

continue employing physicians who had allowed relatives to die, would have been resolved had she systematically applied her initial insight. The issue was not, as she says elsewhere, about appropriate medical knowledge or setting standards of care, but about the care of the soul in its physical setting, a job which might be done as well by an educated priest with a smattering of medical knowledge, as by a trained physician. Indeed her own emphasis on the "regimen" as a route to health which did not require doctors implicitly makes the same point.

This is a solid, scholarly work, but it would have been better had the author thought through the implications of her initial analysis.

Princeton University Press might also notice that the stitching is so poor in my copy that after one reading the first quire has already come loose.

P H Cullum,
University of Huddersfield

Alan Derickson, *Black lung: anatomy of a public health disaster*, Ithaca and London, Cornell University Press, 1998, pp. xv, 237, illus., £22.50, \$22.95 (hardback 0-8014-3186-7).

In the nineteenth century the hazards of coal mining were well known to occupational health specialists. Thus, Thomas Arlidge, that doyen of British occupational medicine, observed in the 1890s that "[m]iners as a rule, are not well-set-up-men". They looked anxious and prematurely old; they had a tendency to shuffle with a stooping gait and frequently had misshapen limbs. Aside from the risk of accidental death or injury from explosion, roof fall, or a range of other perils, they faced various health hazards including nystagmus, ankylostomiasis, and respiratory disease. As regards the latter, Arlidge

accepted that coal dust, largely on account of its rounded structure, was not the most dangerous dust. On the other hand, its prolonged inhalation did produce dyspnoea, chronic bronchitis, and fibrosis.

Accordingly, while the overall mortality rate among coal miners was surprisingly low, the death rate from respiratory disease was high. As for the widespread notion that coal dust accorded immunity against pulmonary tuberculosis, Arlidge was a confirmed sceptic.

Notwithstanding the state of specialist knowledge at the end of the nineteenth century, the fact is that in the USA, as Alan Derickson convincingly demonstrates, for "much of the twentieth century, many in positions of authority held that breathing coal mine dust was harmless, or even beneficial, to human health". This being the case, few efforts were made in any states either to provide compensation for coal miners incapacitated by their unhealthy workplaces, or to eliminate dust from mines. Indeed, as mechanical power was applied to the extraction of coal in the course of the twentieth century, the dustiness, and hence the unhealthiness, of underground conditions increased. *Black lung* tells the story of how compensation and prevention measures were first denied and later established, both at state level and, eventually, though not until the late 1960s, federally. In the process, coal workers' pneumoconiosis (CWP) came to be accepted as a clinical and compensable condition. Importantly, there was to be a presumption that respiratory disease in miners was of occupational origin.

This is a comparatively short volume which, nevertheless, covers a great deal of ground, including in terms of the growth of scientific, technical and medical knowledge, in all of which areas British researchers exerted a substantial influence in the USA. But it is with the social, legal, and political struggles, particularly of the 1960s, that Derickson is mainly concerned. His story is one in which mining companies, physicians,

legislators, regulators, and the main labour union all too often combined to protect their own pecuniary interests at the expense of mine workers' health, welfare, and lives. Only with the development of grass roots activism, supported by independent medical expertise (for many years a rare commodity in the American workplace) and the civil rights movement was this unholy alliance outmanoeuvred. In the face of such pressure, vested interests capitulated, but their acceptance both of the existence of CWP and of the need for remedial measures was born out of self-interest and the desire to forestall the possibility that they might be forced to bear the burden of compensating all ageing miners with lung infections, regardless of the origin of such disease.

In many respects Derickson's line of argument will be familiar to anyone acquainted with the burgeoning literature on the history of occupational health and safety in the USA. Nevertheless, meticulously researched, elegantly written, and handsomely produced as it is, *Black lung* is an important and welcome addition to the history of health in the twentieth-century American workplace.

Peter Bartrip,
University College
Northampton

Allen M Hornblum, *Acres of skin: human experiments at Holmesburg Prison. A true story of abuse and exploitation in the name of medical science*, New York and London, Routledge, 1998, pp. xxii, 297, illus., £18.99 (0-415-91990-8)

One of the well-springs of modern bioethics was the revelation during the 1960s that doctors in the USA and the UK had experimented on the elderly, the very young, the mentally incapacitated,

prisoners, the poor, and blacks (in the USA), and had treated these vulnerable people as somehow deserving of less consideration than the white middle classes from which the doctors themselves came.

The social commentator Jessica Mitford detailed the extent of medical abuse of prisoners in one chapter of her 1974 book, *Kind and usual punishment*. Under the provocative heading, 'Cheaper than chimpanzees', she laid out how commercially lucrative it was to use captive populations for drug testing and how pervasive and corrupting such practices were.

Allen Hornblum has taken a different route to Mitford's. He has focused not on the whole system but on just one institution. Mainly under the direction of Dr Albert Kligman, a dermatologist at the University of Pennsylvania, an extensive range of experiments was conducted on inmates of the Holmesburg Prison for nearly two decades. As one might expect with a dermatologist in charge, some were tests for cosmetics; others included the administration of radioactive materials, and mind-bending drugs on behalf of the US Army and the CIA (not to be expected from a dermatologist). Some of the experimental methods may have been so slipshod that the results cannot be relied upon.

Hornblum tells the story as far as possible through interviews with the surviving inmates who underwent some of the experiments. He has succeeded admirably in letting speak those whose voices were once muted. But there is a price to pay for this approach. Concentration on the personal inevitably means that the institutional escapes scrutiny. Thus he tells a simple tale of victims (the inmates) and villains (Dr Kligman).

Hornblum writes of the entire US prison experimentation system: "Liberties were taken, ethical corners cut, and sensitivity relinquished not by the collective medical community but by ambitious and