Associations Between Pain Characteristics & Suicidality Across Chronic Pain Conditions
A Population-Based Study

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Background
Rates of suicidality are elevated among those with chronic pain. Usual pain/discomfort and pain intensity may be pain-specific mechanisms underlying associations with suicidality among chronic pain conditions.

Objectives
1. Describe the lifetime prevalence of suicidality according to the usual presence and intensity of pain among those with arthritis, migraines, and back pain.
2. Evaluate associations between usual pain/discomfort and suicidality among pain conditions.

Methods
Sample
2012 Canadian Community Health Survey – Mental Health Supplement (N = 25,113)

Measures
Chronic pain characteristics
• Chronic pain condition (arthritis, migraine, back pain)
• Usual pain/discomfort (yes, no)
• Usual pain intensity (mild, moderate, or severe)
Suicidality
• Lifetime suicide ideation, plans, or attempts
Covariates
• Sociodemographics
• Lifetime anxiety, mood, or substance use disorder diagnosis

Analytic Plan
• Weighted cross-tabulations described suicidality prevalence among pain characteristics and pain conditions.
• Multiple logistic regressions evaluated associations between usual pain and suicidality among pain conditions.

Results

Rates of suicidality were:
• Greater among those usually in pain, compared to without (Figure 1).
• Increased alongside the intensity of usual pain/discomfort (Figure 2).
• Highest among those with migraines, across pain characteristics.

Multiple Logistic Regressions

<table>
<thead>
<tr>
<th>Table 2. Sociodemographics Among Those With and Without Usual Pain</th>
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<tbody>
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<td><strong>Arthritis</strong></td>
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Table 3: Associations between usual pain and suicidality among pain conditions*

Usual pain was associated with:
• Increased odds of suicide ideation and attempts among those with migraines.
• Greater odds of suicide ideation, plans, and attempts in back pain.

Post-Hoc Analysis

Asociations between pain intensity and suicidality among pain conditions*

Severe pain was associated with:
• Elevated odds of suicide ideation (AOR=2.19, 95% CI [1.07-4.48], p<.05) in migraines.
• Increased odds of suicide plans (AOR=3.11, 95% CI [1.42-6.80], p<.01) in back pain.

*Adjusting for sociodemographics and psychiatric conditions

Conclusions
Usual pain/discomfort and severe pain are potential mechanisms underlying associations with suicidality among those with migraines and back pain, but not arthritis.