost guarantees that episodes of foul play will go undetected and also negates the public-health role of the forensic pathologist.

How are drug-related deaths, for example, to be monitored if drug testing is optional and occasional? The Commission's report is mute on this point and does not indicate whether the statutory medical assessor will have any say over how funds are expended. The assessor will, presumably, be blamed for any cases that go undiagnosed. Appointments carrying great responsibility and little authority are best avoided: one wonders who will volunteer to be statutory medical assessor. If Dame Janet has doubts about the value of medical referees who oversee completion of cremation certificates—which she does—what will she think of the statutory medical assessor?

Autopsies are still managed by the National Health Service as if they were for hospital audit, education or research, even though the vast majority performed in England and Wales are medicolegal, conducted on instructions from the coroner and nothing to do with the NHS. Most of those doing the autopsies are NHS pathologists with neither medicolegal nor forensic training; they happily and quite legally collect both their NHS salary

and their coroner's fee for the same job. Nothing in the Commission's report indicates that this will change. Some pathologists routinely perform histological studies on autopsy cases; others do hardly any. The Commission does not address the issue of histopathology at all, except to observe that there are too few histopathologists. The fact remains that, if histological testing is performed at all, with or without the coroner's knowledge, the costs are likely to be met from the NHS budget rather than being allocated to, or reclaimed by, the legal system. How much money is lost because of these anomalies is hard to say, but the sums must be substantial, and they have not been included in the Commission's budgetary estimates. These are not the only facets of death investigation that remain unstandardized. Some pathologists routinely request opinions from neuropathologists and cardiac pathologists; many do not. In high-profile cases where the victim seems to have died of an uncommon drug-related syndrome, toxicological samples must be sent to Continental Europe or the USA for analysis. The need for outsourcing has nothing to do with talent or training—merely the refusal of budgetary authorities to release funds. When more layers are added to the current system, will coroners be more inclined to make exotic resources available? Probably not—or not until another Shipman comes along.

Supposing that the reforms were being designed by forensic pathologists rather than the Home Office Commission, how would they differ? Almost certainly, the pathologists would opt for a system where all deaths are reported to a medical examiner who then decides upon the need for further investigation. In California, for example, the existence of any one of nearly thirty different conditions would require clearance from the medical examiner before a death certificate (required for burial or cremation) could be issued. If the results of a thorough investigation indicated the need for post-mortem examination, then in most instances this would be done by a trained forensic pathologist. If forensic pathologists had their way, the autopsy would be performed in a dedicated forensic centre with complete facilities for toxicology, radiology, histology and microbiology testing. Clearly, training of other forensic pathologists would be part of the work, together with research; the centre would also offer services such as bereavement counselling, of less interest to the police and courts but important nonetheless. If forensic pathologists had their way, the postmortem examination would be performed in one of several purpose-built medicolegal institutes located at strategic points around the country.[4] The regional police force areas might provide a good geographical base. The services of pathologists, technicians, and transporters would be available 24 hours a day. Trained investigators, who might include police surgeons, mortuary technicians, and suitably retrained paramedics or nurses but not funeral directors, would go out to investigate and collect bodies from scenes. This is the model used in some of the more rural American states operating under the medical examiner system: despite sometimes long ground transport times, it seems to work well. In a centralized system of this kind, the quality of output—including coroners' reports, police statements, completeness of death investigation, research, bereavement counselling—would certainly be better and more standardized than it is at the moment, no matter what decision was eventually made about what to do with the coronial system. How much would it cost? Without a detailed economic model it is impossible to be sure, but economies of scale, not to mention the economies that could be achieved by structural reform itself, might mean there was little additional expense for the taxpayer.

Unfortunately, the Commission elected to tinker with the existing system rather than attempt root-and-branch reform. The idea of placing responsibility in the hands of medical examiners was dismissed out of hand, chiefly because the UK has only some 35 forensic pathologists in practice and only one active training programme. If forensic pathologists had been asked, they might have suggested training more pathologists. Of course it takes time and funding to establish training programmes, but there are dozens of empty training slots in the USA that could be used until home-grown programmes got underway, and the costs would not be that great. The average American pathologist enrolled in a postgraduate programme earns less than £30 000 a year. The time has come not only for development of big medicolegal centres but also for changes in the training and job descriptions of pathologists. There must be a sizeable number of pathologists in the UK who would like to conduct medicolegal autopsies full time, as medical examiners do in the USA. Forensic pathologists are awash with requests from students, junior doctors and junior pathologists to do attachments of one sort or another. Yet the enthusiasm of these potential entrants to forensic medicine is dampened by the lack of a career structure and the dearth of training programmes. In the end, government and taxpayers will decide. Pathologists can only say how the system could be, if society had the courage to aim high enough.

Note Both authors were Crown Pathologists in the Shipman case.

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REFERENCES

1 Home Office. *Death Certification and Investigation in England, Wales and Northern Ireland: the Report of a Fundamental Review*. London: Stationery Office, 2003

2 The Shipman Inquiry. *Third Report: Death and Cremation Certification*. [www.the-shipman-inquiry.org.uk], accessed 31 July 2003

3 Phillips R, Carson P, Haites N, Johnston A, Clarke C, Whitfield AG. Variation in mortality from ischaemic heart disease between England and Scotland. *Q J Med* 1987;**63**:441–8

4 *Review of Forensic Pathology Services in England and Wales*. [www.homeoffice.gov.uk/docs/forensic_pathology_report.pdf], accessed 31 July 2003

Complementary evidence?

According to a survey published in 2000, one of every five people in the UK had used complementary medicine in the past year.[1] Such a high rate of use becomes less surprising when we see the eclectic variety of interventions under this heading, including acupuncture, homeopathy, hypnotherapy, manipulation, reflexology, aromatherapy, herbalism, massage, magnetic field therapy, neural therapy, and psychological counselling—each proposed as treatment for many different conditions. More interesting is the popularity of complementary therapy among people with chronic or life-threatening conditions. For instance, of 1020 people with arthritis who were questioned, one-third said they had used some form of complementary medicine;[2] and a systematic review of surveys in rheumatology patients indicated even higher use, ranging from 30% to almost 100%.[3] When it comes to patients with cancer, a systematic review of surveys in thirteen countries indicated that 7–64% (average 31%) had tried complementary medicine.[4] In palliative care, including inpatient hospice care, complementary therapies are used widely[5] even though in many instances their efficacy remains untested.

What does the high use in these populations suggest? That patients experience symptoms of distress which conventional medicine is failing to recognize and treat? That practitioners of complementary medicine prey on individuals at a time when they are vulnerable, advocating untested therapies and taking the scarce resources (time and money) that patients and families have left to them? That complementary therapies offer important hope to individuals who have exhausted the resources of conventional medicine: 'at worst they do no harm, so why not give them a go?' Perhaps patients are seeking therapies whose effectiveness, though not proven, is also *not disproven*, offering new hope when the 'magic' of conventional medicine has faded.[6]

When reading the 10-year anniversary report of the Department of Complementary Medicine at Exeter[7] I was struck by the attempts of the group to summarize the evidence regarding specific interventions for specific conditions—for instance, the effectiveness and safety of the herbal medicine St John's wort in depression and fatigue, and the role of acupuncture in recurrent and tension headaches. They examine interventions in a wide assortment of conditions including asthma, cancer, multiple sclerosis, snoring (the intervention here being singing exercises), stress, varicose veins and obesity. In addition they look at the safety of treatments such as herbal medicine, acupuncture and spinal manipulation. Unfortunately, this report confines itself to work done by the Exeter group, and we are not told how the findings compare with other work in the UK and overseas.

How can a patient go about identifying complementary treatments that are at least safe? Charities and web-based organizations produce listings of therapies, practitioners and services, and many services advertise independently. However, most such say little about safety and even fewer deal with effectiveness. An exception is the dotukdirectory,[8] which provides links to published articles, but even here the information is difficult to assess and is not systematically reviewed. Professionals, users of the services and the general public require information on cost-effectiveness and safety, and the charities and websites should make sure it is robustly presented. In addition, of course, we need more research on these matters. For treatments such as homeopathy and herbal medicine, the conventional randomized controlled trial is perfectly suitable; for other interventions, such as aromatherapy, massage, reflexology, and acupuncture, more ingenuity is required—but it can be done[9]. Sometimes, modification of the design proves necessary during the course of the study, as happened with a trial of aromatherapy massage in cancer, funded by Cancer Research UK.[10] And for more complex interventions the Medical Research Council framework combining quantitative and qualitative approaches may well be useful.[11]

Nowadays we tend to think of evidence largely in terms of effectiveness, cost-effectiveness, and safety. But other forms of evidence—for example, concerning uncontrolled symptoms, or need, or wishes for solutions—are important to those affected by illness and society in general. These too must be included in strategies to improve care or outcomes. People with disease, with their personal experience, have their own ideas on the level of evidence that justifies resort to a complementary therapy—ideas that may differ greatly from those of research funders. When we try to judge cost-effectiveness (which we must), the popularity of

complementary medicine tells us that we must go beyond the simple indices we are accustomed to measuring.

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REFERENCES

1 Ernst E, White AR. The BBC survey of complementary medicine use in the UK. *Complementary Ther Med* 2000;**8**:2–6

2 Resch K, Hill S, Ernst E. Use of complementary therapies by individuals with arthritis. *Clin Rheumatol* 1997;**16**:391–5

3 Ernst E. Use of complementary therapies in rheumatology. A systematic review. *Clin Rheumatol* 1998;**17**:301–5

4 Ernst E, Cassileth BR. Use of complementary/alternative medicine in cancer: a systematic review. *Cancer* 1998;**83**:777–82

5 Goodwin DM, Higginson IJ, Myers K, Douglas H-R, Normand CE. What is palliative day care? A patient perspective of five UK services. *Support Care Cancer* 2002;**10**:556–62

6 Sharma UM. Using alternative therapies: marginal medicine and central concerns. In: Daves B, Gray A, Seale C, eds. *Health and Disease: a Reader*. Buckingham: Open University Press, 1995;**6**: 38–44

7 The Department of Complementary Medicine. *The Evidence So Far. A Documentation of Research 1993–2002*. Exeter: Peninsula Medical School Universities of Exeter & Plymouth, 2003

8 http://www.dotukdirectory.co.uk/global/Europe/United Kingdom/Health/Complementary and Alternative/

9 Martin J, Donaldson ANA, Villarroel R, Parmar MKB, Ernst E, Higginson IJ. Efficacy of acupuncture in asthma: systematic review and meta-analysis of published data from eleven randomised controlled trials. *Europ Resp J* 2002;**20**:846–52

10 Westcombe AM, Gambles MA, Wilkinson SM, *et al*. Learning the hard way! Setting up an RCT of aromatherapy massage for patients with advanced cancer. *Pall Med* 2003;**17**:300–7

11 Medical Research Council. *A Framework for Development and Evaluation of RCTs for Complex Interventions to Improve Health*. London: Medical Research Council, 2000