

Addressing emotions in behaviour change

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Rationale and Aim

Guarding is a behaviour often seen in people with chronic pain (1). It is characterised by muscle tension which limits movement, e.g. getting up from a chair (2), and is reliably associated with long-term disability (3). Clinicians aim to help people with chronic pain reduce the behaviour to counteract disability (4). Thus, we aimed to clarify the relationship between guarding, pain, and relevant cognitive and emotional states at a micro-level.

Methodology

We used self-reports of people with chronic pain for pain, anxiety, and distress with physiotherapist ratings of guarding and self-efficacy. Modelling was done with nonparametric Bayesian network structure learning.

Results

We found guarding to be directly predicted by anxiety, not by pain. We additionally found an inverse relationship between guarding and self-efficacy, which was also directly predicted by anxiety. Further correlational analysis showed guarding was positively correlated with pain, anxiety, and emotional distress while negatively correlated with self-efficacy (all $p < .0001$).

Conclusions

Our finding highlights the crucial role of anxiety in guarding during movement and that this behaviour not directly predicted by pain levels despite the label 'pain behaviour'. This underlines the importance of addressing anxiety rather than pain to promote behaviour change in guarding, and the development of technology to identify movements that patients fear, to provide prompts and feedback on movement in order to reduce guarding. Despite pain management interventions (4) maintenance and generalisation of behaviour remains a challenge; technology has considerable promise here.

References

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