#### **ABSTRACT**

i. Title: Facts and myths of back pain.

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**iii. Learning objectives:** Understand the common myths and the contemporary evidence underpinning disabling persistent low back pain.

# iv. Summary:

There is a common belief that the lower back is vulnerable to injury and needs to be protected. This belief has driven exponential increases in radiological imaging to identify 'pathological structures' for back pain, injections and to treat 'painful structures' and in some cases surgery directed to 'fix' these structures. Physiotherapy practice has responded to this problem with a various manual treatments and exercise interventions with a view to correct 'biomechanical faults' and 'stabilise' the vulnerable spine, while advice is commonly given to maintain erect postures and limit lumbar flexion when lifting in order to protect the spine from injury. These approaches together have not arrested the escalating cost and disability burden of back pain in our community.

In contrast to these beliefs, contemporary research suggests that back pain often develops in adolescence and sets a trajectory for later life. It presents more like a chronic disease than an injury and findings on MRI scan correlate poorly with the back pain experience. Furthermore, biomechanical faults, sitting, standing and lifting postures and are not strongly causally linked to back pain. People with disabling back pain present with excessive trunk muscle co-contraction rather than a lack of 'core stability'. There is growing evidence that disabling back pain is associated with vicious cycle of unhelpful cognitions that drive fear, distress, protective guarding, avoidance and sensitization. Current clinical practice is often discordant with the guidelines and reinforces and exacerbates this process.

## v. Implications/Conclusions:

This evidence challenges those in clinical practice to reframe our understanding, communication and management of back pain disorders. All health care practitioners can assist in this journey.

#### vi. Key words:

Back pain, beliefs, pathology, posture, lifting, stabilization, emotions, behaviours

### vii. References or articles we can put on our website to support your presentation:

O'Sullivan P, Caniero JP, O'Keeffe M, Smith A, Dankaerts W, Fersum K, O'Sullivan K. (2018) Cognitive functional therapy An integrated behavioral approach for the targeted management of disabling low back pain, Physical Therapy, 98 (5) 408–423.

Bunzli S, Smith A, Schutze R, Lin I, O'Sullivan P, (2017) Making sense of low back pain and pain-related fear, JOSPT 47(9): p. 638-636.

O'Sullivan P, Caniero JP, O'Keefe M, O'Sullivan K, (2016) Unravelling the complexity of low back pain, JOSPT, 46:932-937.