most powerful constituents. But he also emphasises that moving towards a just healthcare system will require the public to trust government bureaucrats at least as much as they seem to trust the private bureaucrats and highly paid chief executive officers of managed care systems.[8] Individual and population health would surely be better served in social democracies, where individual rights are supplemented by some community solidarity and where accountable leaders and bureaucrats can be voted in and out of power, than in highly individualistic societies where almost anarchical power can be accumulated by entrepreneurial organisations driven predominantly by self interest.

Rational arguments, such as those offered by Buchanan[5] and Dworkin,[9] best reflect the concern for social justice that characterises healthcare systems in, for example, Britain and Canada. They also reflect the concern for political accountability in these countries' reform towards mixed private and public healthcare systems under conditions of constrained resources. If market forces are allowed to predominate in health care, "fear, bias, and greed" may impede the rational efforts needed to answer important public health questions.[10]

The effort required by the American public to overcome these impediments will need to be matched by the willingness of medical professionals to overcome their resistance to the transformation of the American healthcare system.[11] This will require a broadening of professional ethics to include considerations of the public interest and the common good.[12] Buchanan has shown that legitimate retrospective moral judgements can be mounted against those involved in radiation experiments on humans in recent years.[13] Similarly, failing to drive American health care in the direction of greater justice could make the present generation of American politicians and professionals vulnerable to legitimate retrospective moral judgements.

SOLOMON R BENATAR
Professor

Department of Medicine and Bioethics Center,
University of Cape Town and Groote Schuur Hospital,
Observatory 7925, Cape,
South Africa

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Medicine, postmodernism, and the end of certainty

Where one version of the truth is as good as another, anything goes

> "The Enlightenment is dead, Marxism is dead, the working class movement is dead and the author does not feel very well either."[1]

I came across a curious word the other day—credicide. The death of belief. Not this or that one but all and every. Strictly speaking, of course, it means the active killing of belief rather than just its simple demise. Some dark agent has been out mugging belief in the night, jumping it, slicing it up while our eyes were turned to see what the arc lights of the media were bringing us this time.

What is dying of course is not just Progress, Education, Science, Justice, or God—though all these do look anaemic shadows of their former selves. What is dying is the House of Belief itself. Down in the basement the machines are getting too cocky by half. The foundations are changing from carbon to silicon. Upstairs, uneasily aware that the world is changing in ways too deep to fathom, we race the newest technological wonder, work out in the gym, sniff encephalins, or tune into the latest version of reality. And deep in our hearts we suspect that it can only be a matter of time before the House of Belief itself is franchised out to MacDonalds, becomes a theme park, or simply slips like Atlantis beneath the waves of our accelerating technoculture.

Medicine alone seems to remain curiously immune to these epidemic uncertainties. Health is one of the few remaining social values that garners unambiguous support.This is largely due to our continuing and communal belief that there is one truth "out there" which can be known, understood, and controlled by anyone who is rational and competent. The faith that we can accumulate an objective understanding of reality which is true for all times and all places underlies our treatments and our clinical trials. Stating this may seem unexceptional to doctors, yet this "modernist" view is in fact rather unusual. Great swathes of the world increasingly act according to the rather different set of assumptions of postmodernism.

In a postmodern world anything goes.[2] There are no overarching frameworks to steer by. Instead, everything is relative, fashion and ironic detachment flourish, and yesterday's dogma becomes tomorrow's quaint curiosity. To the postmodern eye truth is not "out there" waiting to be revealed but is something which is constructed by people, always provisional and contingent on context and power.

Within medicine one response to the relativism and uncertainty created by postmodernism has been to emphasise the evidence on which medicine is based. After all, if there are knowable medical truths "out there" then we should get our act together and apply them. Evidence based medicine promises certainty—do enough MEDLINE searches and you will find the answer to your prayers. Read in this way, evidence based medicine is a reaction to the multiple, fragmented versions of the "truth" which the postmodern world offers. It is also a serious attempt to invent a new language that might reunite the Babel of doctors and patients, managers and consumers. However, an evidence based approach will only work for as long as we all view medicine as "modern"—that is, as making statements about an objective, verifiable external reality.[3] To the postmodernist the question is whose "evidence" is this anyway and whose interests does it promote?

So what is to become of us serious medical technocrats in this postmodern age where multiple versions of the truth abound? Surely the rationalist, scientific project of biomedicine is immune to all this postmodern relativistic junk where one version of reality is as good as another. After all a diabetic

coma requires specific actions to be taken which can not depend on whim but are the same for all times and all places. Yet dismissing postmodernism simply because the technology of medicine is universally applicable is too easy for at least two reasons.

Firstly, until now medicine has been glued together by a set of myths that everyone subscribed to: doctors battled against death and disease, we lived under the one true church of the NHS, and Science lit the way to a world of health for all. Today these comforting narratives are less believable. In a very postmodern way, doctors have to juggle competing ways of seeing the same situation. Clinical reality as perceived by clinicians has to be reconciled with patients' beliefs, "resources" have to balanced against individual patient need, and ethical dilemmas spring hydra-headed from medical advance.

Secondly, the anything goes nature of postmodernism is being radically reinforced by the anything is possible nature of technology. It is not only Marxism and the Enlightenment which are dead; utterly unquestioned biological givens are disintegrating all around us: the stability of the climate, the immutability of species, a life span of three score years and ten, the unchangeable genetic make up of ones' unborn children. "Facts of life" melt away, and our collective sense of bewilderment and wide eyed possibility rises.

As technology expands the bounds of what it is possible to do, it seems inevitable that clinicians will become agents of the postmodernism that they have so far ignored. Medical technologies will increasingly be used for non-therapeutic ends.[4] Recreational drug use may come to be matched by "recreational surgery"—perhaps an expanded plastic surgery or the augmentation of natural capabilities via mechanical prostheses. At some point in this process medicine's modernist centre fails. Doctors will no longer be able to comfort themselves with the hard edged certainty that their work is "fighting disease." Instead they will have become purveyors of choice—or agents of control—within the plastic limits of the flesh.

Postmodernism may seem altogether too hip and slippery for the staid old world of medicine. Yet we are no more immune than the Amish or the makers of the Betamax to the pluralistic, fragmented webs of power and knowledge that our accelerating technoculture is creating. It is the nature of postmodern societies that no new over arching visions are possible. The language is no sooner minted than it fractures into different perspectives, and simultaneously we sense, somewhere in our bones, that it is certainty itself that has ended.

PAUL HODGKIN
General practice adviser

The FACTS Project,
Sheffield School for Health and Related Research,
Regents Court,
30 Regent Street,
Sheffield S1 4DA

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The power of placebo

Let's use it to help as much as possible

See pp 1624, 1627

Links are revealed this week between the colour of a pill, its name, and its pharmacological action (pp 1624, 1627).[1 2] This news will come as no surprise to many. Pink pills and tonics were the mainstay of many physicians—perhaps their main resource—before the era of antibiotics. But what are the active ingredients of the placebo effect and how can we make the best use of it?

Many non-specific concomitants of treatments help to determine the direction and size of the placebo effect. These can be placed on a continuum ranging from the tangible to the intangible.[3] The form of medications, touch, words, gestures, and the ambience of the consultation can all play a part in conveying a doctor's confidence in a treatment, empathy with the patient, and professional status.[4-6] Non-specific aspects of the remedy itself can also have a powerful influence; the more invasive it is, or the more actively it involves the patient, the larger the placebo effect.[7 8]

All of these determinants relate to the fact that the mind can influence the body. This notion has always been accepted in good medical practice, and much evidence exists to show that the effect is clinically relevant. It would be desirable to know how the use of placebo effects differs between mainstream and complementary practices. Preliminary survey data suggest that patients who use both forms of treatments are more impressed by the therapeutic encounter in complementary rather than mainstream medicine (Ernst E, unpublished data).

We know far too little about the importance of the non-specific effects and their interactions with specific treatments. We know that patients who receive a reasonable explanation from a member of the surgical team about an intervention will fare better than those who get no such information.[9] One can argue about whether this information is part of the treatment or whether it is a non-specific effect. But the effect itself is important, must be studied, and should be optimised.

Systematic research on placebo effects has been neglected for the past 30 years; placebos have been used largely as a tool for reducing bias in clinical trials.[10] Nurses routinely apply placebos in clinical practice,[11] but most doctors still feel uncomfortable about the subject because using a placebo seems to imply deception.[12]

A multidisciplinary research programme is needed to define and examine the most important questions about non-specific factors and their effects. Further studies on the "best" colours and other properties of tablets, capsules, and patches would be interesting but do not perhaps offer much scope for improved effectiveness over the many purposefully distinctive products now available. The issues are complex. For example, heart shaped patches worn over the heart releasing transdermal glyceryl trinitrate are probably marvellous placebos as well as having a pharmacological effect, but they cost much more than other more versatile forms of the drug. Is the balance between cost-benefit acceptable?

Holm and Evans (p 1627) raise the possibility that the names of drugs could influence their actions.[2]This requires experimental investigation. An effort to control names seems necessary on ethical grounds to prevent implied claims that are unjustified or exaggerated.The five yearly review of product licences by Britain's Medicines Control Agency could be used