

## Letters from PPA members to PPA News 15 following Louis Gifford's editorial in PPA News 14:

**from: Graham Lockett**

Dear Louis,

I have just read your editorial discussing fear of flexion. I qualified as a physio 5 years ago. I remember the hours I spent performing extension exercises, as a student, to treat my own back ache. This may sound like an alcoholic standing up at a AA meeting but I had a profound personal fear of flexion. This fear influenced not only my own training for sport but my treatment of others.

Thankfully my practice has changed and your "sprained ankle approach" equates to the way I work today. I agreed with your analysis completely. I would like to thank you for articulating your opinion so well and add my voice to your own in support.

I am currently working part time between the Pain Centre in Salford and a regular out-patient physio department. I tend to use a self management approach for both acute and chronic back pain. I concentrate on identifying obstacles to recovery in assessment and use exercise / activity in treatment. I'm going to use your idea of patient responses (Happy.....to ....get lost) on my next patient.

**From: Sue Mickleburgh MCSP**

Dear Louis,

It was a pleasure to read your comments regarding the Mackenzie approach to back pain. From my own experience I am concerned about the over-focusing on extension exercises by Mackenzie trained physiotherapists.

I used to work at the Wessex Neurosurgical Unit based at Southampton General Hospital where we treated patients who had been admitted for microdiscectomies. Following our initial assessments, which were part of the final decision-making as to whether to operate or not, we would commence a set of three exercises all conducted in supine crook lying – knee rolling, alternate knee bending to the chest and pelvic tilt (flexion not extension). These basic exercises were done for all patients including those that came from a certain rheumatology ward at a Dorset-based hospital who on average had spent 13-14 weeks on bed-rest in an effort to cure their back pain! The aim was to improve general mobility in the spine.

Following surgery the same three exercises were performed with the additional advice to the patient to gradually add in bending forward as they felt able.

**Note** at no point did we try extension (the neurosurgeons would not have been pleased) because it was felt that it carried the increased risk of a further disc prolapse. This also applied to Mackenzie chin tucks for the cervical spine –patients were encouraged just to do general neck exercises as they felt able.

I also treated a number of individual patients there who were not suitable for surgery. Several of these actually walked into the neurosurgery department extended permanently backwards because it had been emphasised to them by physios that extension was good and flexion was bad. Definitely nasty cases of the over-Mckenzieid syndrome!

I have come to the conclusion that normal functional movement works for the majority of patients. I feel that many treatment methods that are pursued in the purist form can be detrimental. Whilst we are upsetting Mackenzie physios, I'll just add Bobath physios to the list. I worked in special schools for a while and came across a number of over-Bobathed children. I think the concept of normal movement is fine when we look at treating patients suffering from strokes or head injuries because the nervous system is "wired in normal patterns". However, when we look at children suffering from cerebral palsy, we are trying to impose normal movement on a nervous system which is "wired abnormally". Some of the children had had their increased tone decreased so much that they were just floppy. It meant that they were unable to operate their electric wheelchairs adequately which others were able to do with the raised tone. Was this really helpful effective treatment?

I now work primarily on a chronic pain management programme where the majority of patients are fearful of flexion. The approach is to gradually work on encouraging movement in all directions. I think this would also be helpful in acute patients as well. We know that the persistence of pain can be caused by the sensitisation of the nervous system. To return to the Bobath analogy we know that abnormal input into the nervous system results in abnormal output and that the best chance of 'normalisation' is by giving normal input. Over-concentration on extension with Mackenzie surely is ultimately producing abnormal input and increasing the chance of a patient developing a chronic pain problem. Extension per se is not a particularly functional movement – I think the only time we need the same amount of extension as in a Mackenzie push up is when we decorating the ceiling! Whereas in normal everyday life we need flexion on a regular basis, just as the hunter-gatherers did. I tend to find that the chronic pain patients who seem to suffer the most are those who have lost that ability to slump.

However, I still feel that variety is the spice of life, some backs like extension and some like flexion. Speaking personally, I have a back that likes flexion and at times of increased pain (including radiation into the leg) I have found digging the garden, riding a horse over a jumping grid and belly dancing (uses the tuck position) have all really helped. Patients on our pain programmes have on occasion told me the following have been beneficial to them: knee-rolling, rocking in a supine position with both legs flexed to the chest, hamstring stretches, ilio-tibial band stretch in sitting, calf stretches against a wall and standing up and down on tip toe. So perhaps the conclusion is that if something works for someone then let them do that as a bit of pain relief and enable them to get on with the activities of daily living.

***From: Mandy Belch***

Lead physio for the strength and conditioning programme for the Scottish Institute of Sport

Louis,

Just had to respond to your McKenzie article!! Tidying my desk at this time on a Sunday night(!) I waded through the pre Xmas journal haul realised I hadn't opened this PPA one yet... I am almost shaking with joy, at last someone with respect who can speak out against our professions obsession with treating the back differently from other joints! I've never understood the drama surrounding being so precious with backs. Look at cadavers and we can see how tightly packed everything is, you aint going to break!

What's making me more excited is it fits with everything said on the shoulder course I've been on this weekend with Jeremy Lewis, from Chelsea and Westminster Hosp.

I have taken the approach recently that if you don't mention the disc ( too emotive)and let them move, take painkillers and even wear a support/taping (oh so bad I know...) Blast the system with every known painkilling measure for the first few days, don't mention centralisation they are dancing in no time! I worked in Occ Health with Strathclyde police for 8 years and I can honestly say there were only a handful of true disc lesions . So why should the public be any different.

I love watching the horror on peoples face when you teach them how to bend forward again. Then the excitement of realising its an ok thing to do.

Another bug bear is our manic drama over muscle balance, don't do any other exercise except these minute contractions. Like you say, would you do that to any other joint? Its part of a whole picture, we don't move with stabilisers.

I'm presently working with the Scottish Institute of Sport on their Strength and Conditioning Programme and have had my eyes opened by the strength coach I work with from the States. Asked what rehab exercises a recovering back person was doing they mentioned their trans ab stuff and... oh that was it. They weren't to do any resisted work. He nearly collapsed as you would do yourself when you think about it logically, why is back strengthening not done? We are led to believe (again by grey literature) that it will only make E.S even more tonic. I think physios are so bad for jumping on band wagons and throwing their common sense away. Again would you do that with any other joint? of course not.

My final rant is our thinking in the sports world that screening for poor tr. ab firing will prevent back problems. We've made a bizarre leap of logic because the studies done by Jull and Richardson showed timing of firing was only off if there was a history of low back pain. Surely then if we are dealing with fit young things and no history they are not going to have a timing issue? I was racking my brains with the sports science director about how we could show this to be a waste of time when the most obvious thing of all was staring me in the face... they used asymptomatics as their controls!! ... who of course showed no timing problems of tr ab firing...

Folk home in on one part and forget its a whole creature they are dealing with.

Oh I could bore you to death with my passion for reinstating common sense into our colleagues. Why search for the holy grail and pay a fortune doing so when you just need to think of re establishing normal movement and function.

Ok that's me calmed down again.

WELL DONE! ( good luck with the purists from all other organisations... go on get them too!)

PS The other area we are blinkered in is neuro, if we are realising that we have to add in the neuro element to orthopaedic problems why dont they add in strengthening to folk who cant get up and walk about. I had first hand evidence of the difference wts training made to a group of elite disabled athletes with CP. They became faster and stronger imagine that!! Oh and their tone didnt change...

Thats it!

### ***From Mandy Belch (2) – on trans abs!***

Louis,

I've just found another scary article advocating tra. ab contractions supposedly in functional positions...like keeping your back in neutral while you flex, now that's useful....Oh, and once again its supposed to help prevent back pain even though you never had any. Probably the best thing about that exercise is the eccentric loading you'll produce in the posterior muscle

groups, (I didn't specify which one coz guess what, they all work!! ARHHHH).. I can see the logic of supposed progression from neutral but why worry when most sporting activity involves a rapid change in position and certainly not in neutral spine. Is this the new extension exercise? And if you consider that under high loads the tr. ab. starts to work harder then start training it in these situations...go on lift that bar, push that scrum machine! I'm not saying throw away the reactivation of the tr.ab./mult in those with previous back pain but mix it with all the other movements, trick it into working in its reflex fashion( after all is that not what it does in real life?) and strengthen the whole trunk. Don't make it an issue, just regain normal movement as our Bobath friends would say.

### ***From Maggie Keeling***

A gentleman recently came to me for physiotherapy assessment and treatment post discharge from hospital. He had undergone lumbar surgery. His case reminded me of your editorial in the December issue of PPA news regarding the McKenzie approach and I thought a very brief summary may raise a smile!

Male 62years, previous L5 decompression and laminectomy 1995 - full recovery. January 2003: sudden onset (after a weekly shopping trip) of left postero-lateral thigh and lower leg pain, numbness in the antero-medial aspect of the left lower leg to the dorsum of the left great toe and marked foot drop. There was no power in ankle dorsiflexion, extensor hallucis longus and ankle eversion.

MRI scan Jan 2003 had shown:

- Forward slip of L3 on L4 with disc bulging at the same level.
- A minimal disc protrusion posterolateral to the left at L4/5.
- Some scarring at the L5/S1.
- Moderate narrowing of the thecal sac noted at L4/5 and moderate encroachment at L3/4.

He underwent L5 decompressive laminectomy on 25.02.03. Post op he was fitted with a foot drop splint but given hope and encouragement that the strength would return. After a 5 day stay he was discharged home.

Two weeks later he experienced severe pains/spasms in the left buttock spreading to whole length of the postero-lateral aspect of the thigh and lower leg, spreading to the great toe, which he described as "like a vice clenching around the leg and cutting of the blood supply".

He was readmitted and underwent a course of 'perineural root injections' and in-house physiotherapy. He was discharged home from hospital, symptoms unchanged with advice to find outpatient physiotherapy treatment locally. I saw him for the first time on 18.03.03 .....He was still experiencing severe muscle spasms and pain from buttock to foot. There was not a flicker of muscle action on testing dorsiflexion, great toe extension and eversion. And, the physiotherapy treatment plan during and on discharge from hospital ..... McKenzie Extension exercises!!!!!!!!!!!!!!

## ***From Vincent Lyles,***

Louis,

Thank you so much for writing the December editorial on therapist and patient fear of bending. There is a continual need to challenge ideas which others see as fact. Science has a long history of sacred cows being slowly replaced by "the truth", which exists until it too is replaced. Kuhn (1996 p151) and others have drawn attention to Max Planck's view "A new scientific truth does not triumph by convincing its opponents and making them see light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it".

I know that glass houses and throwing stones should be upper most in one's mind before voicing criticism, but I believe that many physiotherapists still have fundamental problems with discriminating between fact and opinion. Taking opinion as fact may, as you clearly pointed out, lead to inappropriate management.

The biomedical model, on which many physiotherapists were trained and some still favour, is presented as factual to the extent that it may hinder questioning. Standard undergraduate texts tended to focus on the norm and seldom highlighted variation where muscles are absent, nerve paths are different and dermatomal maps are not all the same. For many, what is in a textbook is true and is therefore not questioned.

I think that the lack of questioning carries over to stuff learnt on weekend courses, which are, on the whole, oriented to physical techniques. Where in Frontline are the adverts on how to assess, yellow flags, how to improve your questioning technique to explore psychosocial issues? I believe that the profession is still bogged down in the "bio" part of biopsychosocial; we want to do stuff to patients!

Admittedly, it's the "bio" part that interested me first but that has developed to include the psychoneuroimmunology discussed in "The Sickening Mind" (Martin 1997), "Why Zebras Don't Get Ulcers" (Sapolsky 1998) and departures into, for example "Illness and Culture in the Post Modern Age" (Morris, 2000). Citing the titles does not, of course, mean that I have read and inwardly criticised each tome in depth but they have put my work into a different framework. It's seeing the person and their problem not a problem bit with a person attached.

We probably should all be like Nobel laureate Richard Feynman's dad. "The old man had a kind of strictness about how to look for reality, look for what is real and permanent and experimentally verifiable, the logic behind all that, and disrespect for authority. It didn't make any difference who had said something; you had to watch the reasoning, the reasoning alone, never mind the name of the man who said it. Just because so and so said this and thought this doesn't mean that the logic is any good; you have to look at the logic" (Mehra 1994)

## **References:**

Kuhn T (1996) *The Structure Of Scientific Revolutions*. 3<sup>rd</sup> ed. University of Chicago, Chicago

Martin P (1997) *The Sickening Mind; brain, behaviour, immunity, & disease*. Flamingo, London.

Mehra J (1994) *The Beat Of A Different Drum; the life and science of Richard Feynman*. Clarendon Press, Oxford.

Morris D B (2000) *Illness And Culture In The Post Modern Age*. University of California Press, California.

Sapolsky R M (1998) *Why Zebras Don't Get Ulcers*. W H Freeman and Company, New York.

### ***From Jo Hutchings***

Dear Louis

I would like to thank you for your interesting editorial in the December issue of the PPA News and would like to add my anecdotal experience to the debate to address a few of the points you raised. I did agree with many of the issues discussed however would like to let you know of my recent clinical experiences. At present I am studying for the McKenzie Diploma and successfully completed the 9-week clinical placement in Texas, USA last year. I work in a general NHS out-patient department seeing a mixture of acute (normally on chronic) and chronic back pain patients. Since attending the placement my approach to treating patients has changed considerably and I now commence flexion with 95% of them. And surprisingly, very few of them fail to improve, or get worse (but some do!). I ask them to flex in the position they find easiest, and that they're most likely to be able to repeat regularly during the day, gradually increasing the intensity until they're able to get to end-range (progression of forces or graded exposure?)

I am finding that patients are achieving significant improvements and I rarely need to extend people first. For those who are worsened or fail to respond to flexion, I will try extension. If there is a mechanical syndrome present they will improve, however if there is no improvement with graded flexion, extension or functional rehab, there is either a significant mechanical problem and further investigation is required, or they have complex pain problems and need a specialist multi-disciplinary pain programme.

The main reason I flex everyone first is to prove/disprove whether a mechanical/McKenzie syndrome exists – more often than not in the population I work with, this is dysfunction, which is helped/remodelled by patient-centred techniques through a progression of forces with a thorough recovery of function programme (or graded exposure!). I think we're all talking about the same thing!!!!

My second reflection on completing the clinical placement is that during my assessment and questioning I now always attempt to disprove the presenting hypothetical syndrome by asking as many open questions as possible, as opposed to your proposal that trained McKenzie therapists 'must be biased to finding and proving centralisation, rather than disproving it'.

I feel I am now able to identify whether there is a true mechanical syndrome present or not, whether I am able to help someone or not as quickly as possible, and if my department is not appropriate then redirect them appropriately. Something I don't think I would be able to do without using the McKenzie approach.

I hope this adds something to the debate,

### ***From: Cathy Gill***

I've just read the December issue of the PPA news having received it late (my fault!) and really enjoyed your editorial. Being relatively inexperienced in the McKenzie approach (learnt principles at college & tried to apply them sporadically) I feel unqualified to challenge or support you. However, your comments about the hunter-gatherer or injured animal struck a chord. As you point out, psychosocial issues that we identify as yellow flags carry no weight where there is no psychology or the social issues require movement for survival. What really cheered me up, though, was your use of the injured ankle scenario. I am giving a talk tomorrow about how physios can help prevent the development of chronic pain. I was looking for a way to take the mystique out of treating back pain and hit on the idea of likening it to an injured ankle! Painful movement of the ankle would not induce us to suggest the client rests until the soreness goes away. In a 30 minute talk, I felt this was the most

straightforward way of putting across the idea of graded reactivation despite pain. I can now say it with confidence and claim to be on the same wavelength as the great and the good!

Many thanks for making me feel clever!

### ***From Liz Macleod***

Dear Louis,

This note is to say thank you for your PPA News Editorial. You may not believe this but your words helped me to sleep the night before I started my new, 2 days a week, private practice job.

My concern was my lack of hands-on skills (20 years since I last touched a patient) and not having the range of modalities expected of those who expect these things. I've managed fine and patients after 2 or 3 sessions are delighted and discharged. I've treated them all as if they had twisted their ankle if you know what I mean. I've used a bit of this including massage or soft tissue manip, and some of that including ( dare I say it ) electrotherapy, and applied basic Pain Management approaches and lots of reassurance, and insisted they move and get back to everything they did or want to do.

Your letter, in my experience of 2 weeks out of the Pain Management Programme environment, makes so much sense. The people I've met this week although not decorated in yellow flags all had the potential to go there. I think what I'm doing is stopping them and reminding them that they have the most amazingly adaptable changing system under their control and that it wants to work for them - it just needs guidance.

It is interesting to be working with patients who, although they have pain that is chronic, have not moved on to develop chronic pain and the baggage that goes with it. (There was one but she was managing well and came once a month to be reminded!). It's a nice change but I do miss the collars, corsets and crutches though!! .....

### ***From Liz Johnson***

I could not agree more with a lot of what you have said in your editorial. I work as a physio with the Nottingham Back Team. We are an inter-disciplinary team treating chronic low back pain patients in groups in Leisure Centres. We do not avoid bending in our groups and we have to deal with patients who have been affected by this concept, fewer recently, and have fear-avoidance.

Personally I am wary of forced extension, partly through observations in my Iyengar Yoga class! However if pain "centralises," I do ask patients to repeat the movement at home, but not to stop all movement in other directions. However one chap came back recently, who was supposed to doing repeated extension, but had found he was better doing seated flexion. In our rehab groups, it often happens that patients attend and say they could not do any exercises. We encourage them to do what they can in the exercises, warm up and cool down, and afterwards they often say they feel better. Movement seems to relieve pain. The "sprained ankle" comments tie in with the rehabilitative approach to back pain. Keep up the good work and keep physios thinking about what we do