

Discussion article

The battle for ideas

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The creation of the National Council for Osteopathic Research indicated the UK osteopathic profession is getting serious about science. Science is not a dispassionate search for truth: it is a battle of competing ideas. And, research is the process of supporting that warfare with evidence. Evidence [data] is the ammunition. Some ammunition, like a thrown spear on the ground, can be picked up and used against those who made it, just as some data can be found to fit in with several different theories. However, research often seeks evidence that, more like a guided weapon, is designed to home in on and justify, or test, a specific hypothesis: such data may not be very useful to those with a different idea to investigate e.g. serial MRIs looking for a structural cause of back pain may shed very little light on any impaired function.

What does this mean for osteopathy? It means that if we want to develop the science of what we do, we cannot rely on the work being done by people who do not share our concepts; their efforts will always be towards testing what seems plausible to them and/or what will serve the interests of those providing the resources. To those who see research as merely testing the outcomes of treatment, the underlying concepts may seem irrelevant, and any battle of ideas with those outside the profession may seem like unnecessary missionary zeal. The battle of ideas is important partly because healthcare may claim to be evidence-based, but it is much more dependant on theory than many would want to admit and it is those theories that are at present winners in the scientific battle, helping determine what happens, particularly in official guidelines.

An example of how this affects every practising osteopath is in the management of acute back pain. This is often shared with a patient's general practitioner, who is being strongly encouraged to base their management on the Royal College of General Practitioners' guidelines. Are these reliably based on evidence as they claim, or are the theoretical allegiances of their authors more influential? Do the concepts and experiences of osteopaths have anything to offer our sister profession?

The background to considering this matter is in osteopathic training. Osteopaths diagnose a patient's problem both through the case history and what touch reveals about the tissues involved. Throughout an osteopathic education, students develop the ability to recognise the tissue changes considered to be due to somatic dysfunction, a concept of fluctuating neurophysiological abnormality that is as real to most osteopaths as a pimple on the nose is to the rest of humanity. That a patient's reported experience and the changes palpated should wax and wane in parallel is the expectation of the experienced practitioner – so direct is this linkage that the recognition of a disparity between the severities of these two aspects acts often as

an alert to the fact that the situation may be complicated by an underlying pathology or psychosocial factor.

What do other healthcare professionals without our concepts or tactile skills consider is happening when patients come to them with back pain of no obvious pathological cause? Usually they don't know. Even when they have allotted some people to diagnostic labels for which there is next to no evidence, such as torn muscles, sprained ligaments, osteo-arthritic facet joints, and internal disc derangements, most are honest enough to admit to being unable to make a diagnosis in the many remaining cases.

Once the lack of a theory on which to base rational treatment was openly recognised in the early eighties, there was a need to fill this conceptual vacuum, but any osteopathic ideas were quite beyond the orthodox pale at that time. So when the concept was proposed that psychosocial factors largely determine the persistence of back pain beyond the acute episode, there being no rival theory in the field, that model became accepted with a haste that also reflected the governmental desperation for answers to their ballooning bill for back pain disability. To accord with natural history data, a rational application of this model required the cascade of fearful cognition, anxiety, activity avoidance, depression, functional deterioration, unemployment, isolation and loss of confidence to be initiated early in the course of an episode. Rational management was therefore to involve a positive message of maintaining activity in the face of pain from the outset; rest must not be thought of as treatment if this regime was to succeed.

To an osteopath, used often to palpating increasing signs of dysfunction in patients unable or unwilling to unload the pain-generating structures, the practice of encouraging further pain confrontation would seem quite unreasonable and part of management would usually be the appropriate use of temporary activity reduction to initiate recovery. A rational basis for this attitude seemed to be offered in the elucidation by modern neurophysiology of positive feedback effects, by which the wind-up of spinal cord sensitivity through ongoing pain input steadily increases the resultant reflex muscle spasm and further pain generation of the dysfunctioning structures.

In the face of this impasse between professionals deriving their management from two different concepts – somatic dysfunction or abnormal illness behaviour – evidence from trials comparing regimes based on such approaches should be the arbiter. It is in the selection and treatment of this evidence by the committees tasked with developing guidelines that we see the unconscious effect of theoretical allegiances and pre-conceptions. Evidence carefully testing the effects of rest during episodes of acute back pain is discarded and trials of lesser design and execution are included and over-interpreted. Without a strong theoretical pre-conception it would be difficult to see how the committees involved could have reached their conclusions.

It must be acknowledged that rest has been over-used in the past, though not in the main, it must be said, by osteopaths. Of course, like many effective treatments that can be costly and have side-effects, it should be prescribed within rational parameters, which are clearly negotiated with patients. However, to discourage an

individual patient from using an effective remedy for them is a serious error especially if the main justification is that this discouragement can be shown to have a beneficial total population effect; we treat patients as individuals.

What are the lessons to be learned from this situation? Firstly, to realise that none of us can view evidence totally objectively: we all have a predisposition to see each observation from a prior conceptual viewpoint from which an alternative interpretation may not be apparent. When that viewpoint derives from a long education and experience, it may not be easy for others to share it. Consequently, while evidence-based healthcare is an aspiration we should all adopt, it should be qualified with the realisation of our propensity, almost inevitable tendency, to want our treatments to accord with our deeply held convictions. If a group has concepts that it believes are valuable and worth promoting, it must enter the battle of ideas and not expect any other group to provide the expertise or resources to produce the quite specific evidence that may be required. If it's worthwhile, it's worth fighting for.

The references and background to my critique of the Royal College of General Practitioner's handling of evidence is viewable on the Cochrane Library website's (Comments Section: review of Bed Rest for Low Back Pain) or, for a full critique, email Dr Roderic MacDonald: rodmacdonald@blueyonder.co.uk.