

Iain Chalmers' notes to accompany the slides for a talk entitled 'Reducing waste in deciding what research to do' which had been prepared for a meeting to mark the 10th anniversary of the death of Michael Berger.

The talk was due to have been delivered in Duesseldorf on 24 May 2013, but the plan had to be abandoned because of the disruption of flights from London Heathrow resulting from an engine fire in a BA Airbus.

I planned to begin my talk by saying how glad I was to have been asked by Bernd Richter to prepare it. I had let Michael Berger down on the only occasion that he had asked me to do something for him! He had asked me to contribute, with Bernd, to a workshop at a meeting of the European Association for the Study of Diabetes in Jerusalem in 2000. As someone who knew little about diabetes I was anyway reluctant to do this; but I eventually withdrew because I was infuriated by the use of a map in the conference programme. This failed to indicate Israel's illegal occupation of Palestinian and Syrian territory. I feel deep shame by the way my country has repeatedly betrayed the indigenous people of Palestine over the past century. The maps in Slide 6 and the following two slides make clear the consequences for the Palestinian people. Palestinians, not Europeans, are being expected to pay the price for European anti-semitism.

Slide 9 moves to the theme of my talk. I begin (Slide 10) by referring to a paper, published in the Lancet in 2009, in which Paul Glasziou and I estimated that 85% of the massive annual investment in medical research is being wasted. That paper led us to be invited by the Lancet to coordinate a series six papers on waste and inefficiency in research, and these will be published later this year. The first paper in the series (Slide 12) concerns issues in which Michael was interested, illustrated by the quotation from Edwin Gale (Slide 13).

The themes covered in the 5 papers on waste that follow are shown in Slide 14. From Slide 15 onwards I focus on just one source of waste, namely, waste in deciding what research to do. Slides 16-20 show the distribution of funding among different types of research, and remind us of the much greater funding for pure basic research than for applied research.

Slides 21-25 draw attention to some mismatches between what users of research want and what researchers are doing. Slide 27 gives an example of researchers ignoring outcomes that patients rate as important, and Slides 28-32 provide information about initiatives endeavouring to address these mismatches.

Slides 33-42 refer to another important source of waste in deciding what research to do, namely, not assessing systematically what is already known before embarking on additional (primary) research. Slides 43-48 provide an example of how choices for research can and should be organised to reduce waste.

In Slide 50, the late lamented Alessandro Liberati reminds us of the need for researchers to take account of the needs of patients and the public. This was a matter about which Michael felt strongly. Not long before he died he sent me (Slide 51) a 1909 paper by the Irish writer George Bernard Shaw (Slide 52), in which Shaw suggests that "it is important to give every doctor an interest in

educating the public scientifically". This was a message developed by Michael in his posthumously published paper 'The Era of Enlightenment Ends with the Golden Calf' (Slide 53).

Slides 54-64 refer to ways in which I, Gerd Antes and others in the Testing Treatments *interactive* Editorial Alliance are trying to address George Bernard Shaw's and Michael Berger's call to engage patients and the public (including my grand-daughter!) in evaluating and shaping the medical research agenda.

Finally, had I been able to reach Duesseldorf in time to have given my talk, I might have read out the following excerpt from the paper by George Bernard Shaw to which Michael had introduced me. I think it was probably one of the passages that prompted Michael sent me the paper. It reminded me of the outrageous ousting of Peter Sawicki from IQWiG:

"The position [of the medical officer of health] was a most independent and responsible one compared to that of a private practitioner. For example, he was judged altogether by the vital statistics of his district. [His] income did not get larger when the district got sick. The private practitioners' [income] did. They revelled in an epidemic. I remember going through one smallpox epidemic. Vaccination raged: you could see the private practitioners getting new ties and new hats. When the death rate went up they always looked better off and happier. That was not the case with the medical officer of health: he looked more worried: it was a bad time for him. From time to time the question of his salary came before the borough council. There was always a fight, because you could not get the ordinary borough councillor to understand why several hundred [pounds] a year should be paid to a doctor who gave no bottles [drugs]. But there was only one point upon which it could be argued, and that was the vital statistics of the district. Then [the medical officer of health] was independent of those borough councillors: they had no power to dismiss him.... I take it the medical officer of health is in an ideal position – the Socialist position – the position that one wants Socialism to place all doctors in."

Michael Berger was a rare exemplar within medicine: a physician with both a respect for scientific evidence and an admirable moral compass. I wish I had known him better and that he was still with us.