EDITORIAL

Psychological interventions with physiotherapy for low back pain

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BEHAVIOURAL THERAPY DELIVERED WITH PHYSIOTHERAPY, MAINLY STRUCTURED EXERCISE, was the most effective treatment in reducing pain in patients with chronic, non-specific low back pain, a systematic review and network meta-analysis has found. Pain education with physiotherapy produced sustainable improvements in physical function and fear avoidance.[1]

Psychological factors play an important role in how low back pain is experienced and how it impacts on function and quality of life. Fear avoidance beliefs, depression, anxiety, catastrophic thinking, and family and social stress are common in adults with chronic low back pain and are associated with higher risk of physical disability, reduced functional capacity and avoidance of activities including work and recreation.

'Behavioural therapy with physiotherapy maintained clinically important benefits in reducing pain intensity until mid-term follow-up'

Psychological interventions for chronic pain aim to reduce distress and disability by addressing patients' negative beliefs and behaviours.

The authors conducted a literature review of randomised controlled trials comparing psychological interventions with any comparison intervention in adults with chronic, non-specific low back pain from database inception to 31 January 2021. Chronic, non-specific low back pain was defined as pain in the back between the bottom of the rib cage and buttocks crease with no known pathoanatomical cause, for more than 12 weeks' duration.

A total of 97 randomised controlled trials involving 13,136 participants were included in the analysis. Psychological interventions included: behavioural interventions, CBT, mindfulness, counselling, pain education, and combined psychological approaches. Comparison interventions were physiotherapy, GP care, advice, no intervention, and usual care. Physiotherapy was used as the refererence comparison intervention.

Physical function

Improvement in physical function post-intervention (from the end of treatment to < 2 months post-intervention) compared with physiotherapy alone:

- CBT plus physiotherapy produced large benefits; standardised mean difference (SMD) 1.01 (95% CI: 0.58-1.44); moderate quality evidence; equivalent to 19.6 points mean difference in improvement on a scale of 0 to 100
- Pain education plus physiotherapy produced moderate benefits SMD 0.62 (95% CI: 0.08-1.17); moderate quality evidence; equivalent to 12.0 points mean difference in improvement on a scale of 0 to 100

Improvement in physical function post-intervention at least until mid-term (i.e. > 6 months, < 12 months) compared with physiotherapy alone:

- The most sustainable improvements in physical function were reported with pain education plus physiotherapy SMD 0.63 (95% CI: 0.25-1.00); low quality evidence

Pain intensity

Clinically important benefits in improvement in pain intensity post-intervention (from the end of treatment to < 2 months post-intervention) compared with physiotherapy alone were found for:

- Behavioural therapy plus physiotherapy SMD 1.08 (95% CI: 0.22-1.94)
- CBT plus physiotherapy SMD 0.92 (95% CI: 0.43-1.42)
- Pain education plus physiotherapy SMD 0.91 (95% CI: 0.37-1.45)

Improvement in pain intensity post-intervention at least until mid-term (i.e. > 6 months, < 12 months) compared with physiotherapy alone:

- Only behavioural therapy with physiotherapy maintained clinically important benefits in reducing pain intensity until mid-term follow-up SMD 1.01 (95% CI: 0.41-1.60); high quality evidence

The most sustainable benefits for physical function and fear avoidance were achieved with pain education programmes combined with physiotherapy and for pain intensity behavioural therapy together with physiotherapy.

The authors conclude that for people with chronic, non-specific low back pain, psychological interventions are most effective when delivered in conjunction with physiotherapy (mainly structured exercise).

REFERENCE
1 Kwan-Yee Ho E, Chen L, Simic M et al. Psychological interventions for chronic, non-specific low back pain: systematic review with network meta-analysis. *BMJ* 2022;376:e067718