



RESEARCH TO  
PRACTICE 2018

27-29 MARCH 2018  
BRISBANE, QUEENSLAND

## EXERCISE FOR CHRONIC MUSCULOSKELETAL PAIN - REFLECTING ON CURRENT CLINICAL PRACTICE

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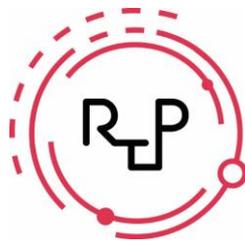
Traditionally pain has been viewed as a warning signal of an underlying disease process/tissue damage. This belief is the foundation for the biomedical treatment approach which has dominated pain rehabilitation since the 16<sup>th</sup> century [1]. Biomedical treatments seek to identify and address problematic tissues, structures and associated disruptive signals relayed to the CNS. However, pain science research over recent decades has significantly changed the way we view pain. Modern conceptualisations of pain consider pain a protector rather than a marker of tissue state [2, 3] – a perceptual inference that reflects a ‘best guess’ that tissue is in danger and requires concerted protective action. As pain persists, the danger transmission system – nociceptive pathways – and the mechanisms that subserve pain itself become more sensitive and the relationship between pain and tissue damage becomes tenuous [2, 4]. With persisting pain, the contribution from secondary pathology, or biopsychosocial factors, including fear of movement, pain catastrophizing, anxiety, and nervous system sensitisation appear to be the main contributors to pain and disability [5, 6].

The widely accepted conceptual change from pain as a reliable marker of disease/tissue damage to a perceived need to protect against potential biopsychosocial threats has been the impetus for rethinking/changing how chronic musculoskeletal pain (CMP) has been traditionally treated. Biopsychosocial treatment that aims to address the biological, psychological and social factors underpinning pain and disability is presently seen as the best approach for treating CMP [5, 7]. Despite a broad acceptance of a biopsychosocial approach, its application in daily clinical practice is less extensive or poorly executed [8]. Consider chronic low back pain where fusion surgery, facet joint blocks, escalating opioid medication, radiofrequency, and epidural steroidal injections are commonly used modalities in the absence of compelling evidence supporting their efficacy. Many physical therapies for chronic low back pain also continue to target dysfunctional/damaged tissues using modalities including core stabilising exercise, massage, manipulation and electrotherapy modalities which are discordant with a biopsychosocial treatment approach. Of note is the finding that patients with low back pain predominately attribute their pain to structural causes and sight the internet and health professionals as the source of their misunderstandings [9].

This presentation explores how an exercise intervention is implemented using a biopsychosocial approach for a typical patient presenting with CMP in daily clinical practice. Key aspects of a biopsychosocial treatment approach concerning exercise for CMP, with consideration for patient needs and clinician competencies, will be highlighted [10, 11]. The goal of this presentation is to encourage Exercise Physiologists to consider how their current clinical practices in exercise prescription for CMP draws on contemporary pain science concepts and fits within a biopsychosocial treatment paradigm. Only through regular reflection on clinical practice can clinicians identify the knowledge and skill deficits that need be developed to deliver interventions that are evidence based, make sense to the patient and have the potential to reduce the impact of pain and improve quality of life.

### References

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**Abstract number:** 037  
**Session:** Breaking the Pain Barrier Through Exercise  
**Date:** Thursday, 29 March 2018  
**Time:** 9:00am – 10:30am  
**Co-Presenters:** Dr John Booth; Prof Peter O'Sullivan; Prof James McAuley  
**Panel Practitioner:** Miss Deborah Fellowes  
**Session Chairperson:** Mr Chris Tzarimas