Professor McPherson argues that public health research should increasingly involve the use of the RCT. This is however a questionable argument. Quantitative research methods as a whole, including the RCT, are based on the ontological assumptions that underpin the natural sciences, ie. that there is some absolute unchanging reality that lies behind appearances, and that there is a method by which we can gain knowledge of that reality.

I would suggest that this assumption is untenable in the field of medical outcome research. Humans are not lifeless atoms, or mere animals, that just react to stimulation or intervention in a set pattern, repeated on every occasion. All medical outcomes are at least partly due to situated subjective factors, both in the intervention itself and in the patient. This is the cause of part of the uncertainty in medical practice to which Professor McPherson refers. While agreeing that this is a predominant, yet unrecognised characteristic in all medicine, contrary to his argument I would suggest that the RCT does not necessarily eliminate this with any more certainty than any other methodological approach. It is the ontological assumption – that there is one absolute "objective" certainty to be found, that is not subjective or situated in the individual–which is flawed.

This is not to suggest that an absolute relativist position should be accepted, nor that high quality well designed RCTs should not be carried out. Neither does it suggest that quantitative survey research methods do not have an important contribution to make to outcomes research. The research methods adopted should be those most appropriate both in terms of their ability to provide answers to the research question(s) posed, and the context in which they are to be used. Studies of the outcomes of medical interventions should seek to systematically validate data by "triangulation" of the said data through the use of as many different sources of data as possible. No one source should be considered definitive in providing "the objective truth" in answer to the question of which intervention is the most effective.

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1 McPherson K. The best and the enemy of the good: randomised controlled trials, uncertainty and assessing the role of patient choice in medical decision making. *J Epidemiol Community Health* 1994;**48**:6–15.
2 Editorial. The philosophical foundations of public health: an invitation to debate. *J Epidemiol Community Health* 1994;**48**:1–3.

NOTICES

Tuberculosis—Sign of the Times? Royal College of Nursing Tuberculosis Visitors Forum Conference, 26 October 1944, Westminster Central Hall, London SW1. RCN members £45; non-members £60. Topics include: drugs and drug resistance; tuberculosis and nursing lessons from Romania; tuberculosis HIV/AIDS; tuberculosis and its relation to humans. Application from: Sandra Treadwell, 071-409 3333.

Commercializing Biomedical Technologies: Effective Collaboration Between Research Institutions and Industry, Fourth Annual International Conference, 7–9 November 194, Boston, USA. For information, contact: Harvard School of Public Health, Office of Continuing Education, 677 Huntington Ave, LL 23, Boston, MLA 02115-6023, USA. Tel: 617-432-1171; fax 617-432-1969.

BOOK REVIEWS

Drugs Policy in Developing Countries. By Najmi Kanji, Anita Harden, Jan Willem Harnmeijer, Masuma Mamdani, and Gill Walt. (Pp148; Hardback £29.95/$49.95, Paperback £11.95/$19.95) London and New Jersey: Zed Books, 1992. ISBN 1-85649-059-9 Hb and 1-85649-060-2 Pb.

This book is published with the support of the Danish International Development Agency (DANIDA), which has been a major source of finance and support for the Drugs Action Programme (DAP) of the World Health Organisation.

The authors, with practical experience in developing countries, give an account of the development of and changes in the policies of WHO, UNICEF and other agencies, and of the actions of drug manufacturing companies and of the governments of individual countries, in relation to the supply of medicines.

In many developing countries one can see expensive and inappropriate medicines on sale to the public while health units do not have enough basic supplies to treat common illnesses. Parents may be persuaded to spend scarce money on ineffective proprietary "tonics" when they would be better to buy good food for their undernourished children. Dye-containing pills have been advertised to cure nearly every ill—one can see the poisons leaving the body with the coloured urine which results!

Within more "respectable" medicine, enormous price differences between supplies of the same drug from different sources greatly affect the number of people who can be treated from a limited budget. A proprietary drug against intestinal worms may cost £3 for a course of six tablets, where the same drug from a "generic" source, with no brand name, costs £10 for 1000 tablets.

Too many competing drugs with similar uses, including new and more expensive alternatives to existing medicines, also increase costs. Essential drug lists and limited drug lists are means to cut costs and simplify prescribing.

Such means are also useful in richer countries. A successful scheme in a hospital in Dundee, Scotland, allowed doctors to prescribe listed drugs without having to justify each prescription. They could prescribe other drugs but had to write why on the prescription form.

Drug manufacturers argue that they cannot stay in business unless they make profits, and they must cover research costs if they are to discover and test new drugs.

It is an irony that new and effective drugs are often available for veterinary use before they can be used in humans. Ivermectin, an effective drug against parasitic roundworms and arthropods, widely used in veterinary medicine, is not yet licensed for general use in humans. But Merck Sharp and Dohme, the makers, have since 1987 supplied it free to WHO for use against onchocerciasis, a debilitating worm infection in parts of Africa and Central America.

Not all of these points are covered in this book, but it gives a good background to the politics and economics of medicine supplies for less wealthy countries – which is relevant to all countries. It should be widely read by those concerned to find solutions to these problems.

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Multiple Risk Factors in Cardiovascular Disease. Eds AM Gotto, C Lenfant, R Paoletti, and M Soma, (pp268; £61.50). Dordrecht: Kluwer Academic Publishers, 1992. ISBN 0-7923-1938-9.

This book reprints 35 papers from those presented at the First International Symposium on Multiple Risk Factors in Cardiovascular Disease (Washington DC, 1990). The editors have attempted to select papers which fit, probably in retrospect, a number of linked themes: the epidemiological evidence for co-segregation and interaction of individual task factors; the evidence supporting the role of insulin resistance as an explanatory and unifying mechanism for some of this clustering; the therapeutic implications of "treating the cardiovascular risk profile", rather than individual factors; and the epidemiological and other evidence for the independent risk factors status of candidates that are old (hypertriglyceridaemia), middle-aged (renin), and newborn (lipoprotein(a)).

Primary prevention is dealt with in a perfunctory way in a chapter dealing with the effects of health related behaviourial changes on HDL-cholesterol and triglyceride levels. Primary prevention of hypertension is dealt with only in passing in chapters dealing with the prevalence, development, pathophysiology and the treatment of this disorder, thus the book is definitely oriented towards the clinical rather than the population epidemiology of cardiovascular disease.

This field is replete with kite-flying or, more charitably, strong conjecture. Laragh, for example, attempts to substantiate his long held conjecture that it is plasma renin (producing angiotensin II) rather than hypertension *per se* which is important for vascular damage and its fatal sequelae. He nearly succeeds. Williams, however, fails to make a case for specific anti-hypertensive therapy, tailored to biochemical profiles. Though, as he states, hypertension is probably not a unitary disorder, we nevertheless have only the randomised controlled trials to guide a choice of therapy—thereotically favoured therapies are mere conjectures, useful as that, but no more than that.

All the authors are, generally, clear and efficient in presenting their reviews and arguing their different cases; the review by Reavan on syndrome X is especially useful and persuasive. In short, this book is required reading in this rapidly changing field, though for specialists only.

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