THE NEW ZEALAND MEDICAL JOURNAL Journal of the New Zealand Medical Association



A rejoinder to Professor Kevin Dew's letter "Who is confused by courtesy titles?"—and response

Thank you for the opportunity to reply to some of the points raised in the letter by Professor Kevin Dew in your last issue.¹

When referring to my previous rejoinder,² Professor Dew is quite right to point out my oversight when I suggested that complementary and alternative medicine (CAM) "has little or no theoretical rational"; however, it is somewhat of an overstatement to then suggest it is indicative of my limited knowledge of the area. In hindsight, I should have added the word 'sound' before 'theoretical rationale', or used the phrase I used in my original article ([the] "scientific rationale...[is] not as strong as for mainstream medicine").³

As such, I suggest that if I am correct once, but commit an oversight the second time, then Professor Dew's interpretation is entirely unwarranted. What my slip does show, however, is the value of peer-review and editing to detect instances when authors use inappropriate words, fail to explain things clearly, or misspell the occasional name (as the original paper was peer-reviewed, but my rejoinder was not), in addition to more serious issues, such as overgeneralisation, inappropriate design, and biased interpretation of findings.

Traditionally, social psychologists draw upon the expertise of others in their area when conducting research—that is what I did when referring to scientific rationale. This makes sense, as clearly not all researchers can be acknowledged experts in the area of their research.

Professor Edzard Ernst, holder of the Laing Chair in Complementary Medicine at the University of Exeter (UK), who is widely reputed to be an expert in his area, has this to say about the scientific rationale of some popular CAM practices: "The primary premise that subluxation is the cause of all illness has no scientific rationale" (chiropractic); "Their scientific rationale is not fully convincing. In particular, the theory of the overriding importance of alignment lacks a scientific rationale (osteopathy); "No evidence has been found to confirm the existence of Qi or meridians" (acupuncture); "There is no known neurophysiological basis for connections between organs or other body parts and specific areas of the feet" (reflexology); and "Presently there is no scientific rationale for understanding how remedies devoid of pharmacologically active molecules produce clinical effects" (homeopathy).⁴

When Professor Dew refers to "Gibley's [sic] rigorous methodology of looking at the yellow pages", he could inadvertently undermine the rigour of my research if his readers were to infer that there was some justifiable sense of irony in his words. I did indeed review the Yellow Pages—that is hardly surprising, given it was stated as the source of my secondary data. To be precise, I reviewed the listings for each CAM practice, for each directory area, at least twice whilst conducting my analysis.

When I did not get two identical consecutive counts, I reanalysed the data until I did. My analysis paid particular attention to the fact that many CAM practitioners appear twice under the same heading, in both box and line listings. I clearly stated in my methods section that when this was the case I would use the entry most likely to mislead, as the potential to mislead was the primary focus of my paper.³ Furthermore, using the Yellow Pages as a source of secondary data is not at all uncommon, as a quick search of the article database http://scholar.google.co.nz/ will quickly reveal. For example, in New Zealand health research, Jopson and Reeder used the New Zealand Yellow Pages and were funded by the Cancer Society of New Zealand Inc.⁵

It is not surprising at all that Professor Dew managed to find instances where he perceived that practitioners stated clearly the area in which they were a 'doctor' (although I am not convinced that calling oneself Doctor X in a box advert for a named chiropractic clinic does indeed make clear a practitioner's title may be one of courtesy).

A common pitfall for researchers is to overlook the fact it is often very easy to quickly find some evidence in support of one's hypothesis; unfortunately, due to the phenomenon of 'researcher bias', whatever is found may tend to be biased in favour of one's hypothesis and thus of little value.

My original article sought to ascertain the ratio of practitioners who use the title doctor, in way that could lead people to believe they were consulting mainstream medical practitioners, in relation to those who do not. This is quite different from seeking evidence to support an *a priori* hypothesis that some practitioners make clear they are doctors of a particular type of CAM. So, in my original exploratory study, in which I had no *a priori* hypothesis—and would thus be less prey to researcher bias—I sought simply to count instances where the title doctor was used without clear qualification (no pun intended), relative to instances where the title doctor was not used. I was unsure of what I would find and, from the outset, intended merely to let the data speak for itself, as most social scientists would do.

Professor Dew suggests the argument should be moved on to answering a number of research questions. I wholeheartedly agree and should point out that I did suggest a further research idea in my original paper. To get more value from the proposal that Professor Dew suggested in his most recent letter, perhaps a quantitative component could also be included (e.g. on a scale of 1 to 10, how likely do you think this person is a qualified medical practitioner like your family doctor, is based upon proper research trials for its efficacy, etc) along with a meaningful comparison group.

So, rather than an uncontrolled one-shot design exploring the (qualitative) beliefs of people visiting a CAM practitioner who use the title of doctor, perhaps an experimental design could be implemented, whereby the perceptions of people consulting CAM practitioners who call themselves doctors could be compared to the perceptions of people consulting practitioners who do not call themselves doctors. After a predetermined number of consultations had occurred, it would then be possible to answer three interesting and pertinent questions: i) do CAM practitioners using the title 'doctor' receive more consultations than those not using the title; ii) does the mean client perception of the two groups differ; and iii) does the use of a prestigious title, such as doctor, affect clinical outcome.

A similar proposal could also be conducted using other occupations that use the honorific title doctor, such as vets and dentists.

Andrew Gilbey College of Business Massey University Palmerston North, New Zealand

References:

- 1. Dew, K. Who is confused by courtesy titles?. N Z Med J. 2008; 121(1280). http://www.nzma.org.nz/journal/121-1280/3226/
- Dew K, Gilbey A, Colquhoun D. Abuse of the title 'Dr': response from Andrew Gilbey. N Z Medical Journal. 2008; 121(1279). <u>http://www.nzma.org.nz/journal/121-1279/3202/</u>
- Gilbey A. Use of inappropriate titles by New Zealand practitioners of acupuncture, chiropractic, and osteopathy. N Z Med J. 2008;121(1278). <u>http://www.nzma.org.nz/journal/121-1278/3160</u>
- 4. Ernst E, Pittler MH, Wider B, Boddy K. The desktop guide to complementary and alternative medicine. (2nd ed.). Edinburgh: Mosby/Elsevier; 2006.
- 5. Jopson JA, Reeder AI. An audit of Yellow Pages telephone directory listings of indoor tanning facilities and services in New Zealand, 1992-2006. Australian and New Zealand Journal of Public Health. 2008;32(4):372–7.
- 6. Bale K. Chiropractic Board New Zealand response to "Dr Who?" editorial. N Z Med J. 2008;121(1280). <u>http://www.nzma.org.nz/journal/121-1280/3224/</u>
- Kelly B. New Zealand College of Chiropractic response to "Dr Who?" editorial. N Z Med J. 2008;121(1280). <u>http://www.nzma.org.nz/journal/121-1280/3223/</u>
- Roughan S. Setting the record straight: New Zealand Chiropractors' Association response. N Z Med J. 2008;121(1280). <u>http://www.nzma.org.nz/journal/121-1280/3222/</u>
- 9. Frizelle FA. Defamatory articles or not? N Z Med J. 2008;121(1279). http://www.nzma.org.nz/journal/121-1279/3208/

A plea for sophistication

Andrew Gilbey makes an effort at distancing himself from *a priori* theorising when it comes to undertaking research in relation to the title of 'doctor' but his suggestions on future research demonstrate how difficult this is. I refer to his suggestion for quantitative research where participants would respond to a question "on a scale of 1 to 10, how likely do you think this person is a qualified medical practitioner like your family doctor, is based upon proper research trials for its efficacy, etc". This could be interpreted, by respondents at least, as equating the practice of the family doctor with the findings of 'proper research trials'. (As an aside—what sense anyone would make of the word 'proper' here is anyone's guess—and this would require even more research. Here we encounter the problem of 'auxiliary' hypotheses when testing a theory.¹ Is Andrew Gilbey's idea of proper the same as everyone else's?).

I have been involved, alongside clinical practitioners, in research closely analysing interactions between patients and health professionals.² There is a great deal of work that is undertaken in clinical consultations that is not based on "research trials". This is not something to be concerned about—but is an inevitable consequence of the very

complex nature of the clinical consultation, where prescribing a drug that has made it through the trial process can be just one component.

Clinicians are weighing up complex issues of drug interactions, co-morbidities, social factors (such as their impression of whether patients are likely to comply with advice given), physiological resistance to medications and so on. This is a very heady mix. Research trials may provide some help for clinicians in some situations, but it is very clear that clinicians are drawing on their experience and their own understanding and values. In addition, clinicians cope with the uncertainties inherent in clinical practice.³

To provide a misleading question in a quantitative survey (suggesting that what family doctors do is based on research trials) perpetuates a myth—but a myth that clinicians themselves have long since discarded. A research tool of the nature proposed would be at best useless, and at worst misleading.

I think we desperately need to move the debate beyond crude dichotomies between 'bad' and irrational alternative medicine and 'good' and rational orthodox medicine. It is clear that most General Practitioners in New Zealand have moved well beyond this simplistic view, seen in the very high numbers of GPs who refer to CAM therapists.⁴

Clinical practice is far more complex than this crude dichotomy implies, and requires a more sophisticated understanding from researchers.

Professor Kevin Dew School of Social and Cultural Studies Victoria University of Wellington Wellington, New Zealand

References:

- 1. Dupre J. The Disorder of Things: Metaphysical Foundations of the Disunity of Science. Cambridge, Mass.: Harvard University Press; 1993.
- 2. Dowell A, Macdonald L, Stubbe M, Plumridge E, Dew K. Clinicians at work: What can we learn from interactions in the consultation? New Zealand Family Practice. 2007;34(5):345–50.
- Dew K, Dowell A, McLeod D, Collings S, Bushnell J. "This glorious twilight zone of uncertainty": Mental health consultations in general practice in New Zealand. Social Science & Medicine. 2005;61(6):1189–200.
- Poynton L, Dowell A, Dew K, Egan T. General Practitioners' attitudes toward (and use of) complementary and alternative medicine: a New Zealand nationwide survey. N Z Med J. 2006;119(1247). <u>http://www.nzma.org.nz/journal/119-1247/2361</u>