



Research Brief

Pain Interference on the Relationships Between Pain Intensity and Probable Major Depression Among Participants With SCI

Introduction

To evaluate whether pain interference mediates the relationship between pain intensity and probable major depression (PMD) among persons with spinal cord injury (SCI), accounting for differences in the frequency of prescription medication use and resilience.

Key Findings

- The Patient Health Questionnaire-9 was used to define PMD. Covariates included demographic and injury characteristics, pain severity, pain interference, and resilience. Separate sets of multistage logistic regression analyses were conducted for 3 levels of prescription pain medication use (daily, occasional/weekly, none).
- Pain intensity was related to a greater risk of PMD (odds ratio [OR]_{daily pain medication user}, 1.28; 95% confidence interval [CI], 1.21-1.35; OR_{occasional/weekly pain medication user}, 1.26; 95% CI, 1.16-1.36; OR_{nonpain medication user}, 1.44; 95% CI, 1.33-1.56), but this relationship disappeared after consideration of pain interference (OR_{daily pain medication user}, 0.97; 95% CI, 0.90-1.04; OR_{occasional/weekly pain medication user}, 0.94; 95% CI, 0.84-1.05; OR_{nonpain medication user}, 1.07; 95% CI, 0.95-1.20), which indicates pain interference was a mediator between pain intensity and PMD and there was no direct relationship between pain intensity and PMD. Resilience was protective of PMD in each model but was not a mediator.

Conclusion

Although pain intensity was associated with PMD, the relationship was mediated by pain interference. Resilience was an important protective factor. Therefore, clinicians should assess pain interference when screening for PMD and direct treatment at reducing pain interference. Building resilience may further reduce the risk of PMD.