Online Submission Form - Model of Care for the Management of Low Back Pain

Thank you for your submission on this consultation.
We have received the following information from you.

Agreement

Agreement:	I have read the SIRA submission procedure *

Your Details

Can we publish your submission?:	Yes, with these details:
Name of organisation or individual making this submission:	Dr Ben GAFFNEY (PHYSIOTHERAPIST)
Authorised delegate/contact person:	Ben GAFFNEY
Position:	Principal Physiotherapist
Organisation:	Resilience Physiotherapy Pty. Ltd.

Submission Details

Upload your submission (optional):	Case-Studies-from-Ben-GAFFNEY-5.9.23.pdf, type application/pdf, 133.8 KB
Are you responding on behalf of an organisation or as an individual?:	
What is your industry or profession?:	Phyiotherapy
Do you have any known conflicts of interest in making this submission?:	Yes - provide details below
If yes, describe the conflict of	As a physiotherapist I may lose custom if acute back pain clients are not referred to physiotherapists, but

interest.:	rather to other allied health professionals, such as Exercise Physiologists
What is your feedback on the draft guidelines?:	I believe the proposed model has the potential and is likely to do more harm than good. Non-physiotherapy allied health professionals such as Exercise Physiologists (EPs), not surprisingly, use exercise interventions more or less exclusively for treatment. In many instances the resting tension of certain muscles is the root cause of the person's pain. This is often the case for lower back pain (LBP) where erector spinae tension tends to cause compression of intervertebral discs1,2 and or compression of the dorsal ramus derived cluneal nerves3. I have had instances where clients who already had LBP were prescribed deadlifts by EPs and, in so doing, worsened clients's back pain (see the case studies in the attached documents). This is despite literature of the type published by Ramirez et al.4 that, for example, state in their conclusions: “Despite the significant causal role of lower back loading (or biomechanical loading) in musculoskeletal injuries, there is very limited knowledge related to the biomechanical impacts of deadlifting training on the lower back and the associated risk of injury.” and “In the absence of such knowledge, trainers and practitioners should be cautious in promoting a training protocol that is likely to put the spinal column at extremely high risk of injury.” and “The physiological benefits of repetitive deadlifting training may be overshadowed by the associated risk of lower back injury during this type of training.” and “While more research is needed to characterize the biomechanical impacts of repetitive deadlifts on the spine, trainers and practitioners should be aware that training protocols or physical readiness tests that involve heavy deadlifts expose the spinal column to an extremely high risk of injury.” Furthermore, it seems in at least one instance an EP was likely not aware of the connection between poor dorsiflexion and valgus strain related patellofemoral function, an association which is well established in the field of physiotherapy by peer reviewed published articles written by physiotherapists5,6,7 (see case study #2 in the attached documents) Also of concern is the Key Principal #6 on page 3 of the Model of care for the management of low back pain, which states: "Physical therapies will primarily be a ‘hands off’ approach." As outlined above erector spinae tension is often a root cause of LBP due in part to the ability of tension in the muscle to compress intervertebral discs1,2 and/or compress the cluneal nerves3. For this reason techniques such as myofascial release massage and dry needling are often the most effective intervention for LBP. Clients can and usually should be taught how to massage themselves with the use of a massage ball against a wall, but in my experience, they are almost always not skilled enough to do this from day one. 1. Filler A. G. (2007). Emergence and optimization of upright posture among hominiform hominoids and the evolutionary pathophysiology of back pain. Neurosurgical focus, 23(1), E4. https://doi.org/10.3171/foc.2007.23.1.4 2. Mulholland R. C. (2008). The myth of lumbar instability: the importance of abnormal loading as a cause of low back pain. 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[redacted]

5 September 2023

Case Studies involving client's experiences with Exercise Physiologists

Case Study #1: [redacted] Year Birth [redacted]

I had been treating this [redacted] for several months for left (L) sided lower back pain (LBP) that extended from the mid thoracic (Tx) region to the posterior superior iliac spine (PSIS) region and down to posterior aspect of the L leg. Sometimes the client had numbness and tingling in the L calf and foot and foot drop. This pain commenced after someone fell on him during a soccer match. Scans revealed an L4-5 disc herniation. [redacted] was in the defence force and had recently finished a commando course. He had markedly tight paraspinals, especially the TxLx erector spinae, and long head of sacroiliac ligament. [redacted] sacroiliac joint (SIJ) moved normally and had a similar pattern of movement to his right SIJ. Treatment primarily included myofascial release including teaching self-massage with a ball against a wall, dry needling of paraspinal muscles and long SIJ ligament, and exercises drawn from Chinese internal martial/healing arts designed to decrease unnecessary paraspinal tension.

On 27 August 2023 [redacted] reported that his general medical practitioner (GP) thought he needed to put on more muscle mass and referred him to an Exercise Physiologist (EP). This is despite my suggesting to the client that EPs often naively assume that therapeutic exercises for back pain require back muscle strengthening, with exercises such as squats and deadlifts, which often causes more, not less, pain due to creating excessive tension/pressure in the paraspinal muscles, which tends to cause intervertebral disc compression and cluneal nerve entrapment. The client reported that his EP had him doing squats and deadlifts. The deadlifts were performed with a trap bar, which allows a better technique than a straight bar with less paraspinal recruitment and less Lx lordosis.

The client's pain went up from 6/10 at worst at best the week before to 7-8/10 at worst after commencing exercise with the EP. However, the patient was not certain this increase was due to working with the EP and so continued to do so on a weekly basis.

On 17 September 2020 the client reported a marked increase in LBP to 9/10 at worst from his L lower back to his foot with pin and needles in his L plantar fascia. That week he had said to his EP that he was feeling sore and did not want to do the squats and deadlifts as usual. The EP suggested they do some "core" work. Upon enquiry, the "core" work undertaken included an exercise that involved standing upright on one foot holding onto the handle of cable weighted to pull the body forward and then bending at the hips still holding onto cable. This exercise would have strongly recruited the client's paraspinal muscles unilaterally in an isolated fashion. I believe this is what caused the marked increase in the clients LBP. The client stopped going to sessions with the EP after this incident.

Not long after this the client took on work that required leaning over a box working on printed circuit boards in caravans. This necessitated leaning static erector spinae muscle recruitment. Not surprisingly his symptoms steadily worsened. I explained to the client that in my opinion no amount of strength in the lower back could avoid this kind of occupationally incurred pain due to particular anatomy of the human spine whereby tension/pressure in the erector spinae tends to cause intervertebral disc compression and/or cluneal nerve entrapment, both of which cause LBP

Case Study #2 [redacted] DOB [redacted]

I treated this [redacted] year old [redacted] twice in 2020 for right (R) LBP the client rated at 8/10 that extended into the posterior aspect of the buttock down to the hamstring region. Objective assessment revealed marked tension and tenderness on palpation in the R paraspinals, especially the TxLx erector

spinae and long SI ligament. The R SIJ movement was normal and the same as the L. Treatment included myofascial release, including teaching self massage with a ball against a wall, and teaching an exercise drawn from Chinese internal martial/healing arts designed to decrease unnecessary paraspinal tension. After the first treatment the client reported that her pain had dropped down to 2/10, but returned to 8/10 after a shift at work.

More recently this client has put in a WorkCover claim for lower back pain and returned to me after going to a rehab centre where she saw a physiotherapist and an EP. While the physiotherapist did not hurt her, she felt his hands-on therapy was ineffectual and wanted to see me instead. She also reported that the EP had been getting her to do deadlifts and that they caused pain in her lower back and posterior buttock region. The EP said she had to do them because she would have to deadlift 12kg in order to return to work. I mentioned a review article on the biomechanics of deadlifts by Ramirez et al. (2022) and read out loud the following quotes:

"Despite the significant causal role of lower back loading (or biomechanical loading) in musculoskeletal injuries, there is very limited knowledge related to the biomechanical impacts of deadlifting training on the lower back and the associated risk of injury."

and

"In the absence of such knowledge, trainers and practitioners should be cautious in promoting a training protocol that is likely to put the spinal column at extremely high risk of injury."

and

"The physiological benefits of repetitive deadlifting training may be overshadowed by the associated risk of lower back injury during this type of training."

and

"While more research is needed to characterize the biomechanical impacts of repetitive deadlifts on the spine, trainers and practitioners should be aware that training protocols or physical readiness tests that involve heavy deadlifts expose the spinal column to an extremely high risk of injury."

The client also reported that her L knee had been getting sore during and after the squatting excises she had been performing with the EP. Objective observation revealed markedly poor left ankle dorsiflexion and a swelling in the achilles tendon of the type generally associated with achilles tendinosis. I explained to the client the association of poor ankle dorsiflexion with valgus strain induced knee pain established in numerous peer reviewed journal articles and that the squatting movements are likely exacerbating this issue (Lima et al., 2018; Rabin, Portnoy, Kozol, 2018;). The client told this to the EP and, according to the client, the EP rolled her eyes at the explanation and simply said words to the effect "not necessarily". It may be pertinent here to point out that the authors of the article by Lima et al. (2018) and all the other authors cited were physiotherapists (or physical therapists as phyiotherapists are called in Brazil) or orthopaedic surgeons, rather than EPs. I also pointed out that to my knowledge EPs, unlike physiotherapists, have limited training in assessing and treating clients with injury and/or pathology.

I also pointed out that I, a physiotherapist, am trained and qualified by my physiotherapy course to design and supervise a resistance/conditioning program as part of her WorkCover return-to-work program.

Case Study #3 [redacted]

This client is a [redacted] teacher I had been treating periodically for the last 16 years primarily for LBP and neck and shoulder pain related to her occupation. In 2022 [redacted] was very sick and was diagnosed with a rare blood disease that, amongst other things, impaired her kidney function.

In June 2022 her GP decided she needed more fitness/conditioning and referred her for five sessions with an EP. [redacted] said the first four sessions were with a male EP who listened to her when she said various exercises were too difficult or the weight was too heavy and consequently only prescribed very light weights. [redacted] did not get sore with this EP. However, on the last visit, [redacted] was assigned a female EP who prescribed various exercises with weights that [redacted] thought were too heavy. For example. 10 Kg barbell bicep curls. [redacted]. said that weight was too heavy and the EP suggested the 6 Kg barbells. [redacted] said even that was too heavy and the EP gave her the 4 Kg barbells. [redacted] still thought they were too heavy but relented to what she felt like was pressure from the EP to do heavier weights. [redacted] said that EP commented word to the effect that [redacted] didn't look she was working very hard. [redacted] sided LBP and posterior hip pain increased from her common baseline of 3-4/10 up to 6/10 that lasted for the following week.

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