

Technological medicine

Maurice Lessof

Beyond the Magic Bullet. By B. Dixon. Pp. 249. (George Allen and Unwin: London, 1978.) £5.50.

THE essential thesis of this readable and well written book is that expensive, technological medicine has failed. It has distorted our approach to health problems and has led to the neglect of the epidemiological, social and psychological components of illness. Worse than this, it is not even effective. Waterborne infections, which kill an estimated 10 million people annually throughout the world, could be contained more readily by measures that are concerned with nutrition, hygiene and water supplies than ever they could by antibiotics.

There is a second theme which is a little more difficult to sustain. The author believes that, in a world setting, the approach to disease through individual causes and specific cures has largely been a fiasco. 'Specific aetiology' is an idea that has had its day; for even infections with an identified cause are very complex in their origins. A technological approach to treatment is inappropriate in the Third World, where the death rate for measles is increased 400-fold by malnutrition.

The fallacy of this proposition is perhaps worth considering, for the argument is very seductive. The use of vaccines, much applauded by the author, is the fruit, *par excellence*, of research into 'specific aetiology'. It is also, incidentally, a product of the much-criticised pharmaceutical companies, with their 'magic bullet' mentality. In making the case for better nutrition and hygiene, it is tempting to deride the scientific approach. Yet vaccination has eradicated entire diseases from many countries throughout the world. The evidence of this book, so impressive in other ways, cannot therefore be accepted for this curiously science-bashing purpose.

The author's thesis is a powerful one and may be re-stated in another way. The Western approach to medicine is characterised by a search for antidotes and glamorous technology. It has led to overspecialisation, overprescribing, and the development of incongruously elaborate techniques for curative medicine and surgery. It fails to take into account the fact that the illnesses of mankind are determined by a combination of many factors, which require social remedies rather than pill-pre-

scribing and high-technology doctoring. In the West, cigarette-smoking and obesity, in the Third World nutrition and hygiene—these should receive our attention and our emphasis.

In its writing, this book is delightful, and the historical section includes an account of Pasteur's experiments which is strangely exciting. (Poor Jenner gets no credit, but never mind!) The author is not merely an anti-medical Illich, following a fashionable witch-hunt against doctors. He notes that some at least of the medical profession share his concern with the relationship between social problems and health care. The medical establishment is, however, unable to cope.

The problems are indeed formidable—how to assert, in a liberal democracy, an effective anti-smoking, anti-alcohol, anti-obesity policy; how to persuade a Third World country to modify, however slightly, the priority given to prestige hospitals and universities, in order to emphasise the importance of hygiene, health education and good water supplies; and how to encourage solutions which, even when they cost nothing, require a firm stand by politicians, who themselves depend on populist support.

Much of the quoted evidence is beyond dispute. There are some massively important problems, which we neglect at our peril and which require largely political solutions. The medical or scientific reader may find little comfort in the author's message. The implication, almost throughout, is that the purveyors of modern, conventional medicine and research are oblivious to the real world, shackled to an obsolete view of current health needs, obsessed by high technology and magic bullets, and unable or unwilling to adapt either their thinking or their teaching of the next generation of doctors. This is simply not true. The problems are as formidable as the author says they are. In seeking to combat them, it needs to be more clearly stated that doctors, and even scientists, are quite frequently on the side of the angels.

Switching from the Third World to the sophisticated West, there is not only a need to change our social priorities but also a need for more humanity in our provision of health care. This is illustrated by a vivid account of a patient with ankylosing spondylitis, who had an unquenchable determination to get better, though "one of the experts put the chances of recovery as one in 500; another said he had never witnessed recovery from this comprehensive state". (On the story given, this was probably not ankylosing spondylitis at all but post-infective reactive arthritis, from which a rapid recovery is usual. Even in true anky-

losing spondylitis, it should be stated that some 80–90% of patients are earning their own living 20 years later.) The story is a good one, recording a patient's determination and also a doctor's unstinting support for an unconventional treatment which had nothing to commend it except for the patient's faith. The point is well made. A practising doctor looks after sick people, not disembodied disease. Hope and encouragement may do more than medicine—even more so in diseases such as cancer, in which definitive medical treatment may not be available.

Having reviewed all the evidence, this book suggests that we must deploy both our doctors and our financial resources to better effect. The message could, however, be dangerously misread. On the advice of our politicians, we in Britain have already suffered an expensive and ineffective reorganisation of the Health Service; a wasteful but well-meaning allocation of money to ineffective types of social work; a crazy emphasis in our Community Health Councils, which give priorities to 'watchdog' functions rather than to a responsible collaboration with professional health workers; and an opportunistic encouragement of specialised kidney units which are now, for political reasons, deprived of funds.

What about the needs of the Third World? Who can doubt that great benefits could follow from better nutrition, hygiene, good water supplies, and the Chinese barefoot doctor's approach to health education and simple health care. But even here, the problem is not a simple one. In many parts of the world the mere fact of a reduced infant mortality rate results in the exposure of even more children to the ravages of malnutrition. In this context, social priorities must therefore include population control. This, the most important problem of our time, is merely touched upon in this book. Alone among the Third World countries, the Chinese have shown that population expansion can be controlled by means of public education and persuasion. In the West, however, this social and political approach has not succeeded. Here the contraceptive pill and the intra-uterine device have, indeed, provided another victory for high technology, and their future potential blessings have yet to be realised.

In summary, the siren song of the anti-science lobby needs to be heard but then resisted. The moral to be drawn from this book is absolutely clear. We need both social policies and high technology to solve our problems. It is a partnership, not a conflict. □

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