
POSITION PAPER

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Methods of Assessment

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1. The report bases its assessment of both orthodox and alternative therapies on scientific method. However, science is a product of Western thinking, and is based on the assumptions Western society makes about the world and our place in it. Thus while within its world view science is a powerful tool for inquiry, it is by no means 'free from overriding social values and political bias'. Many philosophers (Bateson, 1972;¹ Skolimowski, 1986²) and lay people alike view the Western world view and the society which is its product as in serious disarray: while it has brought about enormous material benefits, it is also the root of ecological devastation, human and social alienation, and spiritual impoverishment. Thus it is quite inappropriate to base an assessment of alternatives solely on scientific method, and we need to reach out to find ways to assess critically therapies which arise from other world views in their own terms.

Modern philosophy of science suggests that it is not helpful to think in terms of absolute truths or laws of nature, but rather of truths within a world view, or paradigm (Kuhn, 1962³). Orthodox medicine claims to rest firmly within the materialist scientific paradigm. But the alternatives to the scientific paradigm cannot be reduced to 'superstition, magic, and the supernatural': traditional acupuncture, for example, is rooted in a sophisticated and coherent world view quite different from orthodox medicine. It would be much more helpful if orthodox medicine would carefully and critically articulate its own world view, and challenge and encourage alternative therapies to articulate theirs. From such a dialogue we would learn a lot.

2. The report is naive in its view that science is a fully rational process. Students of the history of scientific discovery (Kuhn, 1976;³ Feyerabend, 1975⁴) as well as those who have carefully looked at current practice (Harré, 1981;⁵ Mitroff, 1974⁶), have pointed out that science proceeds through passion and bias, as well as through the application of systematic observation and experiment. This is particularly true at times of paradigm shift, when the scientific world view changes dramatically (for example as at the time of Pasteur's discoveries). Such a change in world view can only be a non-rational process, based on human sensitivities other than our rational judgement. The idea that

science is a fully rational process is so at odds with the evidence that it has been terms a 'fairy-story' (Mitroff, 1974⁶).

This modern view of science is also at odds with the idea expressed in the report that scientific knowledge advances steadily, and that those committed to alternative therapies have halted their intellectual progress, content with a 'knowledge sufficient for all time'. It would appear rather that the writers themselves, in their uncritical embrace of modern science as enshrined in the clinical trial, are content with a method 'sufficient for all time'. If scientific medicine is to learn from or include any of the alternative therapies, it is more likely to do so by changing its world view than by careful and critical assessment from within its current world view.

3. As well as reducing inquiry to include only Western science, the report further reduces the scientific approach to include only the clinical trial. While claiming that science is defined in the 'strictest sense of the word, namely the systematic observation of natural phenomena for the purpose of discovering laws governing those phenomena', the report confines itself to discussion of the 'normal approved method of clinical trial'. But the scientific method is based first and foremost in careful, systematic observation and recording of phenomena (see point 4 below), and has developed a whole range of inquiry methods in addition to the clinical trial. Of particular significance for the study of orthodox and alternative therapies is the range of naturalistic methods (Lincoln and Guba, 1985⁷); clinical methods (Berg and Smith, 1985;⁸ Reason, 1986⁹), and cooperative inquiry methods (Reason and Rowan, 1981¹⁰).

4. The report is fundamentally unscientific in not making proper use of the accumulated information on the various alternative therapies. While any one piece of this information may be tentative or open to error, the whole body of information can be assessed critically in an holistic fashion, by comparing one piece of data against other kinds of evidence on the same point, and by identifying systematic errors. Thus the body of knowledge on any alternative therapy may be seen as a network of inter-related ideas and evidence which together have an holistic or contextual validity (Reason, 1986⁹).

It may be argued that this empirical evidence is at times idiosyncratic and less rigorous than might be desired. But this may be as much due to our failure as a society to devote the political and financial resources to the careful, systematic and sympathetic study of the phenomena observed by the alternative therapies, as to the actual absence of those phenomena.

Rather than attempt to make a fair assessment of current evidence, based on its own espoused method of 'systematic observation of natural phenomena', the report dismisses the empirical evidence of alternative therapies as not fitting into existing orthodox medical theories. This is, within its own terms, fundamentally unscientific.

5. The report fails to consider the question of whether scientific medicine to some degree creates the world it seeks to discover. Heisenberg has remarked with regard to particle physics that what is studied is not so much nature itself as nature exposed to our way of questioning; similarly in the human sciences it is widely acknowledged that 'reality' is socially constructed; the modern

philosophers such as Skolimowski (1986²) write of a universe which we participate in co-creating. By rooting their discussion in materialist thinking, the authors of the report fail to live up to Bateson's challenge to 'learn to think in the new way' (1972).

A radical critique of modern medicine and of the clinical trial in orthodox medicine would argue that this way of inquiry creates objects out of patients, who then 'have' a disease which is 'caused' by certain internal or external effects.

6. A fundamental critique of orthodox scientific method is that it is not a method fit for the study of human beings as persons because persons are to some degree in actuality, and to a greater degree potentially, self-determining subjects (Heron, 1981¹¹). However, orthodox scientific method, as part of its rationale, excludes human intentionality and self-direction. The human 'subjects' of a clinical trial are treated as objects to be randomized, allocated, treated, and assessed; their intent to get well or remain ill, their understanding of their dis-ease condition, their assessment of the effects of treatment, all these are treated as non-significant, screened out through randomization as irrelevant variables. This kind of inquiry sustains the Cartesian split so that we continue to see bodies as chemical and mechanical machines cut off from the exercise of self determination and the influence of mind and spirit.

7. This fundamental inability of orthodox science to study persons as intentional beings is at the root of many of the ethical problems that abound in orthodox inquiry. Because fundamentally, if we treat patients in ways that are ethically dubious, so that we need to set up ethical committees to monitor what we are doing, it is likely that our work is epistemologically unsound as well, because it is treating persons as objects who can be manipulated rather than subjects who can think, act, and experience.

8. The scientific method as discussed in the report is a reductionist method: it sees diseases as having causes – by implication single causes – and as responding to specific treatments. Certainly the clinical trial is designed to be a powerful method of assessing the effect of a single intervention, with all extraneous variables controlled for. But human persons cannot be thus reduced to single variables, and by implication to mechanical and chemical machines; they are whole complex aware beings of mind, body, and spirit, who exist in a particular social environment. Orthodox general medical practice, as well as many alternative therapies, claim to treat persons as wholes. But a reductionist science cannot study wholes.

We are just beginning to see how to develop an holistic science; certainly it is not fully developed, but the clues exist in the work of thinkers such as Bateson, Jantsch (1980)¹² and Prigogine (1980)¹³, which is lucidly summarized in Capra (1982).¹⁴ An holistic science is likely to produce a different kind of theory of the human being, in which rather than seeing diseases as having internal or external causes, we will seek to map out the interconnections of interpenetrations of various factors, and produce what Kaplan (1964)¹⁵ called a 'pattern' (as opposed to hierarchical or deductive) model of the human person.

9. Similarly, a science that ideally studies single interventions has great dif-

ficulty in studying a complex interaction between patient and practitioner. The report does address this issue in the Appendix on 'Methods of Assessment', and suggests that it might be acceptable to take the practitioner as the unit of study rather than the intervention. But an holistic approach would be more satisfactory.

10. The report fails to consider the possibility that its conclusions are biased by the anxiety of its authors, and by the political desire of the medical establishment to band together to protect its view of the world. In recent years several students of scientific method (notably Devereaux, 1967¹⁶) have pointed out the crucial role of anxiety in inquiry. When we explore critically aspects of our life and practice we are likely to stir up our psychological defences; we may then project unwarily our anxiety out onto the world we are supposed to be studying, distorting our vision so that we see what we wish to see. Similarly groups of persons may band together in defence of their anxieties in what may be called consensus collusion. We have followed Devereaux in arguing (Heron, 1982;¹⁷ Reason and Heron, 1986¹⁸) that all researchers should engage in some discipline powerful enough to reach into the unconscious and explore the ways our unaware anxiety is distorting our inquiry.

The report in several places feels arrogant, referring to 'so-called' alternative therapies, comparing them with superstitions and magic, and through innuendo associating them with religious 'cults'. From a psychodynamic perspective, these aspects of the report can be seen as symptoms of defensiveness and an unwillingness to be open to phenomena which may be present.

11. Experimental method produces generalizable results; this is its aim. The trouble with generalizations is that they do not apply to particular instances. What we need, as practitioners and as patients or clients, is an action-science that helps us act to improve our health, not remote, alienated, highly abstract generalizations. In laying total emphasis on the clinical trial, the report ignores the fact that all good consultations are inquiries in their own right: the best clinical practice, be it orthodox or alternative, proceeds through systematic observation and careful checking. The systematic development of clinical practice as systematic research could be a very sound way of proceeding with an inquiry into the process and outcomes of many aspects of both orthodox and alternative practice (Mills, 1986).¹⁹

A way forward for inquiry

Rather than rely on a very limited view of inquiry, based on Western materialist philosophy and realized on the clinical trial, the following principles might facilitate more creative inquiry into alternative practice.

1. A recognition that different practices derive from different world views, so that rather than trying to assess other practices from our own perspective, we find ways to learn from each other through dialogue.
2. A genuine acceptance that 'research' means open, systematic, critical

- inquiry; a comparison of claims with outcomes; public scrutiny of results. And that this approach can be applied to all disciplines.
3. The removal of the clinical trial as the only way to conduct inquiry, and the application and development of naturalistic and clinical inquiry methods which can explore critically different therapies as they are practised.
 4. The development of cooperative inquiry methods, so that persons as patients can take their place in determination of their therapy and the critical assessment of outcomes.
 5. A careful and honest appraisal by all concerned of their personal and political stake in the matters of concern here, and an assessment of how that distorts their assessment of the evidence.

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