

A GP's Guide to Clinical Pilates

What are the benefits and why should you care?



Back pain burdens **16%** of the adult Australian population. And that's just the percentage that decides to see a medical professional about it.

Clinical Pilates is the answer.

Clinical Pilates empowers patients to focus on improving posture, core stability, balance, strength, and flexibility, all of which play a vital role in Spinal Rehabilitation.

Clinical Pilates vs Pilates

Clinical Pilates improves upon the foundations of typical Pilates as it is tailored to each patient's specific injuries, physical needs and capabilities. Prescribing clinical pilates to patients experiencing back pain provides the additional benefit of an easy-to-maintain routine and preventative method beyond their treatment period. Patients can easily induct pilates exercise into their ongoing routine to reap the benefits of pilates' core principles without the need for ongoing treatment advice or dependency.

The Facts

- 1** Meta-analysis for 1108 patients experiencing chronic lower back pain found that pilates exercise resulted in significant pain reduction in patients utilising clinical pilates compared to patients who did not engage with pilates.
- 2** Pilates was also associated with improved functional ability for patients with chronic lower back pain.

At 360 Physio Revesby, we know that early diagnosis and treatment is a game changer. It allows patients to be free of pain faster and also minimises the likelihood of chronic issues developing. So don't delay we can help!

Clinical Pilates is an essential component of spinal pain rehabilitation for the following reasons:

1 Retrains the co-activation of the stabilising muscles in the spine (Transversus Abdominis (TA), Pelvic Floor (PF) and Multifidus (MF) muscles)

Research on patients with spinal pain shows that following back or neck pain, the deep muscles of the spine (TA, MF and PF) which normally support and stabilise the spine are inhibited. These stabilising muscles normally contract in anticipation of movement to protect the spine and pelvis from overload or stress. If this anticipatory function is not reactivated post-injury then the patient is highly likely to suffer from recurrent episodes of pain and, in certain cases, chronic spinal pain. Clinical Pilates restores this anticipatory ability of the deep stabilising muscles.

2 Teaches correct muscle activation patterns

Clinical Pilates focuses on low-load, repetitive exercises that optimise the recruitment of the Type 1 spinal stability muscles. Prolonged, low-intensity contraction is more effective in retraining the stability function of TA and MF. Research also shows that specific Clinical Pilates exercises that train the deep abdominal muscles address motor control deficits providing an improved outcome and return to more skilled activities e.g. sport or heavy lifting.

3 Trains local and global stability systems

Functional spinal stability is dependent on the combination of both local and global muscle systems. Clinical Pilates allows us to progress from basic exercises which recruit local stability muscles separately, to more complicated exercises that involve the larger, more superficial global abdominal muscles. Clinical Pilates is proven to be one of the most effective methods of targeting both these groups of muscles in a rehabilitation program.

4 Progress static stability to dynamic

Spinal stabilisation and strengthening programs, such as Clinical Pilates, allow individuals to progress from static exercises into functional activity and/or sport-specific exercises which are typically more effective in decreasing the likelihood of recurrence.

5 Direction specific

Clinical Pilates assesses a patient's directional preference of movement using specific examination tests. This allows us to predict the outcome of specific Clinical Pilates exercises, which results in immediate improvements in dynamic postural stability and performance.

Summary

In conjunction with individual one-on-one sessions, at our clinic, we also provide group classes (3-4 participants) which allows for individual attention at a lower price. These are a great option for those patients who require ongoing treatment. Contact us to find out how we can help your patients with their spinal pain rehabilitation.

Patient Outcomes

Our treatment philosophy at **360 Physio Revesby**, is to remove, restore and redefine. Combining manual therapy, pain relief and patient education, our skilled team of physiotherapists will help your patients live pain-free lives.

Contact us to find out more about how we can help your patients reach their potential.

(02) 9774 2530



References

- Derivation of a Preliminary Clinical Prediction Rule for Identifying a Subgroup of Patients With Low Back Pain Likely to Benefit From Pilates-Based Exercise *Journal of Orthopaedic & Sports Physical Therapy* November 2016
- Long, A., Donelson, R., & Fung, T. (2004). Does it matter which exercise? A randomised control trial of exercise for low back pain. *Spine*, 29(23), 2593-2602
- Clinical Pilates Directional-Bias Assessment: Reliability and Predictive Validity. Tulloch, Phillips, Sole, Carmen & Abbott. *Journal of Orthopaedic & Sports Physical Therapy*. Published Online: August 1, 2012 Volume 42 Issue 8 p676-A10
- Richardson, C., Jull, G.A., Hodges, P., & Hides, J. (1999). Therapeutic exercises for the spinal segmental stabilisation of low back pain: Scientific basis and clinical approach. Churchill Livingstone, Edinburgh.
- Hodges, P. W., Gandevia, S. C., & Richardson, C. A. (1997). Contractions of specific abdominal muscles in postural tasks are affected by respiratory manoeuvres. *Journal of Applied Physiology*. (Bethesda, Md. : 1985), 83(3), 753.
- Hides, J. A., Stokes, M. J., Saide, M., Jull, G. A., & Cooper, D. H. (1994). Evidence of lumbar multifidus muscle wasting ipsilateral to symptoms in patients with acute/subacute low back pain. *Spine*, 19(2), 165.
- Ferreira ML, Ferreira PH, et al. (2016). Effectiveness of Pilates Exercise in Treating People With Chronic Low Back Pain: A Systematic Review of Systematic Reviews. *BMC Medical Research Methodology*, 16(1), 1-10.