

Reply by New Zealand Chiropractors' Association to Edzard Ernst's April 2012 "research"

Dear Editor

It is disappointing to see that you have once again through your journal allowed Professor Edzard Ernst the opportunity with the 20 April 2012 publication to stimulate fear and suspicion about manipulation, and more specifically about the chiropractic profession. He has on numerous times in the past been identified as publishing misleading articles on chiropractic¹⁻³ and has been described by Dr Gordon Waddell, a leading UK orthopaedic surgeon and back pain authority, as offering "inter-professional confrontation under the guise of scientific objectivity."⁴

Among the numerous journals that he cites as failing to report adverse events [AEs] are prestigious journals such as *Spine*. The editors of such high ranking journals would surely be experts regarding the requirements around this topic. Ernst implies that chiropractic is unsafe because adverse events are often not reported. Even if this is the case, this is not a uniquely chiropractic issue, as he implies. As recently as 2007, the task force set up by the International Society of Pharmacoepidemiology found that "many major journals have minimal requirements for publishing adverse event reports, and some have none at all".⁵

The "numerous prospective studies specifically designed to investigate AEs of chiropractic manipulation", quoted by Ernst, refer to only three studies and they do not "agree" on the figure of 50% experiencing mild to moderate AEs after such treatments. However; this is not, as implied, an unreasonably high reaction rate unique to chiropractic. A recent review found around half manual therapy patients may experience minor to moderate adverse events after treatment⁶ (a moderate adverse event can be defined as transient disability with medical care sought or needed but not hospitalization and minor adverse event as self limited which did not require additional medical care⁷). This brings into question whether Professor Ernst is purposely exaggerating the information available and placing undue emphasis on certain issues for effect.

This incidence of AEs is not to suggest that manual therapies are somehow more dangerous than pharmaceutical treatments. Soon to be published research conducted in Sweden by an expert panel of pharmacists estimate 61% of all patients attending healthcare suffer from drug related morbidity (DRM)⁸ and of those 29% will suffer from a new medical condition. A similar study by an expert panel of Swedish physicians estimated that every other outpatient and inpatient experiences DRM. They will either suffer an 'adverse drug reaction' – which could be any reaction from insomnia to death – get 'intoxicated' from an overdose or become dependent on the drug.⁹

Ernst's persistence in peddling his particular brand of scaremongering is made all the more disturbing by the way he neglects to refer to any research that contradicts his

point of view. In this particular case, it occurs when he refers to the “expressed doubts about the safety of spinal manipulation. A particular concern [which] relates to vascular accidents caused by arterial dissection after upper spinal manipulation”. An objective and impartial reviewer would make some reference to the most comprehensive research carried out on this subject, (Cassidy) which found no evidence of greater risk of stroke from chiropractic care when compared with seeing a primary care physician. This was carried out under the direction of The Bone and Joint Decade and looked at over 100 million person years worth of data, finding only 818 cases or examples.¹⁰ The association with chiropractic or spinal manual therapy for 7% of these cases was considered likely to be due to patients with headache and neck pain from a pre-existing tearing of the vertebral artery seeking care before their stroke. This is termed “Stroke in Evolution” and can be difficult to diagnose.

His statement that “*the opinion of most chiropractors that such complications are extreme rarities is partly based on the fact that clinical trials of chiropractic manipulation fail to demonstrate the existence of such events*”, is artfully worded to sow suspicion without having to make any reference to the vast amount of data available that contradicts his position.

The best evidence indicates that the incidence of vertebro-basilar artery injuries associated with high-velocity upper neck manipulation is extremely rare – about 1 case in 5.85 million manipulations¹¹ and as previously discussed form only 7% of all causes of such events. These are indeed tragedies; however, the overwhelming evidence for the much higher risk of serious side effects and death from properly prescribed and properly administered pharmaceutical medication is also tragic, far more common, and therefore represents a much higher risk to the public. We acknowledge that spinal manipulation does carry some risk. As a profession we take this seriously. However, when put in perspective with the risks associated with other common medical treatments, the side effects from manual therapies are minimal. Add to this recent evidence that has shown that spinal manipulation is more effective than medication both in the short and long term for acute and subacute neck pain¹² and Ernst’s arguments just do not add up.

It would appear that Prof. Ernst is “manipulating” his presence in the sceptic blogosphere by publishing in the *NZMJ*. This appears to do little more than promulgate misinformation. A careful review of the article in *The Guardian*, published shortly after the *NZMJ* article, would appear to confirm this.¹³

In summary, the chiropractic profession is happy to debate issues surrounding shortcomings, patient management, safety and effectiveness. However we hope that we do not have to witness repeated publications of articles that mismanage the evidence in what can only be interpreted as an attempt to discredit.

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