

A REVIEW OF EVIDENCE CONCERNING EVIDENCED-BASED MEDICINE.

It is timely to consider a current paper in the Medical Journal of Australia, as it seems medicine itself is unsure about EBM.(1)

Although it is recommended that the total paper should be studied, a scan of the sub-headings is enough to make one wonder where this issue is taking so-called scientific medicine – and indeed the Cochrane Collaboration!

“Randomised controlled trials do not necessarily reflect real-world practice or experience.”

“Meta-analyses are often unreliable”.

“There is bias in the hypotheses tested in clinical trials.”

The evidence is not transmitted to practitioners in a timely or uniformly reliable manner.”

“There are many conditions for which no ‘high-level’ evidence exists.”

“For all these reasons, the ‘evidence available’ may often be flawed. We all practise ‘evidence-based medicine’, but the evidence comes from many sources:

- *our own experience,*
- *our clinical judgement about a particular patient, and (to a lesser extent)*
- *the published literature of which we are aware.”(1)*

1. Celermajor DS. Evidenced-based medicine: how good is the evidence? Med J Aust 2001;174(6):293-295.

(NB This is current **2001**, paper.)

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But can the medical literature be reliable? O’Donnell questions the quality of medical research writing. He states “...*only 5% of published papers reach minimum standards of scientific soundness and clinical relevance...*” and that “...*in most (medical) journals the figure is less than 1%”.*(2)

2. O’Donnell M. Evidenced-based illiteracy: Time to rescue “The Literature”. The Lancet 2000;335:489-491.

Add to this, the 1991 claim that “...*only 15% of medical interventions are supported by solid scientific evidence...(and)...only 1% of the articles in medical journals are scientifically sound...many treatments have never been assessed at all...*”

- and it would seem that medicine might have as much work to do as any other profession in justifying its existence.(3)

3. Smith R. Where is the wisdom...? The poverty of medical evidency. Editorial. British Medical J 1991;303(Oct 5):798-799.

But the journals themselves are under further question. The editors of the Annals of Internal medicine are alarmed that drug companies are exercising too much control over research results. They have adopted a policy of rejecting a research paper unless the researchers involved are guaranteed scientific independence. The concern is that much of the research is paid for, and indeed carried out by companies with a big financial interest in the results.(4)

4. Okie S. Journals take stand on drug research. The Age Aug 6, 2001;10.

An article in the NEJM in 1998 by three physicians stated that 51% of approved prescription medicines have serious side effects ***not detected prior to approval!*** Ellis claims further that “GP’s and specialists are themselves the victims of

a biomedical model that forces on them allopathic treatments which over and over again can do them more harm than good.”

Ellis M. Conspiracy against health and healing: An Australian doctor looks at the problems and possible solutions. New Dawn 2001;69:53-

But the evidence base is further compromised when an authority states that *"the (medical research) clinical studies (in back pain patients) still largely lack validity; controlled, prospective trials are disappointingly rare. ...even chiropractors...have striven to prove their point in prospective controlled studies, sometimes with success... ..this does not mean that orthopaedists should totally abdicate the responsibility for back pain to our non-surgical colleagues."*(5)

5. Nachemson A. Guest Editorial. Low-back pain. Are orthopaedic surgeons missing the boat? Acta Orthop Scand 1993;64(1):1-2.

This appears to be further supported by The President of the Academic Orthopaedic Association of the United States stated in a 1993 presidential address that 95 % of spine surgery for back pain was inappropriate. (6)

6. Radin EL. Whither academic orthopaedic integrity ? Orthopaedics 1993;16:267-269.

The esteemed New England Journal of Medicine was questioned when it was found that that *"the world's most influential medical journal has admitted to an extraordinary betrayal to its own ethics, saying that almost half the drug reviews published since 1997 were written by researchers with undisclosed financial support from companies marketing the drugs." "The ethical breach also shows the deep inroads that commercial sponsorship has made into academic research and publishing." "For a premier journal to err on a basic matter of editorial integrity raises questions about the quality of medical data in lesser publications."*(7)

7. Monmaney T. Journal owns up to conflict of interest. The Age, Melbourne Feb 25, 2000:3.

But the drug sponsorship monies which appear to inextricably support the chemical model of medical care, are further involved. *"The marketing practices of Australia's multibillion-dollar pharmaceutical industry are likely to face a major review after allegations its cosy relationship with doctors is undermining the integrity of the medical profession."* The book *Too Much Medicine* by Ray Moynihan has turned the spotlight on dubious methods pharmaceutical companies employ to encourage doctors to prescribe their products.”(8)

8. Smith W. Gifts from drug firms spark call for inquiry. Herald Sun? Age? Nov 7 1998.

In September 2000, USA Today exclaimed that *54% of the experts hired to advise the US government on the safety and effectiveness of medicines have financial relationships with the pharmaceutical companies that will be helped or hurt by their decisions.*(9)

9. USA Today Sept 25th, 2000.(Cited in Nexus Dec 2000-Jan 2001 pp8)

"Doctors are offered luxury accommodation and trips worth up to \$10,000 a year, paid for by pharmaceutical companies trying to push their drugs."(10)

10. Dunn M. Junkets lure doctors. Herald Sun Oct 9, 2000:24.

Yet, *"Two-thirds of submissions by drug companies to have their products subsidised on the Pharmaceutical Benefits Scheme were seriously flawed..."*(11)

11. Toy M-A. Drug submissions flawed, study finds. The Age April 26, 2000.

So with powerful and well-financed drug companies placing biased information based on inadequate research(1-12) before medical doctors, what is really the standard of medical care?

12 Altman DG. The scandal of poor medical research- We need less research, better research, and research done for the right reason. BMJ 1994;308:283-284.

The big questions now of course are:

“How accurate and reliable is the evidence upon which EBM is based?”

“Is there a double standard between medical criteria and other health professions?”

And, when a Tibetan Buddhist priest can diagnose *"the nature of (an ovarian carcinoma), its precise location, size, metastatic spread, and a revelation of the patient's past 30 years of medical history,"* with greater accuracy than a medical resident at a respected university hospital, then traditional paradigms or orthodox medicine must be subject to review.(13)

13. Jobst KA. So what if there is no immediate explanation? Editorial. J Altern Complement Med 1998;4(4):355-357.

"There is no valid clinical outcome studies evidence for 94% of all medical treatments and technologies"(14)

14. Chapman-Smith D. Report citing an address by Kane B, MD., at conference. Chapman-Smith Report 1994;March:13. CIM 94/2 pp78

Yet, even the gold-standard of EBM is subject to further questioning. *"The outcomes of the 12 large randomised controlled trials that we studied were not predicted accurately 35 percent of the time by the meta-analyses published previously on the same topics."*(15)

15. LeLorier J, Gregoire G, Benhaddad A, Lapierre J, Derderian F. Discrepancies between meta-analyses and subsequent large randomised, controlled trials. N Engl J Med 1997;337:536-542.

"The medical establishment has become a major threat to health" - Ivan Illich in:

Moynihan R. Too much medicine? The business of health – and its risks for you. ABC Books, Sydney 1998:242

"...millions of dollars are almost certainly squandered on lots of essentially useless and positively harmful tests, treatments and medications..." - Prof S Leeder in:

Moynihan R. Too much medicine? The business of health – and its risks for you. ABC Books, Sydney 1998:3

"Paradoxically, increasing health care expenditure may soon become one of the greatest threats to people's quality of life and even to their health." - Dr Lionel Wilson, former president of the AustMA in:

Moynihan R. Too much medicine? The business of health – and its risks for you. ABC Books, Sydney 1998:3

"...once you discover how much hokum resides in your doctor's medicine cupboard just how medicine relies on blind faith, received wisdom and selective facts, not reason, science or common sense, you can grab the power away from this false shaman and begin to take back control of your health."

McTaggart L. What doctors don't tell you: The truth about the dangers of modern medicine. Thorsons, London 1996:xx-xxi.

How strong is medicine's commitment to health maintenance and disease prevention and how does that commitment stand up to the scrutiny of evidence based medicine when *"Drugs are now so widely prescribed that many Australians will be*

medicated for the rest of their lives. Melissa Sweet uncovers a host of adverse reactions and cost blowouts.”

Sweet M. Popping mad. The Bulletin, July 24, 2001:18-25.

The medical model of health management is essentially an interventionist chemotherapeutic model. An example of this is noted in comparing the management of headaches. *“By injecting normal saline into the disc under pressure, noting the pain response and volume injected, it is possible to localise the referred pain source. Immediate temporary relief of pain can then be achieved by injecting 1% bupivacaine.”* Hodgkinson A. Headache and face pain. MJA 2001;174(6):314-315 This seems to contradict studies offered by Edmeads, Bogduk and others. That is, it conflicts or ignores these medical colleagues who propose a mechanical cervicogenic cause of many headaches. Given the choice, patients would opt for the safer, natural, easier and more efficacious methods with the minimal intervention – if they knew about it! Speidewinde et al state that, *“Zygapophyseal joints are clearly a common source of pain in patients presenting with chronic neck pain, with or without headache.”* However their approach to cervical articulations is *“radiofrequency neurotomy”*! (Speldewinde et al. MJA 2001;174(4):174-6.) But then Braaf states that *“...more than 90% of recurring headaches can be traced to mechanical derangements of the cervical...spine...”* (Prof S Butler. "Headaches a real pain-in-the-neck." Sydney Telegraph. 27.8.1970. pp27. - Reporting on findings by Braaf and Rosner.)

It would seem that there is a rather tenuous and unconvincing foundation behind the profession which is in the key position to influence a nation's health policies! And these quotations do not touch on political bias of a protective medical empire! If these issues were addressed, perhaps there would not be some of the adverse events associated with so many procedures under the medical model.

Although only some of these references are not so recent, one must ask, “Have things changed?” Is the current medical model upon which national health policy is based, really in a position to be critical of other models of health care? And, is the public subject to the shortcomings of aspects of the current medical model?

If this collection of observations reflects the modern model of the dominant health profession, what hope is there for believable or even reasonable, evidence based medicine? This paucity of scientific validation has not stopped medicine demanding lofty standards of proof from other health professions! It is hardly in a position to criticise the scientific validity of natural health professions – particularly when it has not carried out truly scientific studies to assess them – or indeed its own imposed theories.

This would seem contrary to observations made in 1991 by Bedell et al., in discussing medical adverse events. *“Iatrogenesis may be, in part, a price we pay for medical progress.”* In earlier eras, many patients died of untreatable diseases; now, such patients may survive with complicated regimens of treatment. Another possibility is that the intensive monitoring itself, or what Myers calls “therapeutic hyper-enthusiasm,” may be partly responsible.

Despite impressive technological advances, survival following in-hospital cardiopulmonary resuscitation has not changed significantly over the past 2½ decades.”

Bedell SE, Deitz DC, Leeman D, Delbanco TL. Incidence and

characteristics of preventable iatrogenic cardiac arrests. JAMA 1991;265(21):2815-2820.

There must be a need for anybody, even politicians, to question the current medical model of health care – the philosophy behind it, the science, the politics and the efficacy.