DISTINGUISHING MEANS FROM ENDS: THE PROBLEM OF MODERN MEDICINE

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INTRODUCTION

Over the past 50 years, medicine has changed beyond recognition. Doctors now have a large armamentarium of drugs effective against many diseases, not least infectious and chronic diseases. Surgical and anaesthetic technology can now offer, in the best hands, a degree of safety and efficacy unimaginable two decades ago. The new genetics show huge promise, although as yet little direct achievement in treating and preventing ill-health. A more rigorous approach to clinical effectiveness, in which SIGN (Scottish Intercollegiate Guidelines Network) is a national and international driving force, is transforming medical education and practice. Public health medicine is gradually unravelling the complex connections between health and poverty and deprivation in a painstaking and systematic way that challenges political dogma.

MEANS AND ENDS

These are some examples of the powerful *means* which modern medicine has at its disposal. By means, I refer to that which is instrumental in bringing about an end, goal or outcome which is desirable in itself. The technologies listed above are all, of course, based in science, and it is perhaps possible to see modern medicine as a late flowering of the values of the Scottish Enlightenment.

Why then does society have so many concerns about the ethical basis, the direction, costs and achievements of medicine today, as expressed through the media, through litigation and through the political process? Why is morale so low in many branches of the medical profession? From the 1970s to the present day, analyses have appeared which reassess or challenge the hitherto secure place of medicine in society, including its basis in science.[1-7] The continuing rise in interest in complementary medicine is a further indication of the need for more traditional medicine to consider its position.

SOME ISSUES

Perhaps, as a society, we have ourselves to blame. Hanson and Callahan[1] argue that 'the intensity of the technical discussion (about health care) has, ironically, obscured the poverty of discussion about the purpose and direction of medicine'. We have spent all our energy on discussing means, while thinking that the ends of medicine were either self-evident, or would become obvious when the technological clouds had cleared. The modernist revolution of medical science has deceived us into thinking that technology only solves problems and does not create them. It has created a 'tendency to measure progress simply in technological terms'.[1] The re-emergence of infectious disease reminds us that, like Beowulf, we should not be triumphalist about our achievements, but expect new and greater challenges.[8]

Greenhalgh and Hurwitz[9] suggest pessimistically that 'modern medicine lacks a metric for existential qualities like inner hurt, despair, hope, grief and moral pain which frequently accompany, and indeed often constitute, the illnesses from which people suffer'.

A summary of the Goals of Medicine project[1] may be useful here. The authors categorise sources of stress on medicine into the following headings:

New pressures

- The Western preoccupation with bodily health and fitness as being the sources of real happiness, which amounts to a surrogate religion.
- Medicine's ability to keep alive desperately sick people who would otherwise have died.
- The rise of chronic illness (diabetes, heart disease) requiring life-long treatment.
- The global explosion of information through the worldwide web.

Scientific developments

- The dominance of medicine by diagnostic and therapeutic technologies, which may improve marginal outcomes at great expense.
- An emphasis towards cure of disease, obscuring the need for learning from illness, and for compassion and care in the face of the inescapable facts of growing old, being ill and dying.

Ageing populations

- The rise in the 'old old' populations with considerable pressures on health budgets and human resources – now a problem for some developing as well as developed countries.

The market and public demand

- Technologically-led success leads to an increased demand for medicine, which then must be supplied. In market-led societies, this can lead to high quality care for the privileged while reducing standards for the poor, who carry greater burdens of ill health. Medicine focuses further on the health of the individual rather than on that of society. The inverse care law prevails.[10]
- Medicine is increasingly seen as a way of expanding human choice and possibility, rather than merely dealing with disease and illness.

The medicalisation of life

- Modern medicine relies on evidence. Increasingly, finance for research to develop evidence comes from pharmaceutical companies. Seventy per cent of finance for clinical drug trials in the US now comes from the pharmaceutical industry, rather than from public sources.[11] Evidence therefore follows the money and not necessarily the direction, that could be considered as 'best' for society.

- Medicine can be used to pharmacologically 'treat' the anxiety and sadness that arises from normal life. This can be extended to matters of crime, poverty and addiction, all of which can, to a degree, be analysed and treated medically. Many risk factors for chronic diseases such as high blood pressure and blood cholesterol can be effectively treated by behavioural change as well as by drugs. Using drugs may medicalise and disempower patients, whereas facilitating sustained behavioural change empowers and enables individuals. Illich calls the former an 'expropriation of health'.[3] There is a view that the British NHS may contribute to this process by providing ready access to a 'professional' interpretation of life events.

MEDICINE AND SOCIETY: COMMON OR DIVERGENT ENDS?

Hanson and Callahan suggest that a reformulating or redefining of the goals of medicine is necessary to avoid health care systems becoming economically unsustainable, confusing for clinicians, socially frustrating and lacking coherent direction and purpose. It is arguable that all of these adjectives already apply, and that there is an urgent need for discussion on these issues involving the medical and related professions and the wider public.

How far is agreement on these issues possible in a society characterised by diversity and pluralism of values? How can the modernism which still characterises the medical approach be reconciled with the complexities of post-modern society?

To move forward, we need to acknowledge the paradigm shift from scientific pseudo-certainty to post-normal science, which accepts that all scientifically derived knowledge is provisional and is to be balanced in decision-making with valid views of the world from many different perspectives.[4] This is no more than a modern restatement of David Hume's view of 1740 that 'the distinction of vice and virtue (what is to be done?) is not founded merely on the relation of objects (scientific induction)'.[6]

By doing so we could start to consider constructively some of the major issues raised in this paper, such as:

- Are the huge social disparities in health outcomes in the UK today in part a medical responsibility? Are drugs for blood pressure and blood cholesterol the correct answer for the at-risk middle aged population? Related to this, is the profession at risk of becoming an arm of the pharmaceutical industry, disempowering and dosing the worried well?
- Medical research, the driver of medicine, is overwhelmingly reductionist, quantitative and biomedical. In parallel with the paradigm shift to post-normal science,[4] do we need a shift to good qualitative research on the goals and ends of medicine as a matter of urgency?
- The treatment and prevention of illness, the promotion of health, the relief of pain and suffering and the pursuit of a peaceful death are all legitimate ends of medicine. Modern medicine has concentrated overwhelmingly on treatment and prevention of illness. Why is this? Do we need a shift in direction and emphasis, and if so, how?

No easy answers exist to these complex questions. What clinicians and society need is more (and better informed) debate and discussion on these issues. This would be a healthy influence on NHS policy at all levels, and might help us all to a better understanding of the place of medicine in society, both today and in the future.

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REFERENCES

1 Hanson M, Callahan D, editors. *The goals of medicine: the forgotten issues in health care reform*. Washington: Georgetown University Press; 1999.
2 LeFanu J. *The rise and fall of modern medicine*. London: Little, Brown; 1999.
3 Illich I. *The limits to medicine*. London: Harmondsworth, Penguin; 1975.
4 Funtowicz S, Ravetz J. *Uncertainty and quality in science for policy*. Leeds: Kluwer Academic Publishers; 1989.
5 Kennedy I. *Unmasking medicine*. Reith Lectures. Hemel Hempstead: Allen and Unwin; 1980.
6 Toon P. *What is good general practice*? RCGP Publications, Occasional Paper 65. London;1994.
7 *Policy futures for UK health: pathfinder a consultation document*. Dargie C, editor. Nuffield Trust; 1999. (Summary available on the Nuffield Trust website).
8 Heaney S. *Beowulf: a new translation*. London: Faber & Faber; 1999.
9 Greenhalgh T, Hurwitz B. *Narrative-based medicine*. London: BMJ Books; 1999; 11.
10 Tudor Hart J. Commentary: three decades of the inverse care law. *BMJ* 2000; **320:**18-9.
11 Bodenheimer T. Uneasy alliance – clinical investigators and the pharmaceutical industry. *NEJM* 2000; **342:**1539-44.

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